

# Microsoft Power Platform

## 2020 RELEASE WAVE 1 PLAN

Features releasing from April 2020 through September 2020



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# Microsoft Power Platform: 2020 release wave 1 plan

The Microsoft Power Platform release plan (formerly release notes) for the 2020 release wave 1 describes all new features releasing from **April 2020** through **September 2020** for Power BI, Power Apps, Power Automate, AI Builder, Power Virtual Agents, and Common Data Model and data integration.

## 2020 release wave 1 overview

The Microsoft Power Platform enables users and organizations to analyze, act, and automate on the data to digitally transform their businesses. The Microsoft Power Platform today is comprised of four products – Power BI, Power Apps, Power Automate, and Power Virtual Agents. It also has two add-ons: AI Builder and Power Apps Portals.

- [Power BI](#) simplifies how organizations derive insights from transactional and observational data. It helps organizations create a data culture where employees can make decisions based on facts, not opinions. For the upcoming release, Power BI is investing in four key areas that drive a data culture: Self-service analytics for everyone, Unified platform for enterprise BI, big data analytics with Azure data services, and pervasive artificial intelligence (AI).
- [Power Apps](#) is the industry-leading low-code application development platform that underpins Dynamics 365 extensibility, Office 365 customization, and standalone custom line of business applications for customers around the world. For the upcoming release, Power Apps provides significant improvements for Power Apps developers of all skill levels, improving the sophistication and usability of apps that are created across the web and mobile devices.
  - [Power Apps Portals](#) are enabling low-code makers to roll out experiences to broad external audiences. We're continuing to advance Portals capabilities as usage grows.
  - [AI Builder](#) is a Microsoft Power Platform capability for teams with the business expertise to easily automate processes and predict outcomes to improve business performance. AI Builder is a turnkey solution that brings the power of Microsoft AI through a point-and-click experience.
- [Power Automate](#) makes it possible to grow 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. For the upcoming release, Power Automate is investing in three key areas: Empowering citizen developers to build powerful automation across the 300+ connectors, UI flows automate mundane, rules-

based tasks with point-and-click simplicity whether the app is old or new, on-premises or in the cloud, and enables modelling and running human-driven business process with the modern approval and business process flow features.

Microsoft Power Platform offers a range of [governance and administration](#) capabilities that span Power Apps, Power Automate, and Common Data Service. These capabilities are designed to help the administrators and IT Professionals in the organization to help set up, secure, manage, govern, and monitor the use and adoption of the platform and its components across the enterprise.

- [Data integration](#) provides built-in connectivity to Microsoft Power Platform and more, with data across hundreds of business systems, enabling rich and intelligent experiences. Common Data Model provides semantic consistency for canonical business entities across Dynamics 365 and Common Data Service, increasing value and saving time for application developers, ISV partners, and integrators.

**IMPORTANT** The Dynamics 365 features coming in the 2020 release wave 1 have been summarized in a separate [release plan](#).

## Key dates for the 2020 release wave 1

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

Here are the [key dates](#) for the 2020 release wave 1.

Milestone	Date	Description
Release plans available	Jan 27, 2020	Learn about the new capabilities coming in the 2020 release wave 1 (April 2020 – September 2020) across Dynamics 365 and the PowerPlatform.
Early access available	Feb 3, 2020	Test and validate new features and capabilities that will be a part of the 2020 release wave 1, coming in April, before they get enabled automatically for your end-users. You can view <a href="#">Microsoft Power Platform 2020 release wave 1 early access features</a> now.
Release plans available in additional 11 languages	Feb 12, 2020	The Dynamics 365 and Microsoft Power Platform release plans are published in <a href="#">Danish</a> , <a href="#">Dutch</a> , <a href="#">Finnish</a> , <a href="#">French</a> , <a href="#">German</a> , <a href="#">Italian</a> , <a href="#">Japanese</a> , <a href="#">Norwegian</a> , <a href="#">Portuguese (Brazilian)</a> , <a href="#">Spanish</a> , and <a href="#">Swedish</a> .



Milestone	Date	Description
General availability	April 1, 2020	Production deployment for the 2020 release wave 1 begins. Regional deployments will start on May 1, 2020.

Continuing from the 2019 release wave 2, we are continuing to call out how each feature will be enabled in your environment:

- **Users, automatically**– These features include change(s) to the user 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 2020 release wave 1.

Let us know your thoughts. Share your feedback on 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.

# 2020 release wave 1 features available for early access

This topic lists the features that can be enabled for testing in your environment beginning **February 3, 2020**. 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, see [Opt in to 2020 release wave 1 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, see [2020 release wave 1 features available for early access](#).

## Power Apps

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

Feature	Enabled for	Early access	General availability
<a href="#">App for Outlook checker</a>	End users, automatically	✓ Aug 16, 2020	To be announced
<a href="#">Chart and dashboard styling improvements for model-driven apps</a>	End users, automatically	✓ Feb 10, 2020	✓ May 11, 2020
<a href="#">Improved grid column filtering in Power Apps</a>	End users, automatically	✓ Feb 3, 2020	✓ Apr 6, 2020
<a href="#">Improvements to model-driven apps</a>	End users, automatically	✓ Feb 10, 2020	✓ May 11, 2020



Feature	Enabled for	Early access	General availability
<a href="#">Improvements to quick find search experience on a grid</a>	End users, automatically	✓ Feb 3, 2020	✓ Apr 6, 2020
<a href="#">Save is always visible in the command bar on edit forms</a>	End users, automatically	✓ Jan 29, 2020	✓ May 4, 2020
<a href="#">Usability enhancements to editable grid</a>	End users, automatically	✓ Feb 3, 2020	✓ Apr 6, 2020
<a href="#">View selector usability enhancements</a>	End users, automatically	✓ Feb 3, 2020	✓ Apr 6, 2020

# Power BI

## Overview of Power BI 2020 release wave 1

Microsoft business intelligence simplifies how organizations derive insights from transactional and observational data. It helps organizations create a data culture where employees can make decisions based on facts, not opinions. We're investing in four key areas that drive a data culture: intuitive experiences, a unified BI platform, big data analytics, and pervasive artificial intelligence (AI).

Watch release overview [video](#).

### Self-service analytics for everyone

To build a data culture, everyone in your organization needs to be empowered to work with data. At its core, BI is a collaborative process. We're investing in simple, intuitive experiences that are deeply integrated with Microsoft 365. Get monthly updates that'll include navigation, streamlined viewing, and user collaboration—focusing on simpler ways to explore, find, and share insights. To enable everyone in the organization to get insights wherever they are and in context, we developed the world leading mobile BI app and enabled embedding BI in your applications, websites, and portals. Also, take advantage of rich authoring capabilities, from evolved formatting controls to performance-tuning tools.

### Unified platform for enterprise BI

Enable your organization to create a global, governed, scalable, secure, and unified BI platform that meets the needs of both self-service and centralized BI. Move to one modern, compliant platform as the single destination for business analytics with key enterprise-facing updates on enterprise-grade semantic models and reporting at worldwide scale.

### Big data analytics with Azure data services

As your data volumes and complexity continue to grow exponentially, invest in an analytics solution that's easy to use, fast, and secure, so you can extract critical insights from your data and take timely actions to maintain a competitive advantage. Our investment in petabyte-scale analytics makes Power BI and Azure an unmatched combination.

### Pervasive artificial intelligence for BI

Help your employees explore your data, automatically find patterns, understand what your data means, and predict future outcomes to drive business results. The new AI capabilities, pioneered

in Azure and now available in Power BI, require no code, enabling all Power BI users to discover hidden actionable insights in your data and drive better business outcomes.

## What's new and planned for Power BI

This topic lists features that are planned to release from April 2020 through September 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see [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 day of release.

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

### Power BI Desktop

Feature	Enabled for	Public preview	General availability
<a href="#">Visual personalization for users</a>	Admins, makers, or analysts, automatically	✓ Apr 20, 2020	
<a href="#">Q&amp;A synonym improvements</a>	End users by admins, makers, or analysts	✓ Jul 13, 2020	
<a href="#">DirectQuery support for Q&amp;A</a>	Admins, makers, or analysts, automatically	✓ Aug 17, 2020	
<a href="#">Incremental refresh (general availability)</a>	Admins, makers, or analysts, automatically	-	✓ Apr 1, 2020
<a href="#">Filter pane migration</a>	End users, automatically	✓ Jul 8, 2019	✓ Apr 15, 2020
<a href="#">Theme editor global defaults</a>	Admins, makers, or analysts, automatically	-	✓ Apr 17, 2020
<a href="#">Conditional formatting for totals and subtotals</a>	Admins, makers, or analysts, automatically	-	✓ May 6, 2020

Feature	Enabled for	Public preview	General availability
<a href="#">Personalized Visualizations pane</a>	End users, automatically	✓ Sep 1, 2019	✓ May 19, 2020
<a href="#">Drillthrough buttons</a>	Admins, makers, or analysts, automatically	✓ May 22, 2020	✓ May 22, 2020
<a href="#">DirectQuery support for AI visuals</a>	End users by admins, makers, or analysts	-	✓ Jun 1, 2020
<a href="#">Decomposition tree (general availability)</a>	End users, automatically	✓ Feb 3, 2020	✓ Jun 1, 2020
<a href="#">Automatic page refresh (general availability)</a>	Admins, makers, or analysts, automatically	-	✓ Jun 10, 2020
<a href="#">Mobile report grid resolution</a>	Admins, makers, or analysts, automatically	-	✓ Jun 10, 2020
<a href="#">Mobile report layout authoring enhancements</a>	Admins, makers, or analysts, automatically	-	✓ Jun 10, 2020
<a href="#">Hierarchy slicer</a>	Admins, makers, or analysts, automatically	-	✓ Jun 15, 2020
<a href="#">Office ribbon in Power BI Desktop (general availability)</a>	Admins, makers, or analysts, automatically	-	✓ Jun 18, 2020

## Power BI Embedded

Feature	Enabled for	Public preview	General availability
<a href="#">Embed Power BI paginated reports into an application for your customers</a>	End users by admins, makers, or analysts	✓ Nov 5, 2019	✓ May 5, 2020

Feature	Enabled for	Public preview	General availability
<a href="#">Extended developer tools and samples to support additional development platforms</a>	End users by admins, makers, or analysts	-	✓ May 30, 2020
<a href="#">Embedded AI - decomposition trees</a>	End users by admins, makers, or analysts	✓ Nov 30, 2019	✓ Jun 30, 2020

## Power BI Mobile

Feature	Enabled for	Public preview	General availability
<a href="#">HoloLens v2 support</a>	End users by admins, makers, or analysts	✓ Sep 30, 2020	
<a href="#">Bookmarks in Windows presentation mode</a>	End users by admins, makers, or analysts	-	✓ Jun 10, 2020
<a href="#">Dark mode</a>	End users by admins, makers, or analysts	-	✓ Jun 10, 2020

## Power BI Service

Feature	Enabled for	Public preview	General availability
<a href="#">Dataflows DirectQuery</a>	End users by admins, makers, or analysts	✓ Apr 1, 2020	-
<a href="#">Overload alerts</a>	Admins, makers, or analysts, automatically	✓ Apr 30, 2020	
<a href="#">Capacity metrics app</a>	End users by admins, makers, or analysts	✓ May 1, 2020	

Feature	Enabled for	Public preview	General availability
<a href="#">Dataset refresh overview</a>	Admins, makers, or analysts, automatically	✓ May 1, 2020	
<a href="#">Collaboration on Power BI in Microsoft Teams</a>	End users, automatically	✓ Jul 31, 2020	
<a href="#">New look</a>	End users, automatically	✓ Sep 17, 2020	-
<a href="#">Power BI dataflows and Azure Data Lake Storage integration at workspace level</a>	End users by admins, makers, or analysts	✓ Sep 30, 2020	
<a href="#">Migration tooling for paginated reports</a>	Admins, makers, or analysts, automatically	-	✓ Apr 1, 2020
<a href="#">In-place app update</a>	End users, automatically	✓ Oct 1, 2019	✓ Apr 1, 2020
<a href="#">Copy and paste visuals into other applications</a>	End users, automatically	-	✓ Apr 15, 2020
<a href="#">Data lineage</a>	Admins, makers, or analysts, automatically	✓ Oct 1, 2019	✓ Apr 15, 2020
<a href="#">Improved RDL feature parity for paginated reports in Power BI</a>	Admins, makers, or analysts, automatically	-	✓ May 1, 2020
<a href="#">Shared and certified datasets (general availability)</a>	Admins, makers, or analysts, automatically	-	✓ May 21, 2020
<a href="#">Data protection</a>	End users by admins, makers, or analysts	✓ Oct 31, 2019	✓ May 31, 2020
<a href="#">Recommended template apps</a>	End users, automatically	✓ Aug 30, 2020	✓ Aug 30, 2020



Feature	Enabled for	Public preview	General availability
<a href="#">New Power BI geos - Germany, China, Switzerland</a>	Admins, makers, or analysts, automatically	-	✓ Aug 31, 2020
<a href="#">Deployment pipeline - develop, test, and deploy workspace content</a>	Admins, makers, or analysts, automatically	✓ May 5, 2020	✓ Aug 31, 2020
<a href="#">Organizational visuals as out-of-the-box visuals</a>	Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020
<a href="#">Managing Microsoft AppSource visuals</a>	End users by admins, makers, or analysts	✓ Aug 27, 2020	To be announced

Description of **Enabled for** column values:

- **End users, automatically:** These features include change(s) to the user experience for end 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.
- **End 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 end users.

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

## Power BI Desktop

### Overview

With each monthly release, Microsoft Power BI Desktop continues to deliver simple, intuitive experiences that make authoring content easier and provide powerful tools to create amazing experiences for report users. These investments will span the following areas:

- **PowerPoint for data:** Millions of people are familiar with how to use Microsoft Office—especially PowerPoint. Users want to create content in Power BI Desktop as quickly and easily as they can create a slide in PowerPoint. A familiar user experience is key to ensuring that customers feel welcome. They intuitively know how to create a chart, add some text, or

choose a layout because they've done it before in other Office tools. Leveraging this knowledge will make experiences even more delightful for our users.

- **Enable authors to empower their users:** Power BI creators want to empower their users to find the answers to their own questions without needing to constantly adjust their reports for their many users' needs. We will enable report authors to turn on exploration capabilities for users, allowing them to make lightweight changes to a report (for example: changing a measure or adding a filter) without needing full edit access to a report and without needing to go into a full-blown authoring experience. This will result in happier users and lots of time saved for authors.
- **Enterprise-grade content creation:** The Power BI Desktop will continue to support large-scale enterprise BI deployments through rich tooling, a focus on performance and infrastructure capabilities to support BI at scale.
- **Empower analysts with AI-infused authoring experiences:** Power BI Desktop will infuse AI throughout the report authoring experience, which will enable analysts to find new insights, create engaging content more easily, and empower their users with engaging AI visualizations.

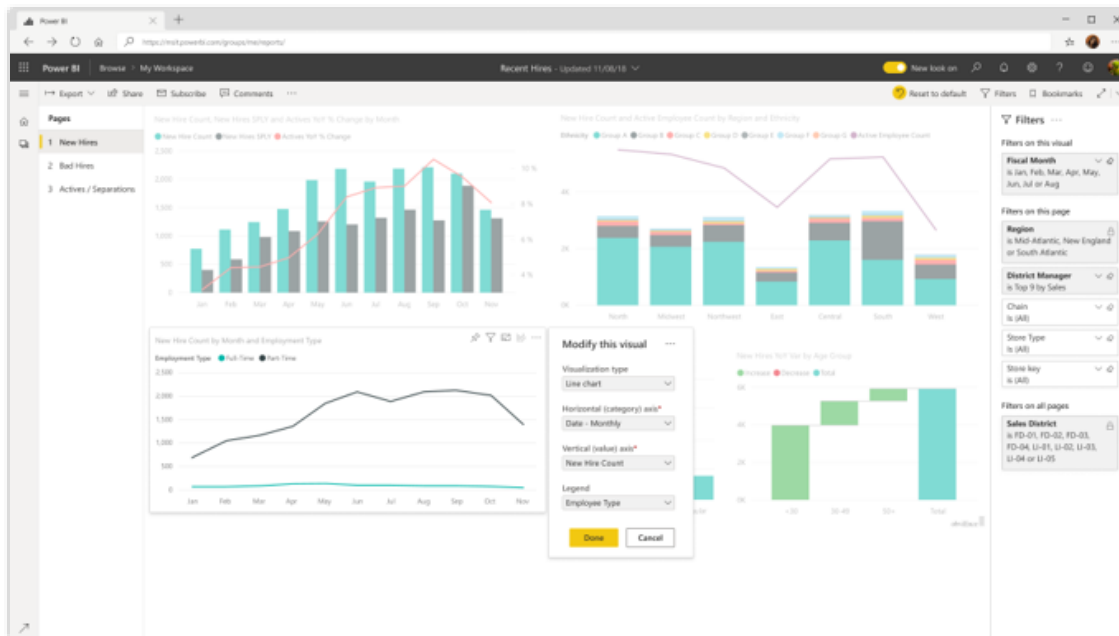
### Visual personalization for users

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Apr 20, 2020	-

### Feature details

When sharing a report with a broad audience, it's difficult to make one visual that satisfies every end user's requirements. Users may want to see the data portrayed in ways that are slightly different than the visual and layout selected by the report creator. This could include swapping what's on the axis, changing the visual type, or adding something to the tooltip.

This new capability will allow users to make tweaks to visuals on a report even if they don't have edit access to that report. After making adjustments to the visual, users can save their changes as a bookmark. This eliminates the need to create a separate version of the report or to ask the report designer for a change.



*Modify this visual*

## Q&A synonym improvements

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ Jul 13, 2020	-

## Feature details

We will be adding new capabilities for Q&A. Report designers will be able to:

- add synonyms to tables and columns.
- promote or reject suggested synonyms from Power BI.
- disable items in the data model so that they can't be used in Q&A.
- add synonyms in bulk.

Additionally, fields that have been renamed in visuals in reports will show as suggested synonyms.

## See also

[Enhancements to Q&A](#) (blog)

## DirectQuery support for Q&A

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Aug 17, 2020	-

### Feature details

Q&A will work in DirectQuery (DQ) mode.

### See also

[Power BI Desktop August 2020 Feature Summary](#) (blog)

## Incremental refresh (general availability)

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Apr 1, 2020

### Feature details

Incremental refresh enables very large datasets in Power BI and is now generally available in the Power BI Premium service and for users with **Pro** licenses.

- **Refreshes are faster.** Only data that has changed needs to be refreshed. For example, refresh only the last five days of a ten-year dataset.
- **Refreshes are more reliable.** It's no longer necessary to maintain long-running connections to volatile source systems.
- **Resource consumption is reduced.** Less data to refresh reduces overall consumption of memory and other resources.

This capability will be brought to general availability, including removing the restriction that models be hosted in Power BI Premium. Anyone with a Power BI Pro license will be able to use this feature.

Incremental refresh

You can improve the speed of refresh for large tables by using incremental refresh in Premium workspaces. This setting will apply once you've published a report to the Power BI service.

Once you've deployed this table to the Power BI service, you won't be able to download it back to Power BI Desktop. [Learn more](#)

Table

Incremental refresh

FactInternetSales ▼

On

Store rows where column "OrderDate" is in the last:

5

Years ▼

Refresh rows where column "OrderDate" is in the last:

5

Days ▼

☐ Detect data changes [Learn more](#)

☐ Only refresh complete days [Learn more](#)

Apply all

Cancel

*Incremental refresh main dialog*

## Filter pane migration

Enabled for	Public preview	General availability
End users, automatically	✓ Jul 8, 2019	✓ Apr 15, 2020

## Feature details

The new Power BI filter pane enables report designers to customize the look and feel of filters in their Power BI reports. Designers can also lock, hide, or rename filters in the pane to ensure the best experience for their report consumers. In addition, consumers get better interactivity with

filters, including a contextual pop up on every visual, helping them to understand which filters are applied. Aligned with the Desktop April release, we will automatically upgrade any reports using the old filter pane to the modern filter experience, which means it will be available to both report designers and consumers. Please note that after we auto-upgrade reports, users will not be able to revert back to the old filter pane as they will no longer be supported. We strongly recommend opting into the new experience beforehand so that the formatting can be fine-tuned before the new experience goes live.

### See also

[Filter pane documentation](#) (docs)

## Theme editor global defaults

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Apr 17, 2020

### Feature details

Users expect to be able to easily change common formatting settings with just a few clicks. To better align with Office and user expectations, we will provide a way to update the most commonly changed settings in one place without needing to write a JSON theme file. These settings will include page background and wallpaper, the visual's color palette, font family and size, and more.

## Conditional formatting for totals and subtotals

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ May 6, 2020

### Feature details

A top feature request on the Power BI Ideas forum is conditional formatting for totals and subtotals in matrix visualizations. Designers want to be able to apply conditional formatting to totals and subtotals in matrices to highlight the most important characteristics of their data. This new feature will bring Excel-like capabilities to the Power BI matrix visualizations. It will allow report designers to set the scope for all currently available conditional formatting options (background color, font color, data bars, and icons formatted by color scale, rules, and field value) to specify the level of hierarchy to which they would like to apply their formatting.



*Conditional formatting on totals and subtotals*

## Personalized Visualizations pane

Enabled for	Public preview	General availability
End users, automatically	✓ Sep 1, 2019	✓ May 19, 2020

### Feature details

Using Power BI Desktop or the Power BI service, you can customize the **Visualizations** pane by adding or removing any Power BI visuals, pinning new visuals from Microsoft AppSource, and restoring the default view. Anyone with edit permissions to a report can now personalize their Visualizations pane for their own account. Changes you make to the Visualizations pane in Desktop will be duplicated in the Power BI service, and vice versa.

### See also

[Power BI Desktop September 2019 Feature Summary](#) (blog)

## Drillthrough buttons

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ May 22, 2020	✓ May 22, 2020

### Feature details

Many report authors use buttons throughout their report to help users navigate through information in a guided way. This improvement will include drillthrough as an action option for buttons. The author will be able to create a button that takes into account what has been selected on the canvas and navigates the user to a particular drillthrough report.

## DirectQuery support for AI visuals

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	-	✓ Jun 1, 2020

### Feature details

The artificial intelligence (AI) visualizations (key influencers and the decomposition tree with AI splits) will work in DirectQuery (DQ) mode and in composite models.

## Decomposition tree (general availability)

Enabled for	Public preview	General availability
End users, automatically	✓ Feb 3, 2020	✓ Jun 1, 2020

### Feature details

The decomposition tree is a new visual that helps you understand the root cause contributing to a high or low KPI value. The decomposition tree lets you break down a metric by one or more dimensions to understand what impact individual factors have on a KPI.

The Power BI decomposition tree is an artificial intelligence (AI) visualization, and you have two options for launching the analysis. The first option is to select the dimensions you want to use to break down the KPI. The second option is to let Power BI automatically find the most interesting splits and conduct the root cause analysis for you.

The decomposition tree is one of the top requested features on Power BI ideas with over 4,000 votes.

### 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

[Decomposition tree documentation](#) (docs)

### Automatic page refresh (general availability)

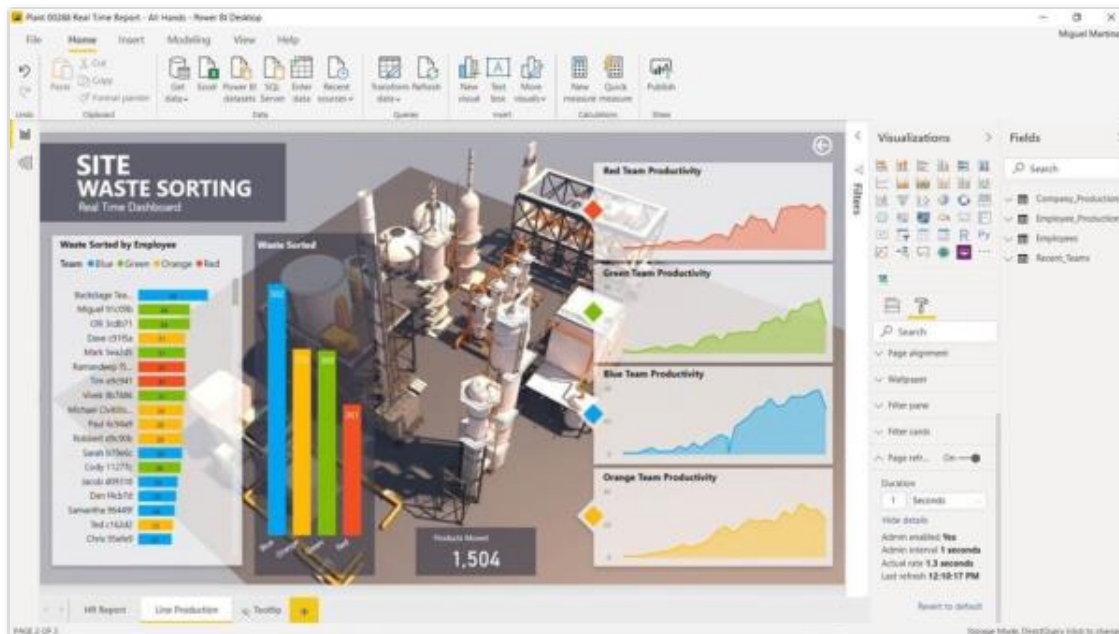
Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Jun 10, 2020

### Feature details

When monitoring critical events with Power BI, it's important that the data is reflected in Power BI as soon as the data source gets updated. For example, in the manufacturing industry, it's critical to know when a particular machine is malfunctioning.

There are several updates to automatic refresh that we are releasing. Report authors using a DirectQuery source will be able to set the refresh interval of visuals on each report page. For very fast updating sources, this near real-time experience will allow users to monitor time-critical reports and ensure that they are always viewing the latest data.

To accomplish this, Power BI will optimize refreshes based on cached data and will allow authors to define data change measures. This will minimize the impact on the DirectQuery source. In addition, if the report author adds a relative time slicer, this will enable improved filtering experiences on top of fast changing sources.



*Automatic page refresh*

## See also

[Automatic page refresh is now generally available](#) (blog)

## Mobile report grid resolution

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Jun 10, 2020

## Feature details

We are improving the mobile report canvas by increasing its grid resolution. Report creators will have more flexibility with visuals placement and sizing when building mobile report layouts.

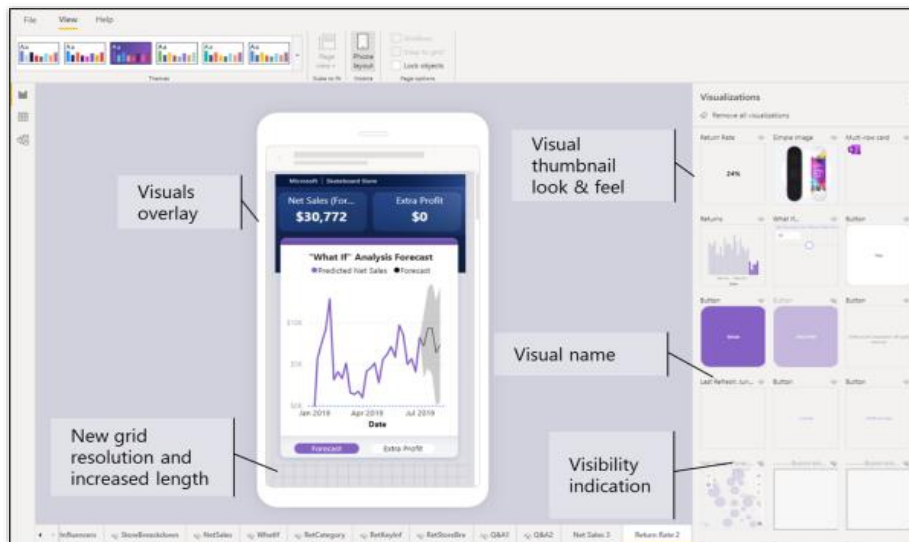
## Mobile report layout authoring enhancements

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Jun 10, 2020

## Feature details

We are updating the mobile authoring experience in Power BI Desktop. This includes the following improvements:

- Increasing the canvas length so more visuals can be added to the mobile layout.
- Allowing visual overlay so report creators can build more complex reports and add bookmark interactivity to them.
- Updating the **Visualization pane** to improve visual thumbnail look and feel, visibility indication, and filter by visibility.



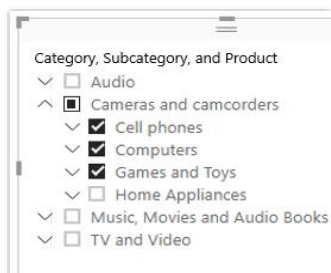
*Mobile layout authoring in Power BI Desktop*

## Hierarchy slicer

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Jun 15, 2020

## Feature details

Power BI slicers will add native support for hierarchies. This will allow users interacting with a report to drill into different levels of a hierarchy and make selections within one slicer. Authors will no longer have to add multiple slicers to the page or leverage a visual from AppSource to support this scenario. In addition, the performance, when interacting with the hierarchy slicer, will be improved from what users experience today when using multiple slicers (one per level in the hierarchy).



### *Hierarchy slicer*

## Office ribbon in Power BI Desktop (general availability)

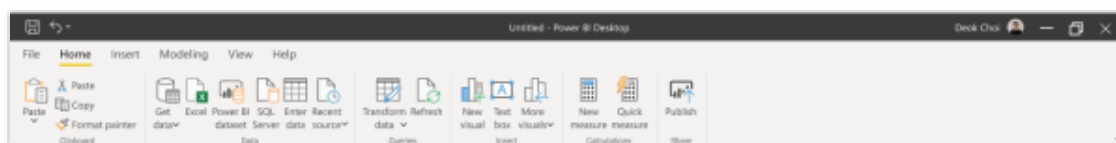
Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Jun 18, 2020

### Feature details

Power BI Desktop will ship with a modern ribbon that users are familiar with from Office. Users will now be able to:

- Save canvas space by using a more simplified ribbon.
- Pin more reports using an updated file menu.
- See available themes in a theme gallery and preview themes on hover.
- Format visuals through a universal formatting control.

The modern ribbon will also be accessible through keyboard navigation and screen readers. The updated ribbon experience will be the new default experience in Power BI Desktop starting in March. After the April release of Power BI Desktop, authors will not be able to revert to the legacy ribbon experience. We strongly encourage updating any internal documentation and training materials for Power BI Desktop before the April release.



### *Office ribbon*

### See also

[Updated ribbon experience for Power BI Desktop](#) (blog)



## Power BI Embedded

### Overview

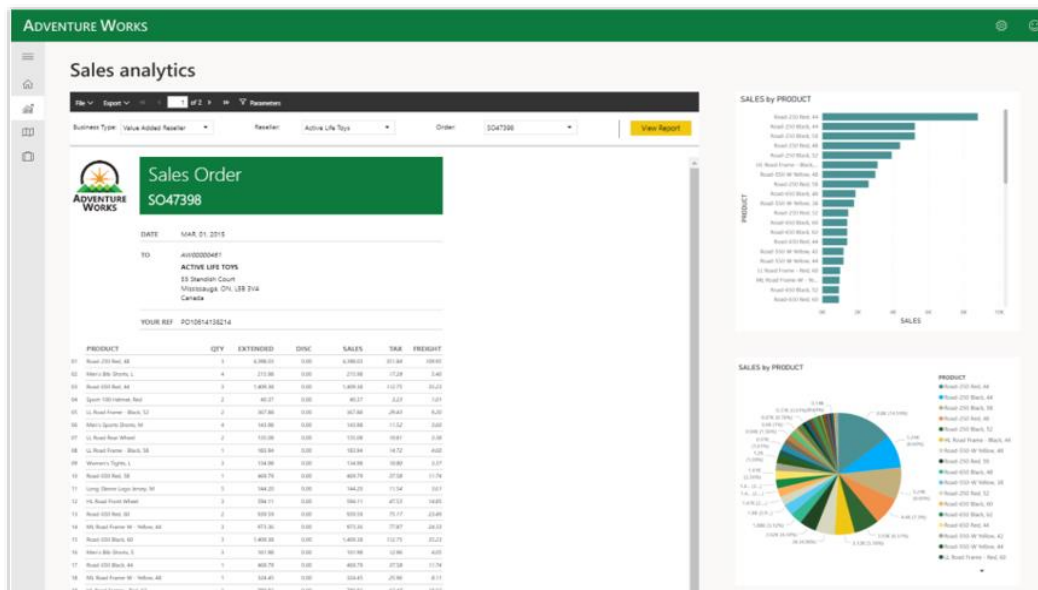
Power BI Embedded enables developers of SaaS services and enterprise portals to embed stunning interactive reports and dashboards. Power BI Embedded will continue to support large-scale enterprise BI deployments with rich tooling and a focus on performance to enable at-scale solution management using either Power BI or an external application.

### Embed Power BI paginated reports into an application for your customers

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ Nov 5, 2019	✓ May 5, 2020

### Feature details

Embed reports to share with external customers. New APIs will be available for embedding paginated reports in applications and portals.



*A paginated report embedded in an app for your customers*

### See also

[Tutorial: Embed Power BI paginated reports into an application for your customers preview \(docs\)](#)

## Extended developer tools and samples to support additional development platforms

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	-	✓ May 30, 2020

### Feature details

The new React component for Power BI Embedded lets you embed Power BI reports in your React applications easily. The React wrapper library for embedding Power BI artifacts support bootstrap, events, and more client-side APIs.

The new samples cover .NET Core embedding for your customers ("App owns data") and embedding for your organization ("User owns data"), embedding for customers in Java, Python, and Node.js, and embedding for your organization in a single page app.

### See also

[New developer samples for Power BI embedded analytics](#) (blog)

## Embedded AI - decomposition trees

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ Nov 30, 2019	✓ Jun 30, 2020

### Feature details

When exploring data, business users in an ISV app may want to understand the root cause of a particular KPI. The decomposition tree visual enables users to break down a metric by one or more dimensions to understand what impact individual factors have on their KPI of interest.

The Power BI decomposition tree is an AI visualization. ISV app users have the choice of either selecting which dimensions to use to decompose their KPI or having Power BI automatically find the most interesting splits, conducting root cause analysis on behalf of the user.

### See also

[Embedded AI – Decomposition tree](#) (blog)

## Power BI Mobile

### Overview

Power BI Mobile continues to support data-driven cultures within organizations by providing access to business data, anytime, anywhere, and from any device.

We will continue to invest in delivering **simple, fast, and intuitive experiences** optimized for mobile use to get business users more engaged with their data and to collaborate with others to share their insights.

### HoloLens v2 support

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ Sep 30, 2020	-

### Business value

Bring data and insights to the frontline worker.

### Feature details

Frontline workers will be able to view and explore Power BI reports using their HoloLens v2.

### Bookmarks in Windows presentation mode

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	-	✓ Jun 10, 2020

### Feature details

Bookmarks are currently used by many report designers to share interesting insights, tell a story, and create intuitive navigation elements within a report. Make storytelling easier and more powerful by combining bookmarks (personal and report bookmarks) with Windows presentation mode and slideshow.

## Dark mode

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	-	✓ Jun 10, 2020

## Feature details

Users can switch the app interface to dark mode to ease eye fatigue and save battery life. Dark mode may also help some users improve focus and productivity.

## Power BI Service

### Overview

We are continuing toward our vision of enabling customers to standardize on a single platform for self-service analytics and enterprise BI. Our investments include:

- **Self-service analytics:** With deep feedback from our community, we are adding new features to make Microsoft Power BI easier and more delightful to use as well as new capabilities for power users who want to push the limits of what they thought possible.
- **Enterprise reporting:** As organizations seek to standardize their BI platform, the need for advanced reporting scenarios increases, whether that is content organization, managed distribution, lifecycle management, or more advanced reporting. We will continue adding capabilities to meet the needs of these advanced enterprise use cases.
- **Enterprise datasets:** Standardized BI deployments put more demands on data models, including larger data volumes, increased model complexity, and the need for collaboration across teams. New capabilities make this possible.
- **Enterprise administration:** An enterprise-wide BI platform must be manageable, governable, and conform to an organization's security policies. We are investing in new experiences for admins to get visibility into their tenant's content, track lineage, understand impact, and set granular policies and controls, among other improvements to make Power BI work at scale.

## Dataflows DirectQuery

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ Apr 1, 2020	-

### Feature details

Power BI dataflows now support DirectQuery capabilities using the enhanced compute engine to provide self-serve analytics. This will allow report designers to quickly set up new reports and dashboards against a single source of truth, as well as prevent the creation of multiple copies of the data source inside Power BI.

## Overload alerts

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Apr 30, 2020	-

### Feature details

Customers will get Premium capacity overload alerts as part of service interruptions.

## Capacity metrics app

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ May 1, 2020	-

### Feature details

The Power BI Premium capacity metrics app will be available as a Power BI template app in Microsoft AppSource. Capacity administrators will download and install the template app and view comprehensive metrics about their Premium capacity. The app will display data for the last seven days, in the current time zone.

The app will refresh once a day with the option to refresh more often as needed. Administrators will be able to use slicers to select capacities (if they have more than one).

Additionally, customer can build customized reports by connecting to the underlying dataset using XMLA.

## Dataset refresh overview

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ May 1, 2020	-

### Feature details

This feature adds new functionality to the admin portal. For Premium capacities, Power BI administrators will be able to view historic and current load of dataset refreshes.

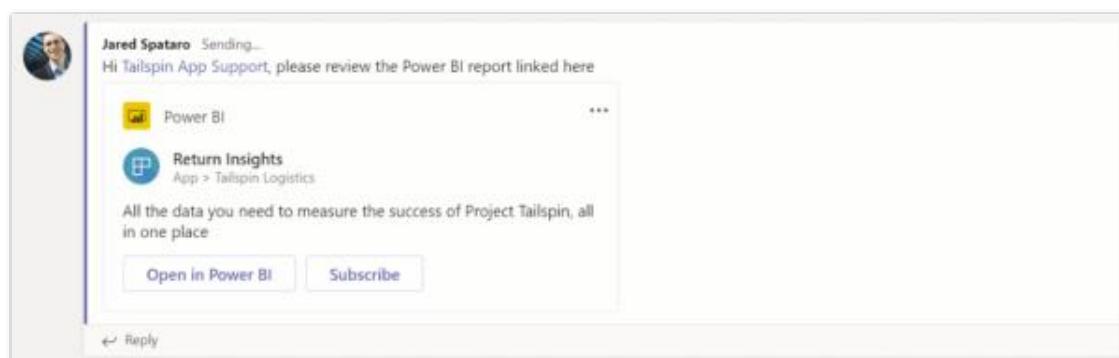
## Collaboration on Power BI in Microsoft Teams

Enabled for	Public preview	General availability
End users, automatically	✓ Jul 31, 2020	-

### Feature details

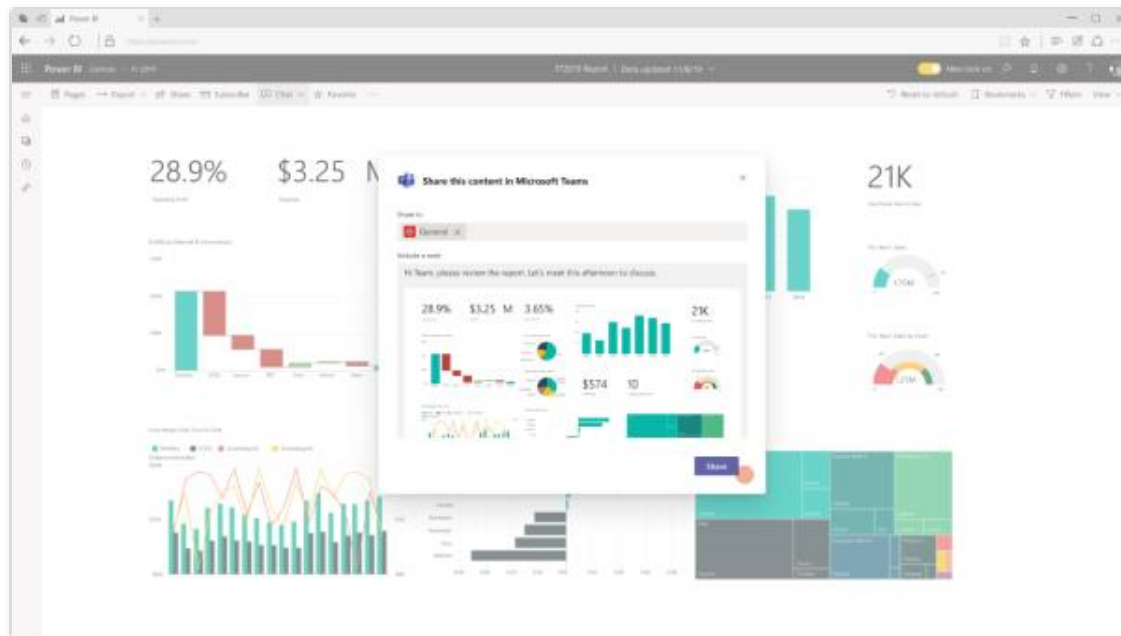
Ensuring everyone has access to data helps drive a data culture. Organizations are adopting modern collaboration in Microsoft Teams so that the tools and the people needed to complete a job are all in one place.

- Power BI interactive cards in Microsoft Teams chat will help users quickly find and take actions on their data.



### Adaptive cards in Microsoft Teams

- Power BI Teams discussions will help users collaborate faster to make data driven decisions.



*Discuss in Microsoft Teams*

## See also

[Share directly to Microsoft Teams from the Power BI service](#) (blog)

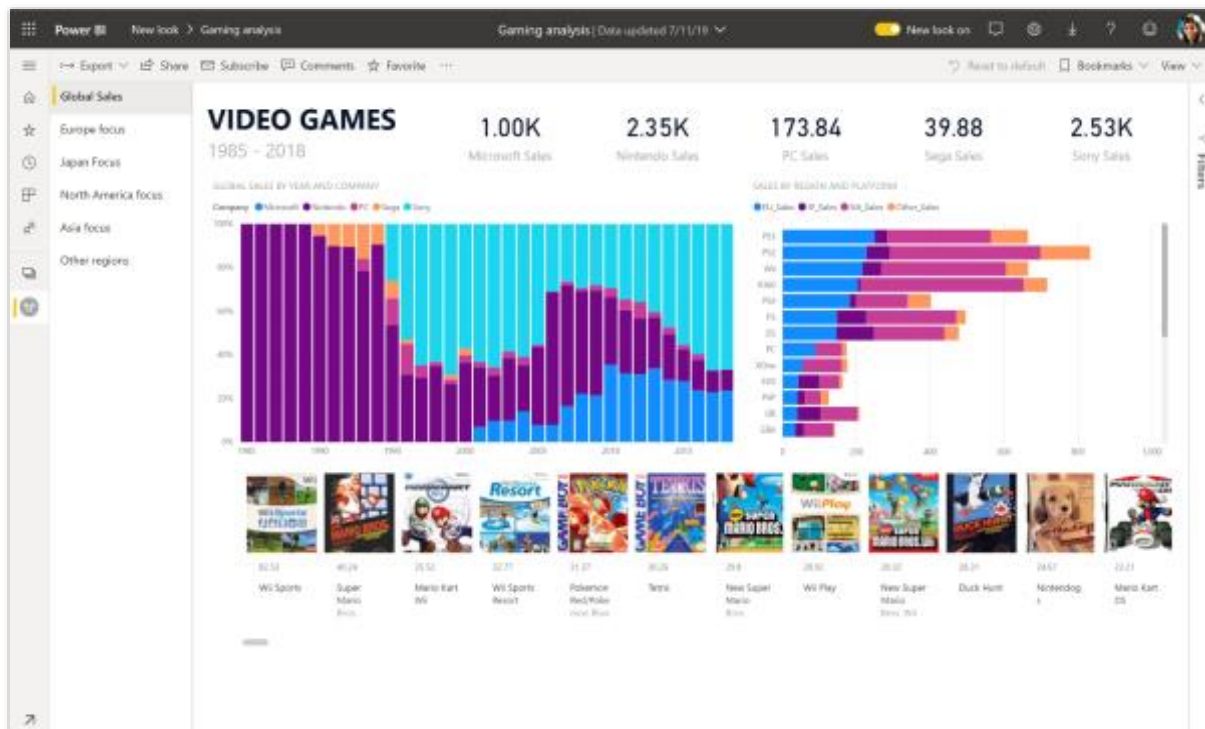
## New look

Enabled for	Public preview	General availability
End users, automatically	✓ Sep 17, 2020	-

## Feature details

We will make enhancements to the new look including improvements to the use of horizontal space and additional usability enhancements from the preview period. The new look will become the default and only option for users.





*New look*

**See also**

[Updates to the 'new look' experience and release plan](#) (blog)

## Power BI dataflows and Azure Data Lake Storage integration at workspace level

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ Sep 30, 2020	-

### Feature details

Customers will be able to connect their Power BI dataflows with Azure Data Lake Storage at the workspace level.

## Migration tooling for paginated reports

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Apr 1, 2020

### Feature details

Customers are looking to move their existing Reporting Services reports to Power BI. We will be extending the open source migration tooling we've made available to further simplify this process. Also, we will be providing additional guidance and documentation to walk users through their migration questions.

## In-place app update

Enabled for	Public preview	General availability
End users, automatically	✓ Oct 1, 2019	✓ Apr 1, 2020

### Feature details

Improve the app-update story to enable updating and replacing template apps:

- Install an app.
- Get a new version of the app from AppSource.
- Install the update and decide if you want to replace the content that was received by the app in its previous version, or install the new version of the app in a new workspace side-by-side with the current app workspace.

### See also

[Template apps update](#) (blog)

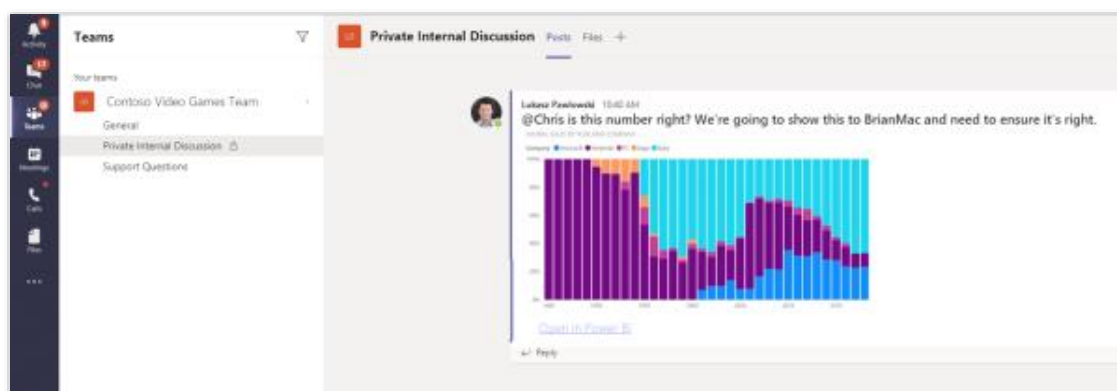
[Install and distribute template apps in your organization - Power BI](#) (docs)

## Copy and paste visuals into other applications

Enabled for	Public preview	General availability
End users, automatically	-	✓ Apr 15, 2020

### Feature details

Conversations about data should happen with ease, no matter what tool your employees use. You will be able to directly copy and paste visuals from Power BI into other applications, retaining visual formatting that makes it easy to interpret for recipients, as well as a link back to Power BI for further exploration.



*Copy/paste link*

### See also

[Announcing: Copy a Visual as an Image](#) (blog)

## Data lineage

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Oct 1, 2019	✓ Apr 15, 2020

### Feature details

BI professionals use Power BI today to build advanced analytical projects spanning numerous data sources, artifacts, and dependencies. Providing insights about the data lineage in these projects is key for shaping efficient work processes and for empowering users to better manage

existing dependencies, derive the potential impact of planned changes in a project, and determine data lineage for important business KPIs. Data lineage insights also help BI professionals understand exactly where their data comes from and assess usage on various artifacts, such as popular data sets.

To further empower our Power BI users, we're introducing a new experience for visualizing data lineage between different Power BI artifacts within a workspace and including cross-workspace dependencies, as well as deriving impact analysis for shared datasets. In addition, APIs to extract lineage information will be supported. This new experience makes it possible for Power BI professionals and admins to better understand the relationships between artifacts and more easily manage Power BI projects in their organization.

### See also

[Power BI data lineage \(preview\)](#) (docs)

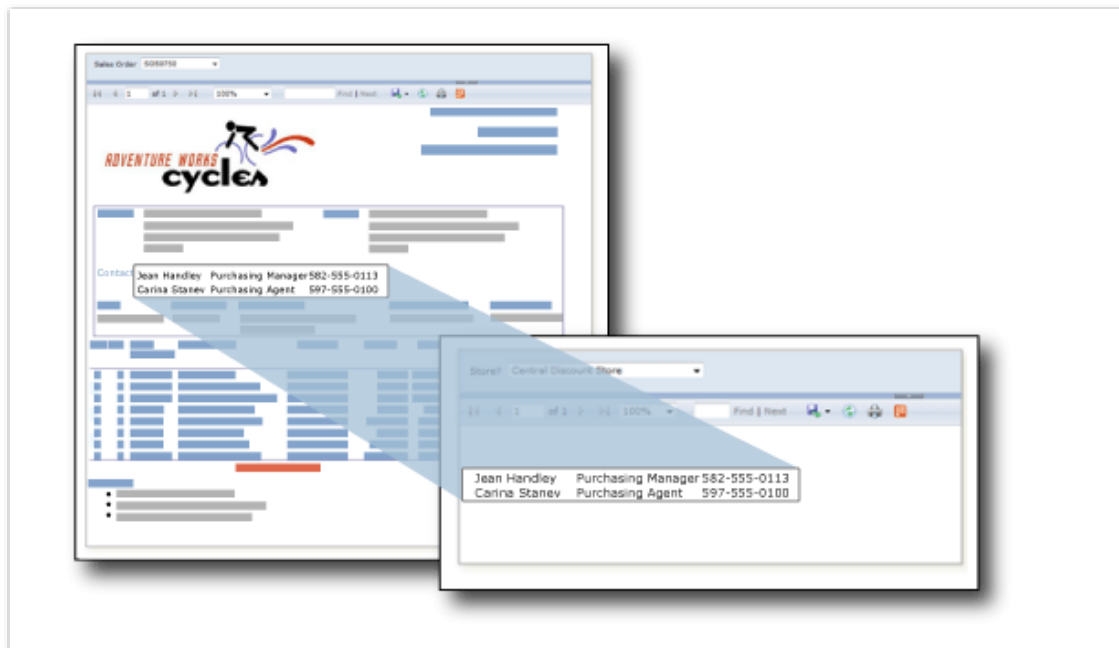
## Improved RDL feature parity for paginated reports in Power BI

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ May 1, 2020

### Feature details

Functional parity for reports is a key requirement for customers coming from Reporting Services. We are adding key features not yet supported in the Power BI service, including:

- **Subreport support:** A subreport is a paginated report embedded within the body of the main report, and conceptually, it's similar to a frame in a webpage. It helps to fulfill a key use case for paginated reports, such as master-detail.



*RDL subreport*

### See also

[Subreports now available for Paginated Reports in Power BI](#) (blog)

### Shared and certified datasets (general availability)

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ May 21, 2020

### Feature details

Following the preview of shared and certified datasets, we will add additional capabilities including easier migration of existing datasets to use shared datasets.

### See also

[Feature exploration](#) (video)

[Announcing General Availability \(GA\) of shared and certified datasets in Power BI](#) (blog)

## Data protection

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ Oct 31, 2019	✓ May 31, 2020

### Feature details

We are introducing new data protection capabilities in Power BI. They leverage Microsoft's leading security solutions for information protection, threat protection, and Microsoft cloud app security to provide you with greater control and visibility over sensitive data in Power BI.

This integration will empower BI professionals and administrators to:

- classify and label Power BI dashboards, reports, datasets, and dataflows in the Power BI service.
- set label-specific permissions on exported files (Excel, PowerPoint, and PDF) from Power BI.
- provide oversight to administrators on sensitive data being used in Power BI and provide them control on export features to enable in their organization.
- monitor user access and activity, protect data based on real-time risk analysis, and set label-specific controls.

### See also

[Data protection in Power BI overview](#) (docs)

## Recommended template apps

Enabled for	Public preview	General availability
End users, automatically	✓ Aug 30, 2020	✓ Aug 30, 2020

### Feature details

Customers are looking for a quicker AppSource buying experience to purchase a Power BI analytics solution from our partners. We will provide recommendations in Microsoft AppSource, and we will make it easier for our Power BI users to find these apps and install them in their Power BI tenant.

## New Power BI geos - Germany, China, Switzerland

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Aug 31, 2020

### Feature details

We're adding support for new geos in Germany, China, Switzerland, and Norway. As a Power BI Premium customer, you will be able to deploy content to these new regions (as well as those already supported) instead of using your home region. These new geos will help you meet your data residency requirements.

## Deployment pipeline - develop, test, and deploy workspace content

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ May 5, 2020	✓ Aug 31, 2020

### Feature details

Enterprises need proper ALM functionality to support the development, testing, and roll out of strategic BI applications. This Power BI Premium-only feature gives enterprises the ability to maintain development, test, and production environments and incrementally transition artifacts between them, reconfiguring them with the appropriate connections and security settings.

## Organizational visuals as out-of-the-box visuals

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020

### Feature details

An admin can pin organizational visuals to the visualization pane of the entire organization. By default, these organizational visuals will display side-by-side with the out-of-the-box visuals.

## Managing Microsoft AppSource visuals

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ Aug 27, 2020	To be announced

### Feature details

Admins will have the ability to manage AppSource visuals for their tenant. Admins will be able to:

- Upload AppSource visuals to the Admin portal (Organizational store).
- Pin any of these visuals from the Admin portal to the **Visualization pane** of the entire tenant.
- Create and manage their own gallery of private and AppSource visuals using the Admin portal.



# Power Apps

## Overview of Power Apps 2020 release wave 1

Power Apps is the industry-leading low-code application development platform that underpins Dynamics 365 extensibility, Office 365 customization, and 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, and deep data platform in Common Data Service, and hundreds of connectors to common business data sources.

Use Power Apps [documentation](#) to get expert information and answers to address your needs, regardless of how you use Power Apps.

The 2020 release wave 1 provides significant improvements for Power Apps developers of all skill levels, improving the sophistication and usability of apps that are created across the web and mobile devices.

- Watch the Power Apps release overview [video](#).
- Watch the Power Apps portals release overview [video](#).

## What's new and planned for Power Apps

This topic lists features that are planned to release from April 2020 through September 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see [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 day of release.

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

## Deep integration from Azure to Microsoft Teams

We're continuing to invest in better Microsoft Teams integration as well as improving the experience of Microsoft Azure developers on the platform.

Feature	Enabled for	Public preview	Early access*	General availability
<a href="#">Build apps for Microsoft Teams with modern controls</a>	Admins, makers, or analysts, automatically	✓ Sep 17, 2020	-	To be announced
<a href="#">Customizable apps in the Microsoft Teams store</a>	Admins, makers, or analysts, automatically	✓ Sep 13, 2020	-	To be announced

## Excellent mobile, including offline

Power Apps is investing heavily in our mobile platform. We're combining canvas and model apps into a single front door, enhancing offline support, and improving mobile-specific user experiences across the board.

Feature	Enabled for	Public preview	Early access*	General availability
<a href="#">Enhanced capabilities and experience in offline mode</a>	End users by admins, makers, or analysts	-	-	✓ Apr 6, 2020
<a href="#">Canvas and model-driven apps run on a single mobile application</a>	End users by admins, makers, or analysts	-	✓ Mar 30, 2020	✓ May 4, 2020

## High velocity developers of all skill levels

Power Apps empowers every developer. We're adding full stack, low-code capabilities that help makers of all backgrounds test their features, ensure performance, and monitor usage.

Feature	Enabled for	Public preview	Early access*	General availability
<a href="#">Instrument your canvas apps with Azure Application Insights</a>	Admins, makers, or analysts, automatically	-	✓ Apr 6, 2020	
<a href="#">Modern solution import experience</a>	Admins, makers, or analysts, automatically	-	✓ Sep 13, 2020	

## Mixed reality

Power Apps is helping digitize physical workflows via mixed reality and connecting you to the physical world through new geospatial capabilities like maps.

Feature	Enabled for	Public preview	Early access*	General availability
<a href="#">Add interactive maps and use data binding</a>	End users by admins, makers, or analysts	✓ Aug 23, 2020	-	
<a href="#">Measure distances and volumes in the real world with mixed reality</a>	End users by admins, makers, or analysts	✓ Aug 23, 2020	-	-
<a href="#">See how a predefined shape fits in your real-world space in mixed reality</a>	End users by admins, makers, or analysts	✓ Aug 23, 2020	-	-
<a href="#">Use an autocomplete text box for street addresses</a>	End users by admins, makers, or analysts	✓ Aug 23, 2020	-	
<a href="#">View 3D content or images in the real world with mixed reality</a>	End users by admins, makers, or analysts	✓ Aug 23, 2020	-	
<a href="#">View 3D models and content</a>	End users by admins, makers, or analysts	✓ Aug 23, 2020	-	-

## Power Apps portals improvements

Power Apps portals are enabling low-code makers to roll out experiences to broad external audiences. We're continuing to advance portals capabilities as usage grows.

Feature	Enabled for	Public preview	Early access*	General availability
<a href="#">Portal Checker enhancements</a>	Admins, makers, or analysts, automatically	-	-	✓ Apr 1, 2020
<a href="#">Support for additional entities in global search</a>	End users by admins, makers, or analysts	-	-	✓ Apr 1, 2020

Feature	Enabled for	Public preview	Early access*	General availability
<a href="#">Power BI Embedded component in portal designer</a>	Admins, makers, or analysts, automatically	✓ Oct 14, 2019	-	✓ Jun 1, 2020
<a href="#">Support for Authorization Code flow for OpenID Connect based authentication providers</a>	End users by admins, makers, or analysts	-	-	✓ Aug 15, 2020
<a href="#">Simplified themes in portals Studio</a>	End users by admins, makers, or analysts	✓ Apr 1, 2020	-	✓ Aug 16, 2020
<a href="#">Simplified web page access management for Power Apps portals</a>	Admins, makers, or analysts, automatically	-	-	To be announced
<a href="#">Simplified portal identity provider configuration</a>	Admins, makers, or analysts, automatically	✓ Apr 1, 2020	-	To be announced
<a href="#">Web APIs for CRUD operations on Common Data Service entities</a>	Admins, makers, or analysts, automatically	✓ Aug 16, 2020	-	To be announced

## Sophisticated apps on a unified platform

Power Apps combines the flexibility of a blank canvas that can connect to any data source with the power of rich forms, views, and dashboards modeled over data in Common Data Service.

Feature	Enabled for	Public preview	Early access*	General availability
<a href="#">Improved data source experience and Common Data Service view are generally available</a>	Admins, makers, or analysts, automatically	✓ Aug 14, 2019	-	✓ Apr 6, 2020
<a href="#">Improved grid column filtering in Power Apps</a>	End users, automatically	-	✓ Feb 3, 2020	✓ Apr 6, 2020

Feature	Enabled for	Public preview	Early access*	General availability
<a href="#">Improvements to quick find search experience on a grid</a>	End users, automatically	-	✓ Feb 3, 2020	✓ Apr 6, 2020
<a href="#">Usability enhancements to editable grid</a>	End users, automatically	-	✓ Feb 3, 2020	✓ Apr 6, 2020
<a href="#">View selector usability enhancements</a>	End users, automatically	-	✓ Feb 3, 2020	✓ Apr 6, 2020
<a href="#">Enable creating and editing data in forms displayed as a modal dialog without navigating away</a>	Admins, makers, or analysts, automatically	✓ Jan 29, 2020	-	✓ May 4, 2020
<a href="#">Save is always visible in the command bar on edit forms</a>	End users, automatically	-	✓ Jan 29, 2020	✓ May 4, 2020
<a href="#">Chart and dashboard styling improvements for model-driven apps</a>	End users, automatically	-	✓ Feb 10, 2020	✓ May 11, 2020
<a href="#">Improvements to model-driven apps</a>	End users, automatically	-	✓ Feb 10, 2020	✓ May 11, 2020
<a href="#">Form settings in modern designer</a>	Admins, makers, or analysts, automatically	✓ Jun 7, 2020	-	✓ Jun 7, 2020
<a href="#">App for Outlook checker</a>	End users, automatically	-	✓ Aug 16, 2020	To be announced
<a href="#">Large file and image support in model-driven forms</a>	End users by admins, makers, or analysts	✓ Apr 20, 2020	-	To be announced

\* Some features are available for you to opt-in as part of early access on February 3, 2020, including all mandatory changes that impact end users. Learn more about [early access](#).

Description of **Enabled for** column values:

- **End users, automatically:** These features include change(s) to the user experience for end 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.
- **End 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 end users.

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

## Deep integration from Azure to Microsoft Teams

### Overview

A core strength of Microsoft Power Platform is our deep integration from productivity applications to advanced capabilities in Azure. We're continuing to invest in better Microsoft Teams integration as well as improving the experience of Azure developers on the platform.

### Build apps for Microsoft Teams with modern controls

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	✓ Sep 17, 2020	-	To be announced

### Business value

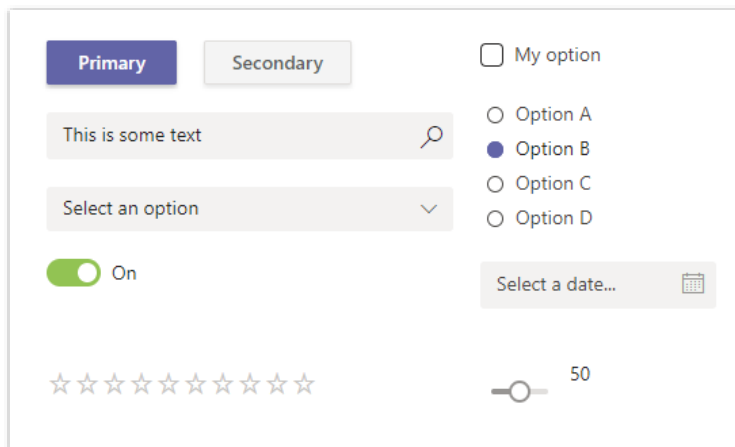
Your apps will look native when they are embedded inside of Microsoft Teams so that your users don't feel like they're having to learn a new tool.

### Feature details

For canvas apps authored inside of Microsoft Teams, there'll be a new version of existing components that you can use within your apps so that they feel native within Microsoft Teams. These include:

- Label
- Button
- Textbox

- Combobox
- Radio
- Checkbox
- Toggle
- Datepicker
- Shape
- Rating
- Slider



*Microsoft Teams theme looking controls*

## See also

[Use the Fluent UI controls](#) (docs)

## Customizable apps in the Microsoft Teams store

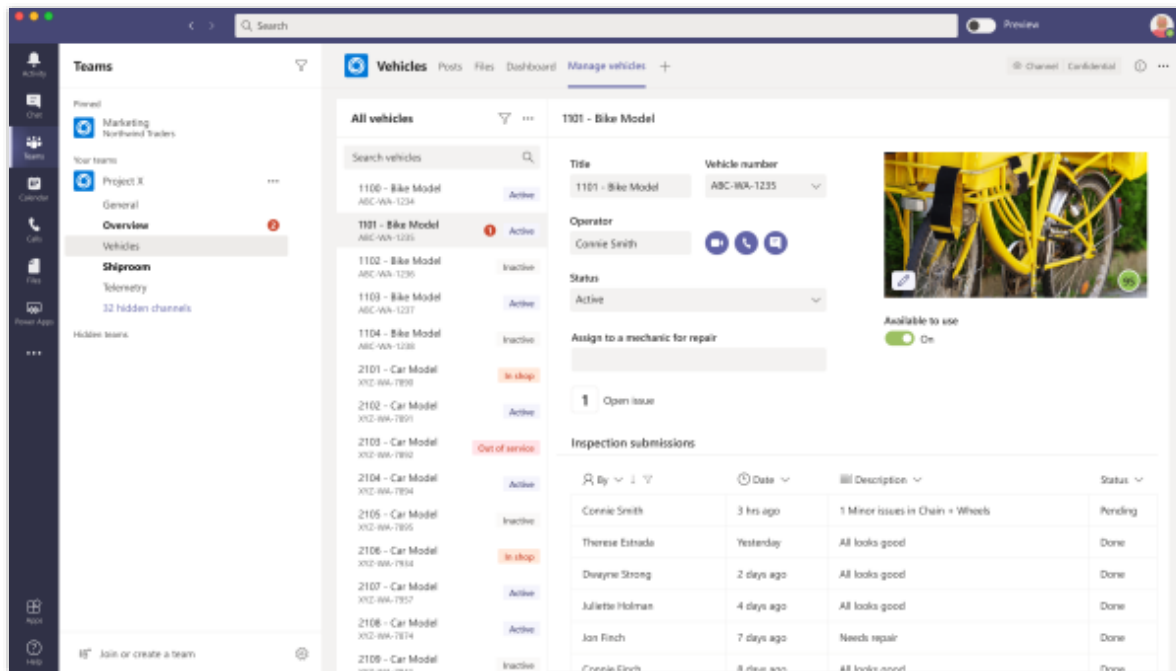
Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	✓ Sep 13, 2020	-	To be announced

## Business value

These apps will make it incredibly easy for you and your teams to structure the data and communications that you have within Microsoft Teams, and if you want to make any adjustments, you can easily make adjustments using the tools you're already familiar with within Power Apps.

## Feature details

Find apps within the Microsoft Teams app store that have built using Power Apps and install them into a Microsoft Teams channel in just a few clicks. One example of an app that will be supported at the feature launch is a vehicle management application that a team can use to keep track of their fleets.



*Manage vehicles within Microsoft Teams*

## Geographic areas

This feature will be released into the following Microsoft Azure geographic areas:

- United States
- Europe
- Asia Pacific
- United Kingdom
- Australia
- South America
- Canada
- India
- Japan



- France
- Korea

### See also

[Use sample apps from the Microsoft Teams store](#) (docs)

## Excellent mobile, including offline

### Overview

Power Apps is investing heavily in our mobile platform. We're combining canvas and model apps into a single front door, enhancing offline support, and improving mobile-specific user experiences across the board.

### Enhanced capabilities and experience in offline mode

Enabled for	Public preview	Early access	General availability
End users by admins, makers, or analysts	-	-	✓ Apr 6, 2020

### Feature details

Ability to work in offline mode is critical for front line workers to perform their daily jobs because they usually work in an area that has poor or no internet connectivity. We are continuously working towards improving this capability to ensure that users have a great experience in offline mode. These improvements are aimed at model-driven apps only.

Some of the improvements coming in April are:

- Model-driven apps are faster and more reliable in offline mode, enhancing the productivity of users.
- Seamless experience in offline mode through better communication and more actionable error messages.
- Entities, such as **Currency**, will be available in offline mode.
- The barcode scanner control will also be available in offline mode.

## Canvas and model-driven apps run on a single mobile application

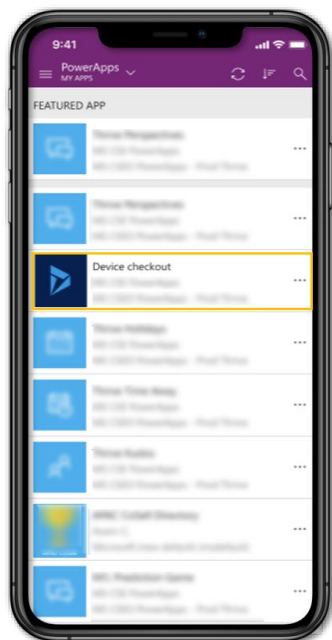
Enabled for	Public preview	Early access	General availability
End users by admins, makers, or analysts	-	✓ Mar 30, 2020	✓ May 4, 2020

### Feature details

Canvas apps and model-driven apps are two rich ecosystems of Power Apps that bring different sets of capabilities to users. Today, there is no way for users to access both of these applications using a single mobile app.

With the Power Apps mobile app, users will be able to access all of their favorite apps in a single mobile application without the need to switch. App makers can deliver targeted experiences to users on a single mobile application; either through a pixel-perfect, task-based, canvas app or through a declarative, metadata/model-driven app. Both canvas and model-driven applications will appear together in a single list of apps in the current Power Apps mobile app.

Model-driven applications also have a brand-new experience that is optimized for mobile users. Usability enhancements to some of the core components of Unified Interface include a native look and feel, gesture support, updated animations, and interaction patterns that are intrinsic to mobile.



*Canvas and model applications (highlighted) running side-by-side in a single mobile app*

## High velocity developers of all skill levels

### Overview

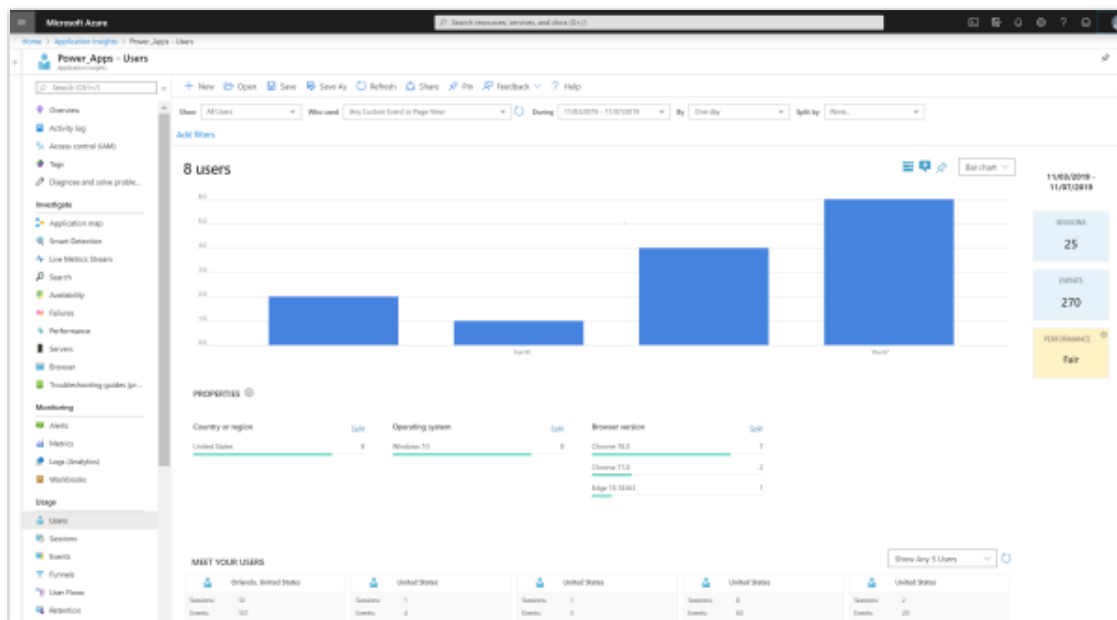
Power Apps empowers every developer. We're adding full stack, low-code capabilities that help makers of all backgrounds test their features, ensure performance, and monitor usage.

### Instrument your canvas apps with Azure Application Insights

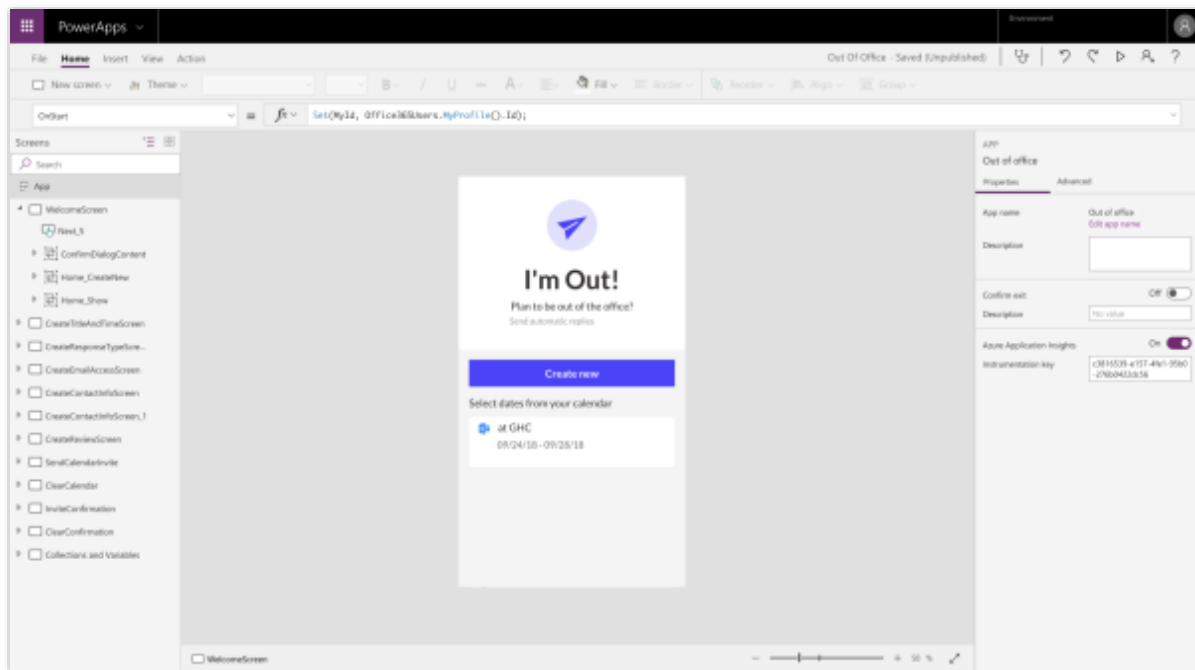
Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	✓ Apr 6, 2020	-

### Feature details

With telemetry now available, admins and app makers can learn how many people are using the app or features and how many sessions, and they can segment the data by country, browser, or other telemetry properties. Makers are also able to write custom traces from their app to Application Insights and build custom queries, reporting, and alerting on top of their telemetry data.



### Azure Application Insights



### Enable Application Insights

#### See also

[Log telemetry for your Apps using Azure Application Insights](#) (blog)

[Analyze app telemetry using Application Insights](#) (docs)

### Modern solution import experience

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	✓ Sep 13, 2020	-

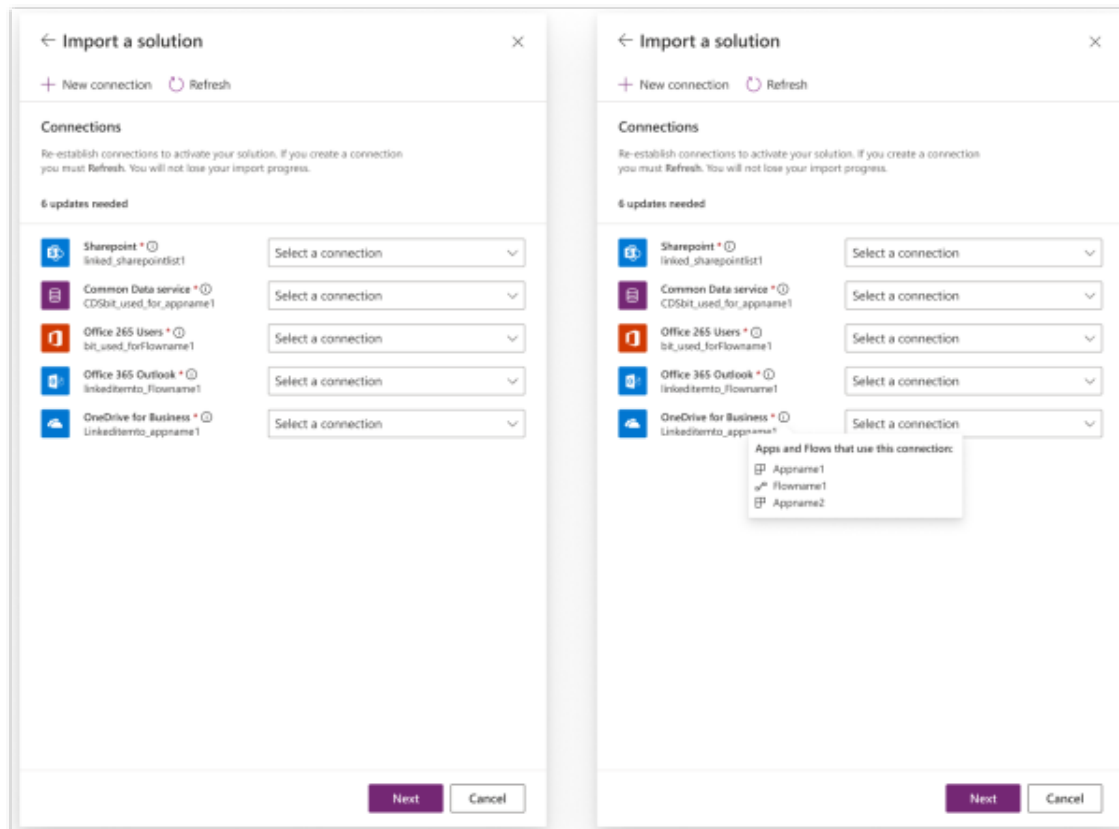
### Business value

We've reimaged the solution import interface to remove complex decision making and ensure solution health. The new experience is more streamlined and allows for configuring inputs that change from environment to environment.

### Feature details

In addition to supporting capabilities of classic solution import, the modern experience offers the following enhancements:

- You're now able to create and authorize the connections required by your apps and flows so that they're created in a working state.
- Set environment variable values required by other components in your solution.
- Reduced complexity when choosing from import actions.
- Accessibility.



## Import

## See also

[Announcing the new solution import experience with connections and environment variables](#) (blog)

[Import solutions](#) (docs)

## Mixed reality

### Overview

Power Apps is helping digitize physical workflows by bringing support for 3D model viewing, placement, gathering of measurements and fit testing in mixed reality. We're also connecting you to the physical world through the introduction of new geospatial capabilities like maps that allow you to easily plot business data.

### Add interactive maps and use data binding

Enabled for	Public preview	Early access	General availability
End users by admins, makers, or analysts	✓ Aug 23, 2020	-	-

### Feature details

Bring dynamic maps that pan, tilt, zoom, and more into your canvas apps. View the location of entities from a data source or by inputting new physical locations. As you zoom out, pins will optionally cluster to represent dense groups of data.

The map supports road and satellite views and can show the current location of the user.

### See also

[Interactive map component](#) (docs)

### Measure distances and volumes in the real world with mixed reality

Enabled for	Public preview	Early access	General availability
End users by admins, makers, or analysts	Aug 2020	-	-

### Feature details

Use the **Measure in MR** component in your app to let users measure distance, area, and volume with their device's camera. During measurement, you create 2D and 3D polygons that can be used to confirm how a certain-sized object would fit within a space. For example, you could measure the length of a wall to see if a display case would fit in the area.

The measurements are then returned to your app where you can use it in formulas, store it in fields, and so on.

## See also

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

## See how a predefined shape fits in your real-world space in mixed reality

Enabled for	Public preview	Early access	General availability
End users by admins, makers, or analysts	✓ Aug 23, 2020	-	-

## Feature details

Create a shape of a specific size that can be overlaid into the real world within your app. Users of the app can use their device's camera to see how the mixed reality shape fits into the real world. For example, you could create a predefined shape with the dimensions of a display case, and then see if it would fit on your display room floor.

## See also

[Create and view predefined 3D shapes in mixed reality](#) (docs)

## Use an autocomplete text box for street addresses

Enabled for	Public preview	Early access	General availability
End users by admins, makers, or analysts	✓ Aug 23, 2020	-	-

## Feature details

Users of this component can see dynamic address suggestions as they type. Using fuzzy matching logic, this component suggests multiple potential address matches that the user can select, making it quicker and easier to enter accurate addresses.

The component returns the address as structured data, allowing your application to extract information like city, street, postal code, latitude, and longitude. The data is in a format that is friendly to many locales and international address formats.

The address input field can be linked to additional text inputs to intelligently auto complete a form, or it can be linked to maps to display points of interest.

## See also

[Address input component](#) (docs)

## View 3D content or images in the real world with mixed reality

Enabled for	Public preview	Early access	General availability
End users by admins, makers, or analysts	Aug 2020	-	-

### Feature details

Use the **View in MR** component in your app to let users see how a particular 3D object might fit within a space. The component creates a button in your app. When app users click the button, it overlays a selected 3D model (in the .glb file format) or image (in .jpg or .png file formats) onto the live camera feed of the device. Users can also capture photos of the object as it appears in the real world.

### See also

[View 3D content or images in the real word](#) (docs)

## View 3D models and content

Enabled for	Public preview	Early access	General availability
End users by admins, makers, or analysts	✓ Aug 23, 2020	-	-

### Feature details

Use 3D models in your canvas apps with the **View in 3D** component to rotate and zoom into the model with simple gestures. For example, you could load a 3D model (in .glb format) into the app, and then zoom in and out of the shape and rotate it to see what it looks like.

You can display a single 3D model, or you can let the user select from a gallery [by connecting to a Gallery control](#).

### See also

[View 3D content in canvas apps](#) (docs)



## Power Apps portals improvements

### Overview

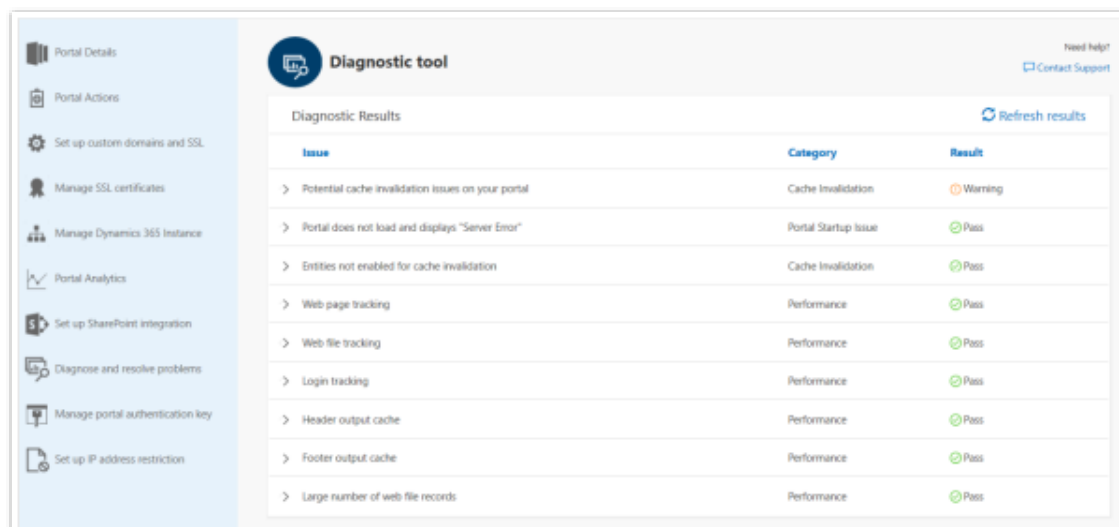
Power Apps portals are enabling low-code makers to roll out experiences to broad external audiences. We're continuing to advance portals capabilities as usage grows.

### Portal Checker enhancements

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ Apr 1, 2020

### Feature details

The Portal Checker tool (released in the October '18 wave) checks portal configuration, identifies potential configuration problems, and provides solutions that help resolve portal issues. Portal customizers and administrators can use this tool to quickly resolve common issues and reduce the amount of time spent on diagnosing issues. As part of this feature enhancement, we added the ability to identify more scenarios that help resolve common portal issues.



### Portal Checker

### See also

[Portal checker](#) (docs)

## Support for additional entities in global search

Enabled for	Public preview	Early access	General availability
End users by admins, makers, or analysts	-	-	✓ Apr 1, 2020

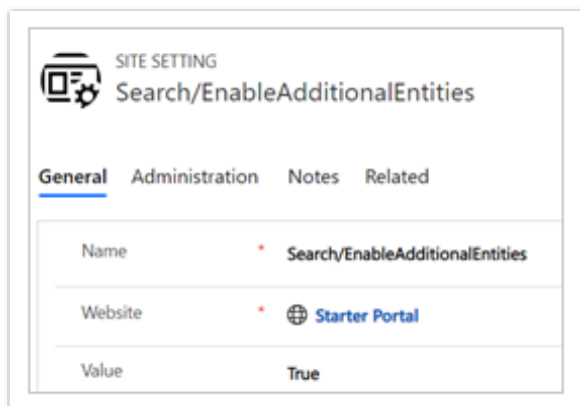
### Business value

Global search helps users quickly search information across multiple record types. Users can already search across webpages and files, knowledge articles, blog and forum posts, ideas, and cases. Supporting additional entities, including custom ones, helps customers extend global search to more record types for their users. This especially helps customers derive more value from global search in Power Apps portals built from blank using starter portal template.

### Feature details

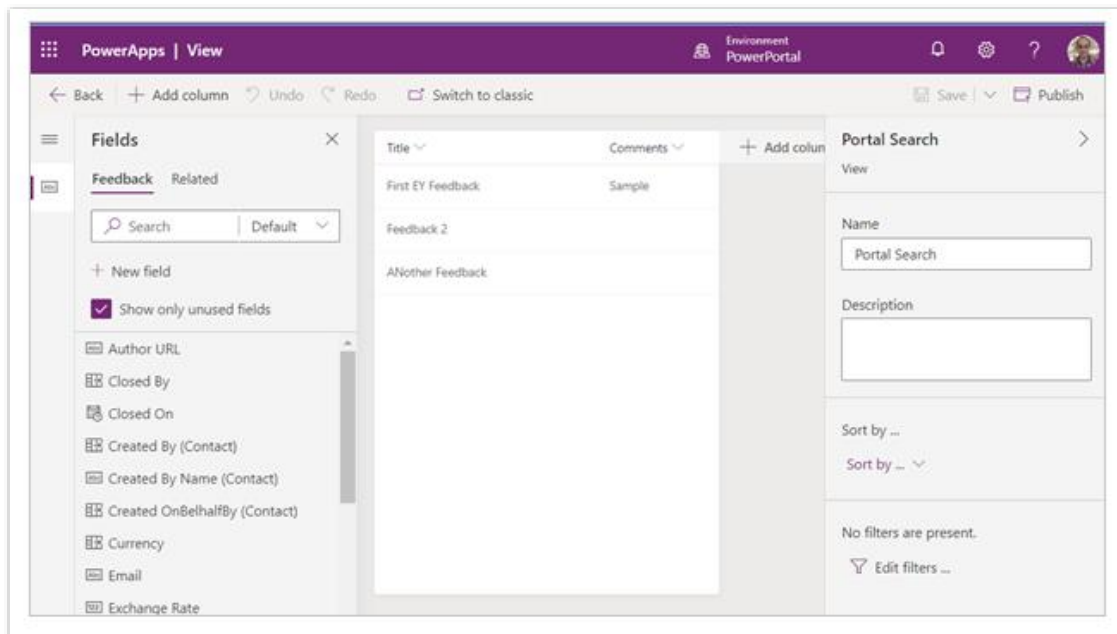
This feature aims at adding support for additional entities that can be searched within a portal in a configurable way.

The capability to enable search is controlled via settings:



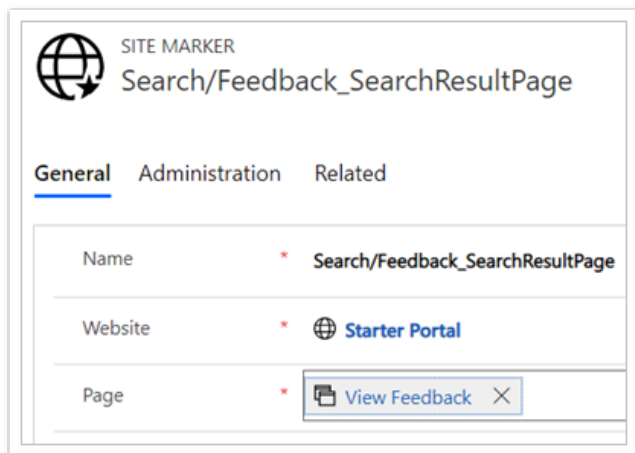
### *EnableAdditionalEntities search site setting*

Records of a particular type that are to be made in global search and the fields that are indexed for search can be configured via a view for each entity individually.



### *Portal Search view*

Record types can be secured and made available in search results via explicit **Read** entity permissions. Makers can specify the page that opens from their search results for each record type that they enable the search on.



### *Feedback\_SearchResultPage result page value*

Global search is based on Lucene.Net, and its current capabilities, such as specifying additional weights and filters, support for terms, and wildcards are available. Also, the configuration of entity filters, support for *searchindex* liquid tag are available for additional entities.

**SITE SETTING**  
search/query

General Administration Notes Related

Name \* search/query

Website \* Starter Portal

Value \* \*(@Query) \_title:@Query) \_logicalname:knowledgearticle-0.9^0.3 \_logicalname:annotation-0.9^0.25 \_logicalname:adx\_webpage-0.9^0.2 - \_logicalname:adx\_webfile-0.9 adx\_partialurl:@Query) \_

Description Override query for site search, to apply additional weights and filters. @Query is the query text entered by a user. Lucene query syntax reference: [http://lucene.apache.org/core/old\\_versioned\\_docs/versions/2\\_9\\_1/queryparsersyntax.html](http://lucene.apache.org/core/old_versioned_docs/versions/2_9_1/queryparsersyntax.html)

### Search query site setting

### 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

[Power Apps portals support additional entities in global search](#) (blog)

[Configuring additional entities for global search](#) (docs)

### Power BI Embedded component in portal designer

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	✓ Oct 14, 2019	-	✓ Jun 1, 2020

### Business value

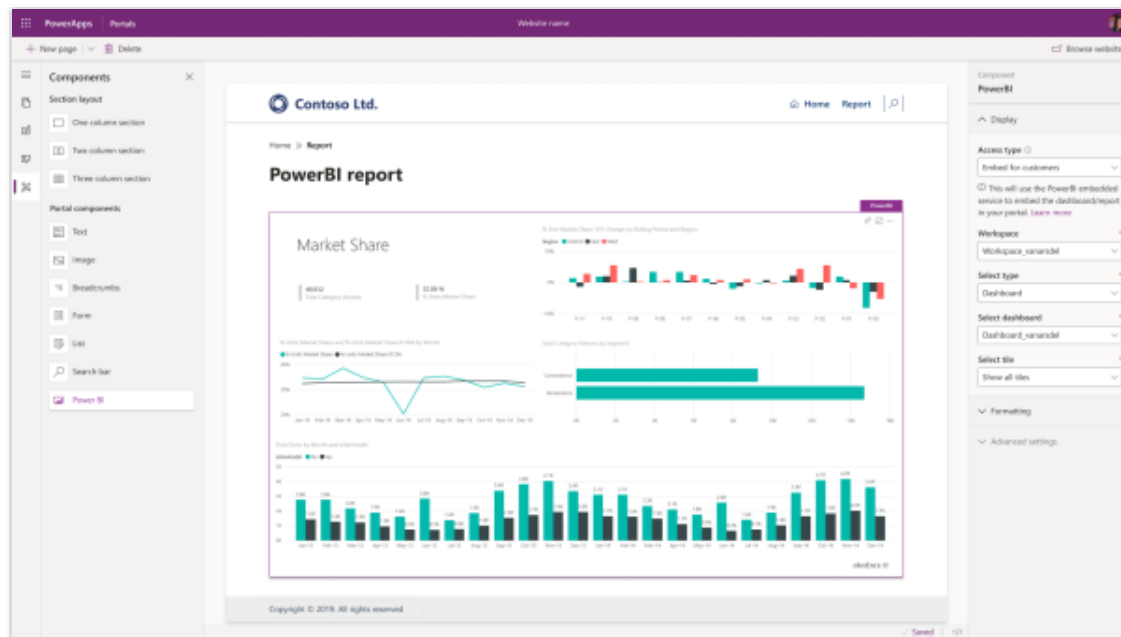
Portals provides the first party integration with Power BI by using the liquid tags. With Power BI Embedded component in the portals Studio experience, we aim to simplify the integration and abstract the liquid tag complexity.

### Feature details

Embedding Power BI in portal using liquid tag is quite cumbersome work, as a maker has to get the required data from Power BI and pass the values to the appropriate parameters in liquid code.

With this feature, we aim at enabling Power BI Embedded as a first-class component in the portals Studio experience; similar to **Forms** and **Lists**. Makers can add the required Power BI

dashboards or reports as a component in a portal webpage by using the portals Studio, without worrying about the liquid code.



*Power BI Embedded as component*

## See also

[Power Apps portals simplified Power BI integration using "Power BI" component](#) (blog)

[Add Power BI component](#) (docs)

## Support for Authorization Code flow for OpenID Connect based authentication providers

Enabled for	Public preview	Early access	General availability
End users by admins, makers, or analysts	-	-	✓ Aug 15, 2020

## Feature details

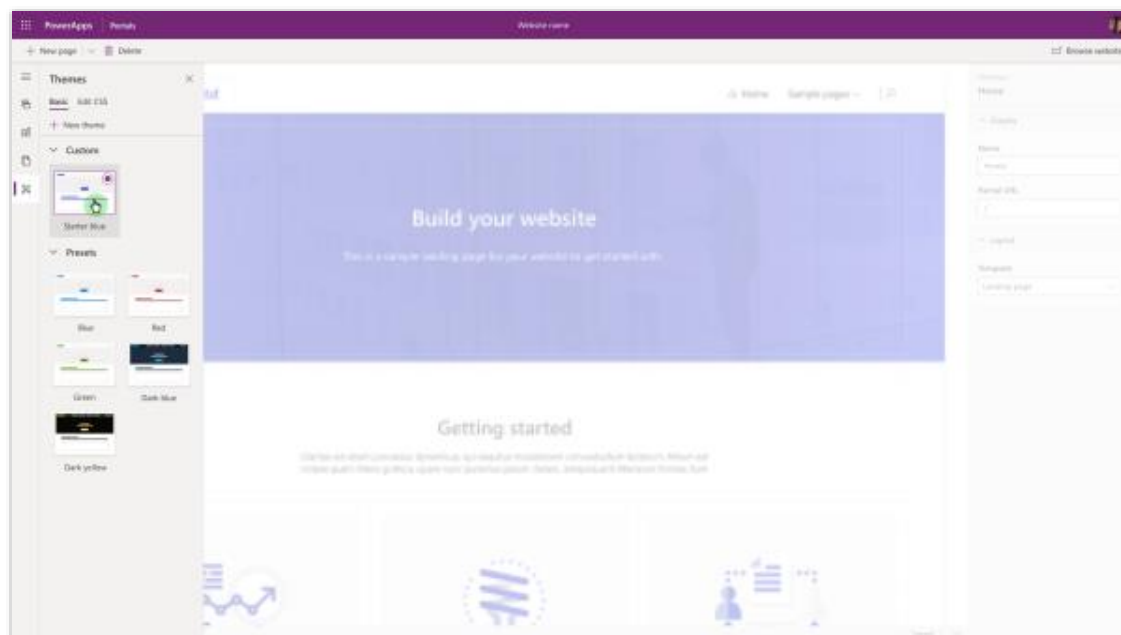
Authorization Code flow is one of the major authentication flows supported by OpenID Connect protocol for user authentication in applications. As part of this feature, we are adding support for Authorization Code flow.

## Simplified themes in portals Studio

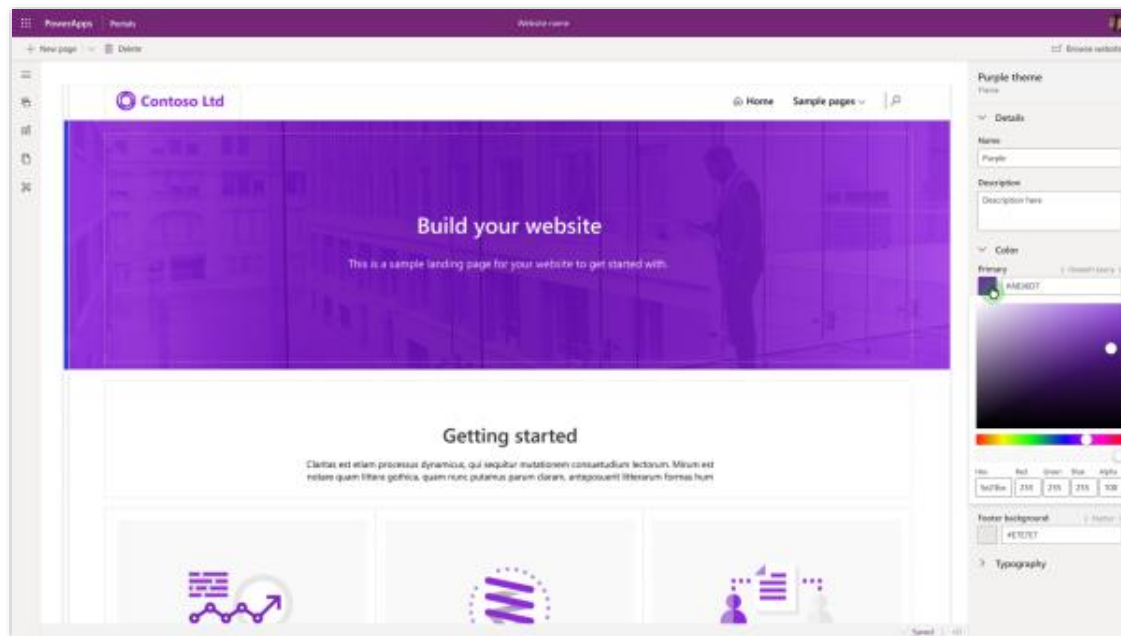
Enabled for	Public preview	Early access	General availability
End users by admins, makers, or analysts	✓ Apr 1, 2020	-	✓ Aug 16, 2020

### Feature details

This feature provides simplified themes in portals Studio. Portal makers can use themes for common website properties using a simple and easy configuration experience.



*Starter Blue theme*



*Custom Purple theme*

## See also

[Power Apps portals simplified themes in portals studio](#) (blog)

[Enable basic themes for existing portals Preview](#) (docs)

## Simplified web page access management for Power Apps portals

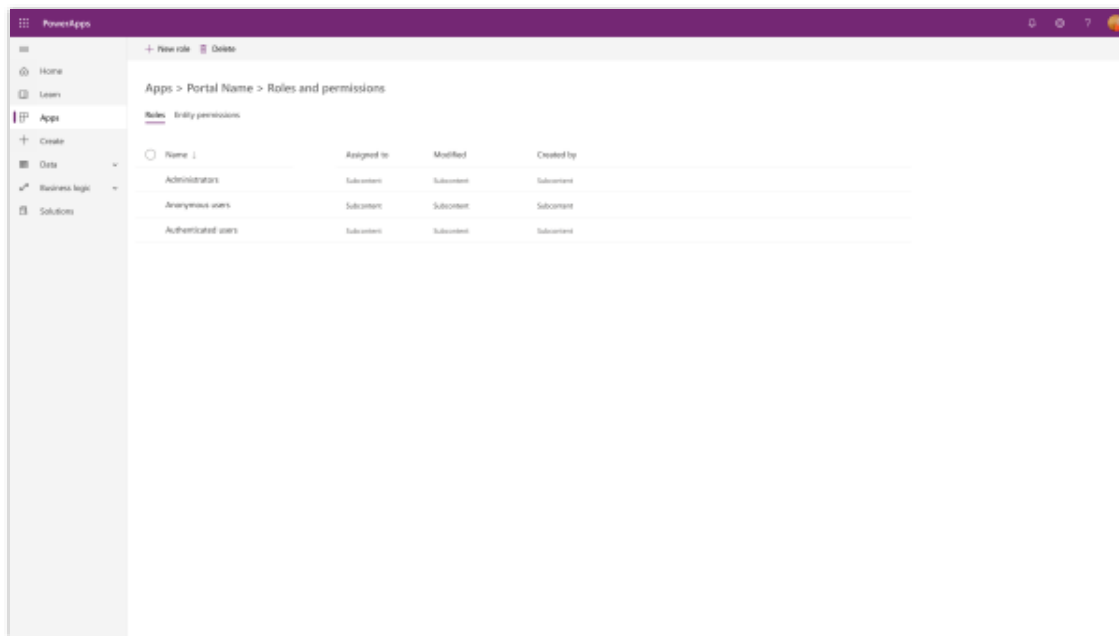
Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	To be announced

## Business value

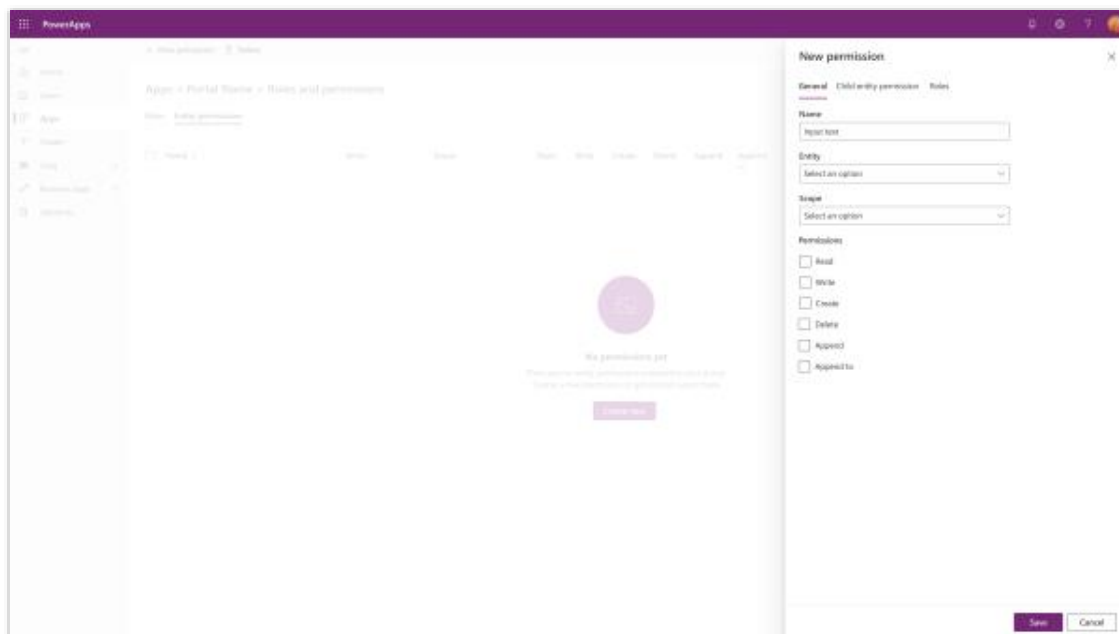
This feature makes the creation of security models for portals quicker and less error prone. It also reduces the complexity of defining the security model in the Portal Management app.

## Feature details

This feature enables makers to specify web page access control rules from the portals Studio without having to create these rules from the Portal Management app.



## Role management



## Add new permission



## Simplified portal identity provider configuration

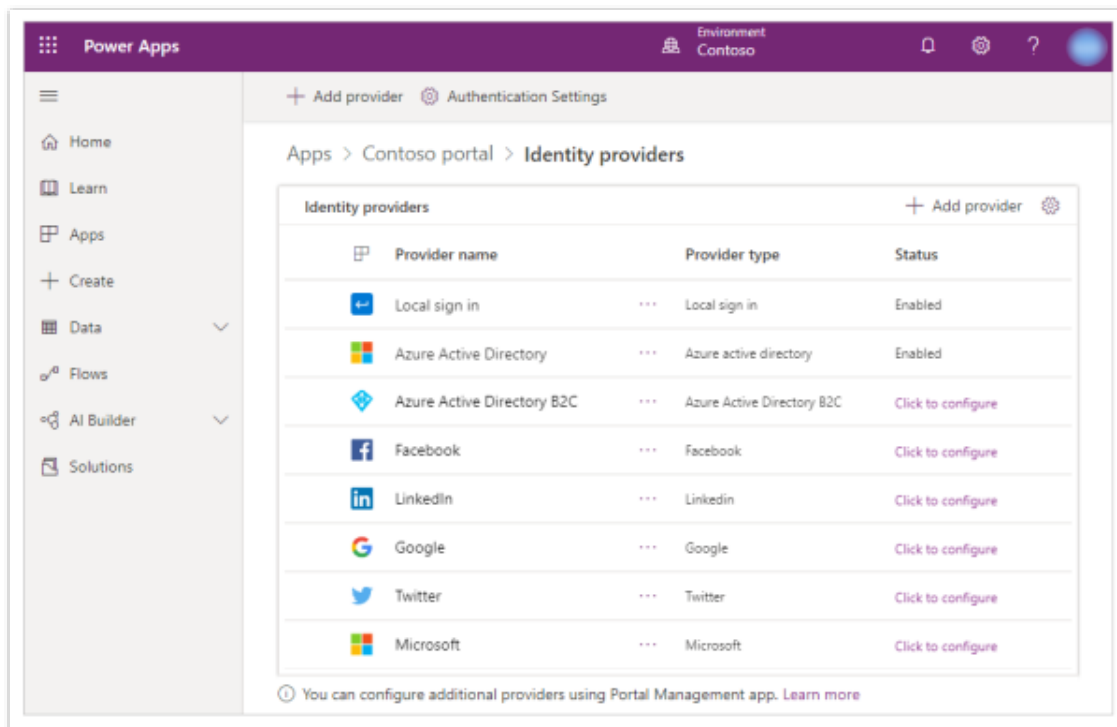
Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	✓ Apr 1, 2020	-	To be announced

### Business value

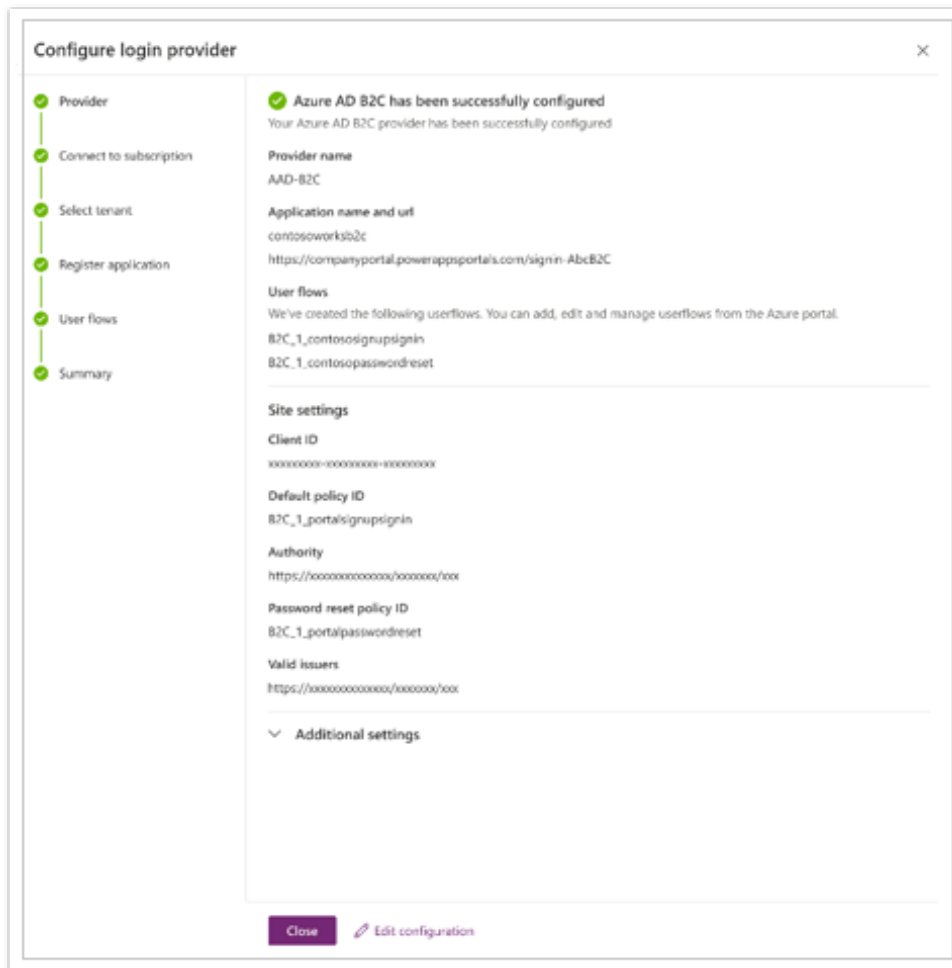
Setting up authentication providers is a core customization in any portal. With simplified portal identity provider configuration, we aim to provide in-app guidance for identity provider setup and abstract setup complexities. This helps makers and administrators quickly and easily perform setup for supported identity providers and reduces the usual configuration errors.

### Feature details

The authentication setup experience today is complex and involves multiple steps. With Azure Active Directory B2C as a provider, we make the experience easier with a step-by-step wizard and automate as much as possible, so a user does not have to follow long documentation steps to configure the authentication manually.



*Identity providers for portals*



### *Identity provider wizard*

With other identity providers, the feature provides guidance and an intuitive configuration experience. For example, for OAuth 2.0-based login providers, the setup provides links to provider documentation, easy-to-copy portal redirect URLs, and instructions to obtain and configure Client ID and Client Secret settings.

**Configure identity provider**

**Select Provider**

**Configure Facebook settings**

**1. Create Facebook app**  
To use Facebook as an identity provider, you'll need to create an app in Facebook with the following redirect URL. [Learn More](#)  
[Open Facebook](#)

**Reply URL** ⓘ  
`https://[portal-name].powerappsportals.com/signin-Facebook` [Copy](#)

**2. Configure site settings**  
Enter Client ID and Client Secret of your Facebook app to enable sign in to your portal using Facebook. You can also configure the additional settings now or from the portal management app later.

**Client ID \*** ⓘ

**Client Secret \*** ⓘ

> **Additional settings**

**Back** **Confirm** **Cancel**

*Configure OAuth 2.0 login provider*

## See also

[Power Apps portals simplified identity provider configuration](#) (blog)

[Simplified authentication and identity provider configuration](#) (docs)

## Web APIs for CRUD operations on Common Data Service entities

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	✓ Aug 16, 2020	-	To be announced

## Feature details

The liquid tags in portals today provide read-only capability. Creating, updating, and deleting operations require using UI components like entity list and entity forms. This feature adds web APIs for portals that allow users to create, update, and delete operations across all Common Data Service entities.

## 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

[Portals Web API](#) (docs)

## Sophisticated apps on a unified platform

### Overview

Power Apps combines the flexibility of a blank canvas that can connect to any data source with the power of rich forms, views, and dashboards modeled over data in Common Data Service. As we continue to combine the strengths of both canvas and model-driven applications, users of both app types will benefit with greater control and flexibility.

### Improved data source experience and Common Data Service view are generally available

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	✓ Aug 14, 2019	-	✓ Apr 6, 2020

### Business value

This feature provides a number of usability enhancements for accessing all data sources. Common Data Service entities are prominent. Speed of access to Common Data Service is now greater than 50% along with greater stability than previous releases. Makers can now work with Common Data Service views. The features and speed improvements make this way of connecting to Common Data Service preferable over the Dynamics 365 connector.

### Feature details

This update includes the following features:

**New data sources pane:** The sidebar now includes a **Data** sources panel icon and pane, which replaces many of the data panels that open over the right edge of the canvas area. This panel allows adding data sources into the app or creating new connections without inserting a control. It provides an easy way to see the data source in your app and perform actions like refresh or delete.

**Entity view selection:** When a Common Data Service entity is used as a data source, a view can be selected in the property pane, and the **Items** property is updated. The property pane will update the **Items** property to add the **Filter** function taking the view name as the filter.

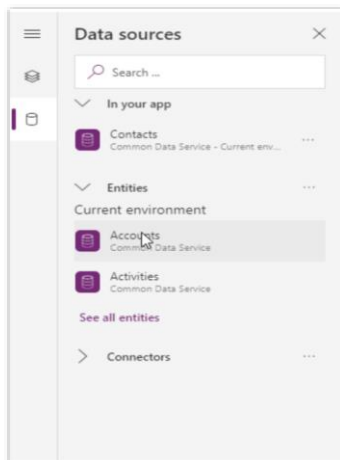
A big benefit of working with Common Data Service views is that the query for the view is run on the server - not locally on your device. This means you avoid delegation issues with the core query. In addition, you have the flexibility to append other filter conditions that are delegated, if supported. For more advanced queries, just nest the **Filter** function within other functions using the formula bar.

**Combo box data source selection:** The combo box control also supports the data source selection call out and view selection. This is the same as the gallery and data table controls.

**Change Common Data Service environment:** Data source selection call out can change the environment to get a Common Data Service entity from another environment. This works within the same tenant. The current environment is the app's environment and changes when the app moves to a new environment. Other environment selections stay the same when the app moves to a new environment.

**Improved data field defaulting:** When a gallery or data table control is bound to an entity, the fields are defaulted using the default public view. This improves the initial fields used and can be controlled by editing that view. Field defaulting only happens when the entity is set as the data source and after that fields are managed with the data panel.

**Improved speed and reliability for connecting to Common Data Service:** Performance testing indicates a 2x (and better) speed improvement for connecting to Common Data Service. Reliability has significantly increased as well.



*Improved data experience*

## See also

[Preview for Improve data source experience and Common Data Service views](#) (blog)

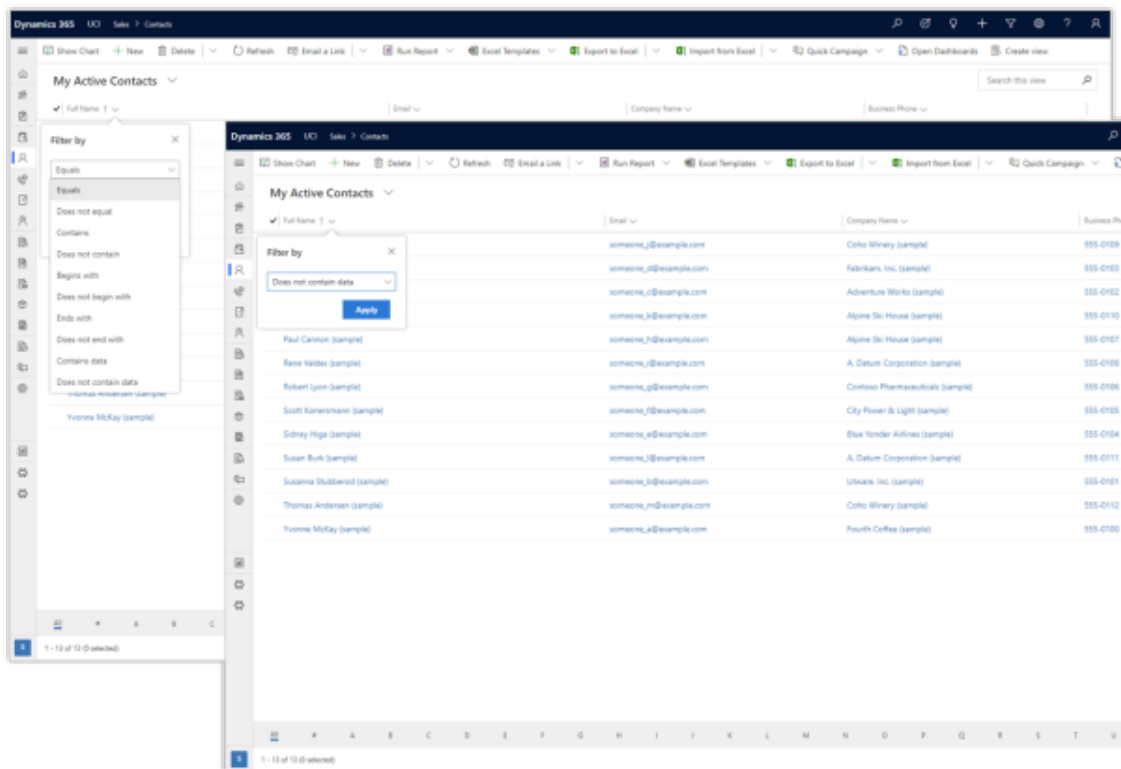
## Improved grid column filtering in Power Apps

Enabled for	Public preview	Early access	General availability
End users, automatically	-	✓ Feb 3, 2020	✓ Apr 6, 2020

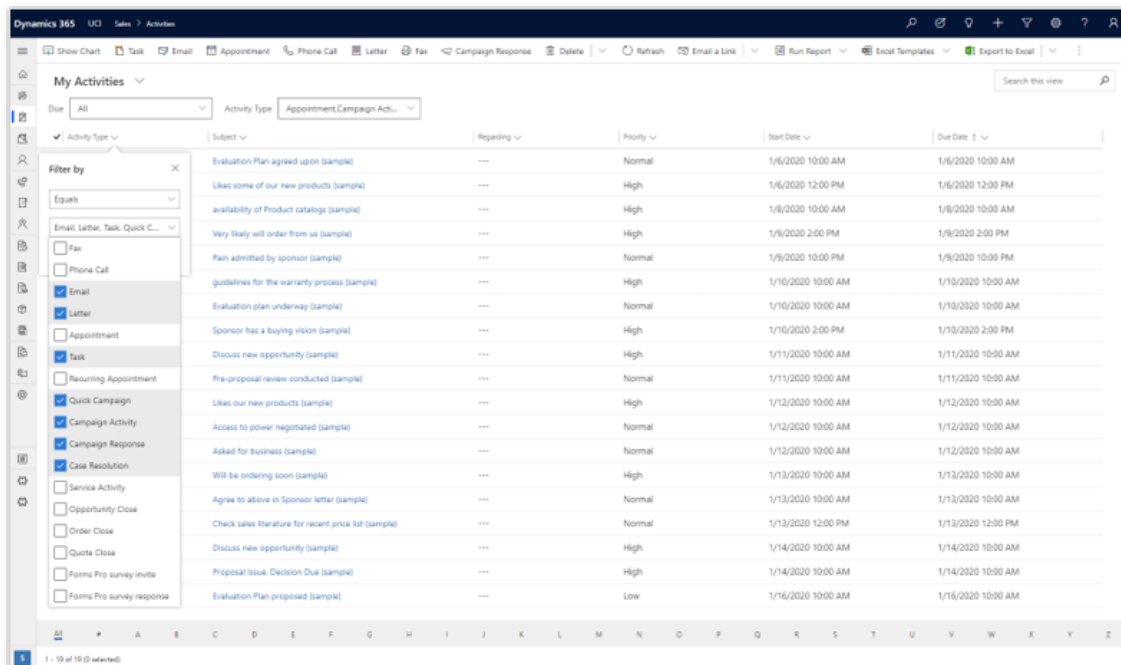
### Feature details

Tabular data manipulation is now easier with a whole range of advanced grid column filtering capabilities.

- String and numeric fields have operators to filters like: *begins with*, *ends with*, and *contains data*.
- Activity management is vastly improved with a new set of date filters. Absolute (before, after, on, etc.) and relative (last week, next year, older than X months, etc.) filters put powerful slicers at your fingertips.
- Filtering on option set columns is as easy as checking items off a list.
- Lookup columns also have an enhanced inline lookup experience for quick filtering.
- Filtering a grid on columns not present in the view is easy and intuitive with the advanced filtering pane.
- Add multiple filter conditions, including grouping and use of logical operators to create more complex condition expressions.
- Legacy advanced find capabilities like building view filter expressions is now on Unified Interface.



### Grid filtering



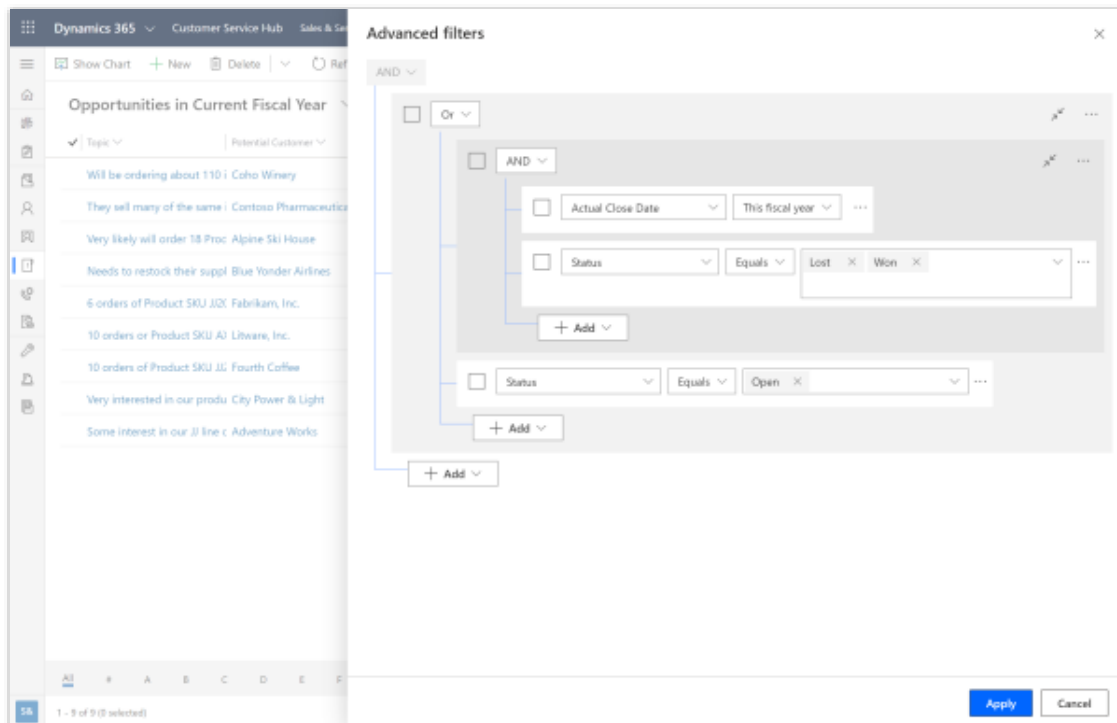
### Grid filters option set



### Grid filter lookup

*Grid filter date*





### Advanced filtering

### See also

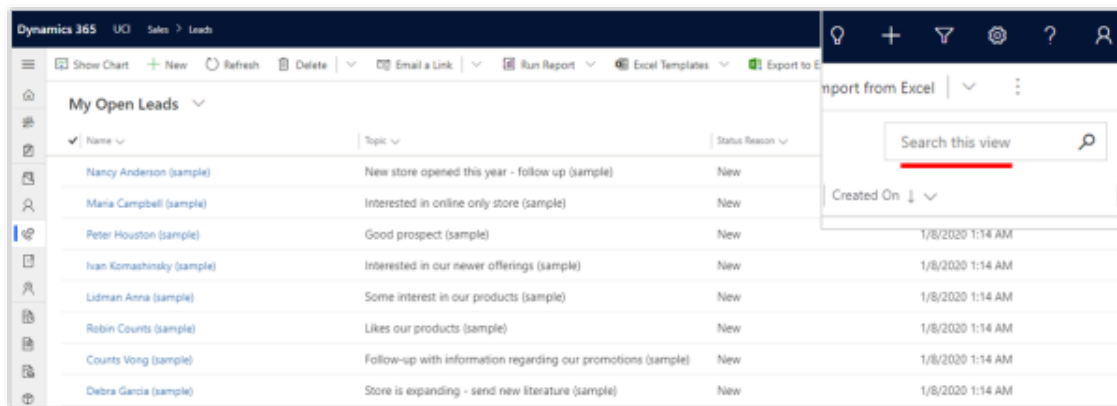
[Use grid filters](#) (docs)

## Improvements to quick find search experience on a grid

Enabled for	Public preview	Early access	General availability
End users, automatically	-	✓ Feb 3, 2020	✓ Apr 6, 2020

### Feature details

Searching for records on a grid is more intuitive with the current view definition honored when performing search. The **Search this view** capability on the grid now applies the current view conditions and then searches on the fields that are configured in the quick find view definition. Enabled by default, administrators can switch back to quick find search experience easily, which targets an entity's quick find view definition for searching against and for displaying results.



*Search*

## See also

[Use search on a grid](#) (docs)

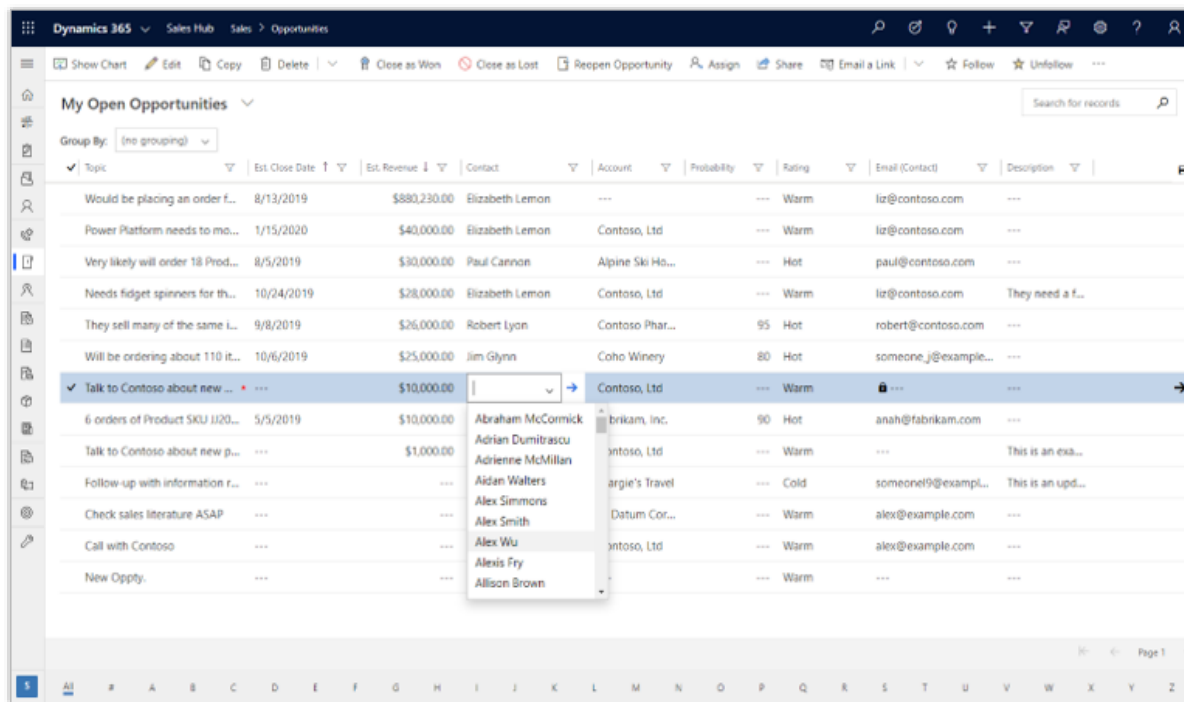
## Usability enhancements to editable grid

Enabled for	Public preview	Early access	General availability
End users, automatically	-	✓ Feb 3, 2020	✓ Apr 6, 2020

## Feature details

Targeted usability improvements to editable grid allows users to be more productive when editing grid-based data sets.

- Editable grids now display up to 100 records on a lookup column, up from 20.
- Editable grids now also display rich text content with HTML tags stripped out for better readability of fields like email body.



*Editable grid*

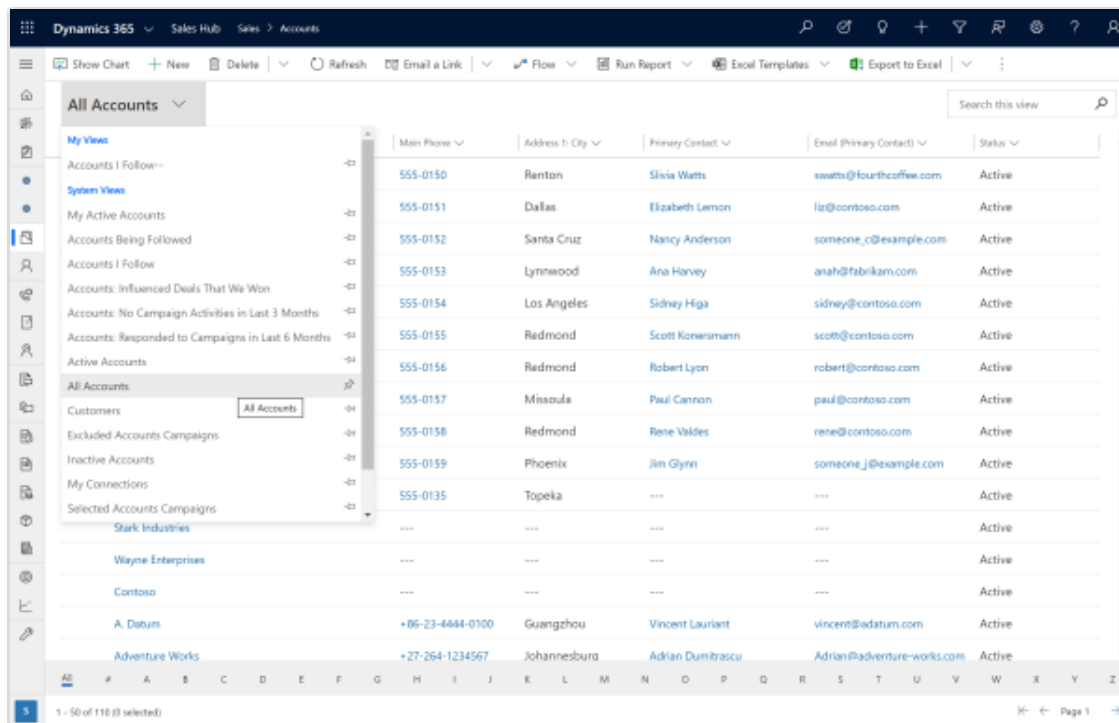
## View selector usability enhancements

Enabled for	Public preview	Early access	General availability
End users, automatically	-	✓ Feb 3, 2020	✓ Apr 6, 2020

### Feature details

The view selector dropdown is enhanced with the following capabilities:

1. The dropdown is longer and wider to show more views, that aid browse and selection experiences.
2. Personal views are separated from system views and shown higher in the list.
3. View header and label highlighting styles promote quick discovery of views.
4. Pinning is made easier with better icon alignment.



### View selector

## Enable creating and editing data in forms displayed as a modal dialog without navigating away

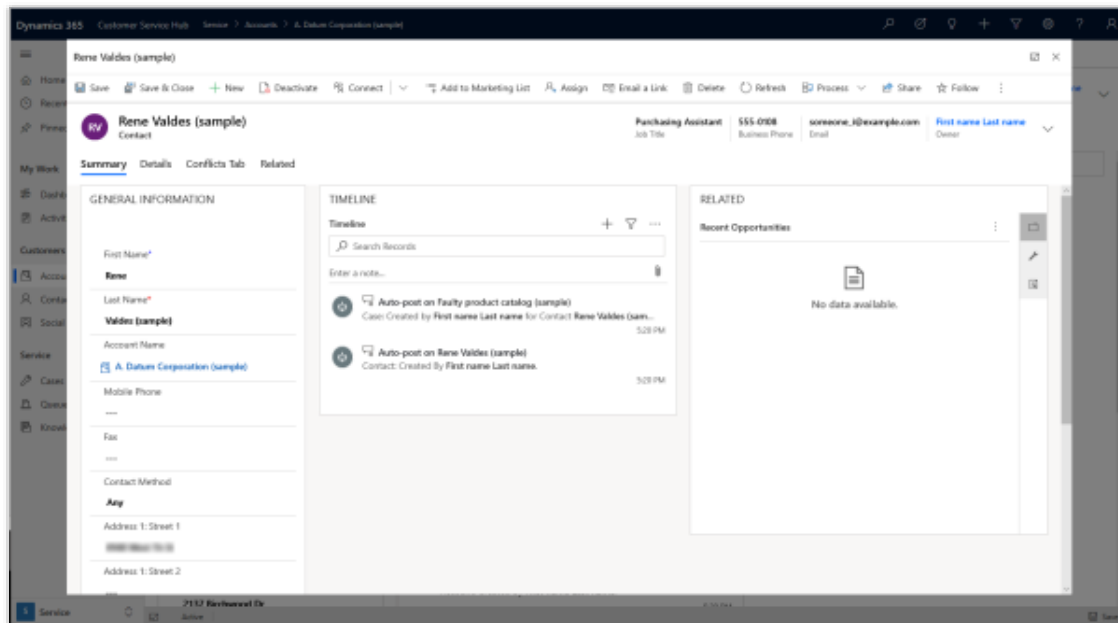
Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	✓ Jan 29, 2020	-	✓ May 4, 2020

### Business value

Users do not have to navigate away from a form to create or edit a related record. This greatly improves productivity by reducing clicks and eliminating the need to do unnecessary navigation back and forth across forms.

### Feature details

Users no longer have to navigate away to add or edit a related record. Makers will be able to open a main form in a dialog directly from another main form. This greatly improves overall productivity by reducing clicks and unnecessary navigation when working with related records. This feature will be available with the 'navigateTo' API and can be used from a command bar, event, or plugin to open a main form record in a dialog experience.



*Main form dialog*

## See also

[Open a main record in a dialog in a model driven app](#) (blog)

[Open main form in a dialog using client API](#) (docs)

## Save is always visible in the command bar on edit forms

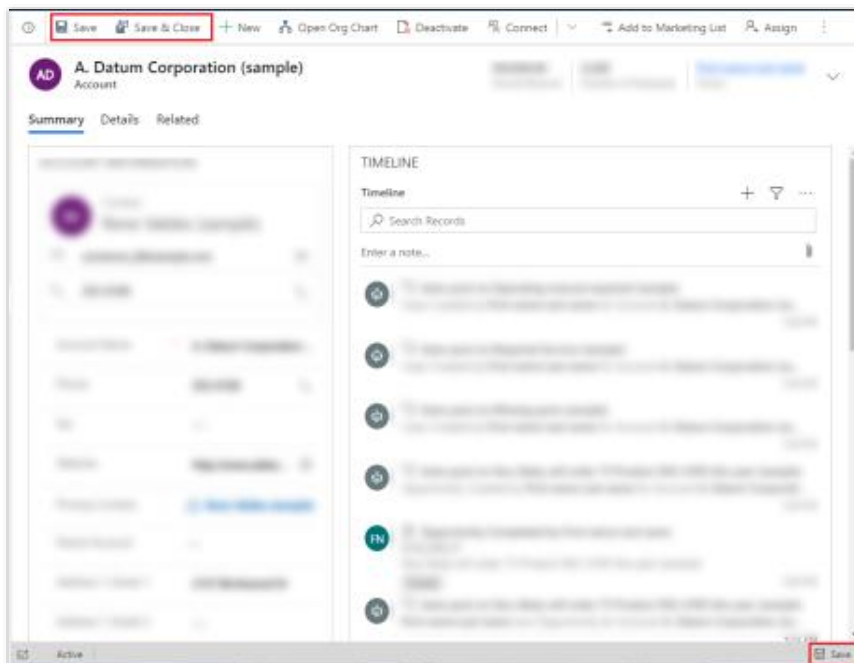
Enabled for	Public preview	Early access	General availability
End users, automatically	-	✓ Jan 29, 2020	✓ May 4, 2020

## Business value

Improve usability and NSat based on direct feedback from customers, partners, and first-party app teams.

## Feature details

Customers using model-driven Power Apps will see the **Save** and **Save & Close** option on the out-of-box entity command bar when editing a record. Before this release, if the auto save option was turned on, both options were hidden and not available in the command bar. The save option was only visible in the footer.



*Save on command bar*

### See also

[Save and Save and Close options are always visible](#) (blog)

## Chart and dashboard styling improvements for model-driven apps

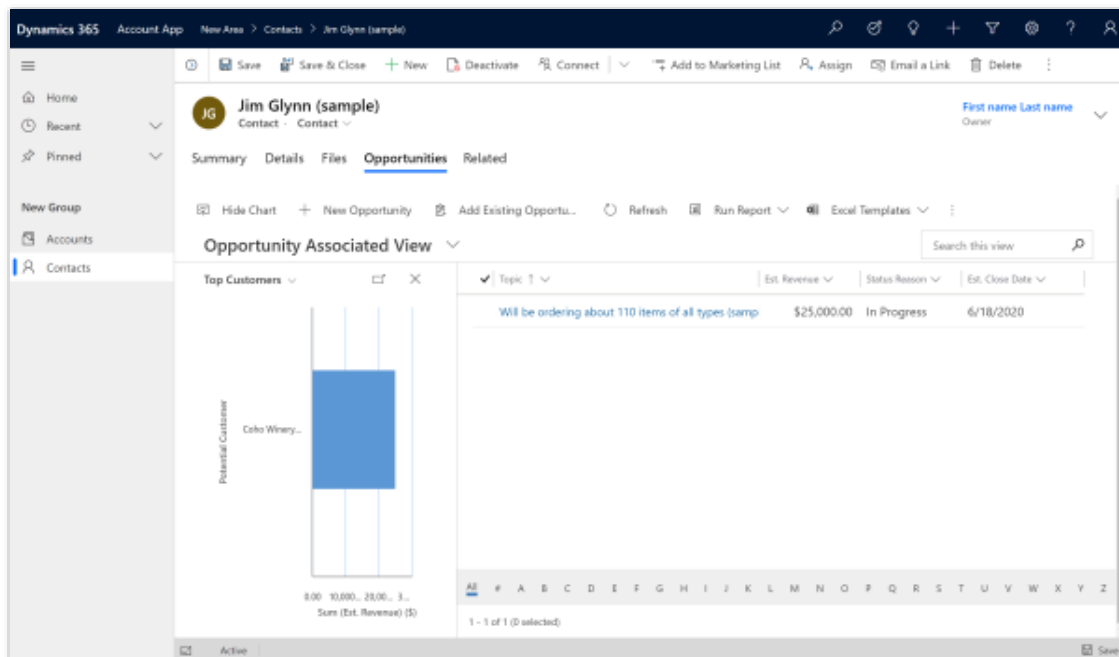
Enabled for	Public preview	Early access	General availability
End users, automatically	-	✓ Feb 10, 2020	✓ May 11, 2020

### Business value

UI improvements for better user experience and promote transition to Unified Interface.

### Feature details

Dashboards and charts are updated in model-driven apps to improve visibility and provide a simpler interface. This includes updated dashboard selection with the user dashboards appearing above system dashboards and minor styling changes. In addition to dashboard updates the related entity grid on forms now includes a **Show Chart** button to match the main grid page.



*Chart control next to the associated grid in the form page*

## Improvements to model-driven apps

Enabled for	Public preview	Early access	General availability
End users, automatically	-	✓ Feb 10, 2020	✓ May 11, 2020

### Feature details

#### Remember the last used app

Model-driven apps have been updated to remember the last app used thereby reducing the need to choose one in the apps list. The last app will be used if an app isn't specified in the URL. For example, use of the last app can happen when opening the organization URL or when opening a generated URL to a specific entity record. The first time opening the URL without specifying an app will still prompt the user, but subsequent opens will use the last app if an app has not been provided. If a user has only one app then that app becomes the last app, which results in no user prompt. This will improve user productivity by removing clicks when getting started with a session.

#### Updated app message bar visuals and new API

Visuals for the existing app message bar where updated to align with the form message bar appearance. Model-driven apps now have new APIs to show app level messages which remain

visible while navigating. The API allows flexibility for the type of message. For example, an app can set a message to be user dismiss-able for information messages or set a message to be not dismiss-able for more permanent messages. The API also supports removing specific messages if they don't apply.

The screenshot shows the 'All Donations' view in a PowerApps application. The interface includes a left-hand navigation pane with options like Home, Recent, Pinned, Fundraiser, Dashboards, Fundraisers, and Donations. The main area displays a table of donation records. The table has columns for 'From', 'Donation Amo...', 'Status Reason', 'Date Created', 'Category (Reg...', 'Fundraiser Go...', 'Name (Regand...', and 'Total Donation...'. The data is sorted by 'Date Created' in descending order. The table shows 12 records, with the first 11 visible. The records include donors like Yvonne McK..., Rene Valdes..., Jim Glynn (s..., Thomas An..., Scott Koners..., Rene Valdes..., Jim Glynn (s..., Nancy Ande..., Jim Glynn (s..., Nancy Ande..., Paul Cannon..., and Maria Camp... with various donation amounts and statuses (Open, Paid).

From	Donation Amo...	Status Reason	Date Created	Category (Reg...	Fundraiser Go...	Name (Regand...	Total Donation...
Yvonne McK...	\$100.000	Open	3/1/2020 2:40 PM	Health	\$1,200.000	Storm Relief	\$250.000
Rene Valdes...	\$150.000	Paid	3/1/2020 2:40 PM	Health	\$1,200.000	Storm Relief	\$250.000
Jim Glynn (s...	\$50.000	Open	3/1/2020 2:40 PM	Education	\$2,000.000	Scholarship ...	\$825.000
Thomas An...	\$75.000	Paid	3/1/2020 2:40 PM	Education	\$2,000.000	Scholarship ...	\$825.000
Scott Koners...	\$50.000	Open	3/1/2020 2:40 PM	Youth	\$1,200.000	Technical Ed...	\$425.000
Rene Valdes...	\$150.000	Paid	3/1/2020 2:40 PM	Youth	\$1,200.000	Technical Ed...	\$425.000
Jim Glynn (s...	\$25.000	Paid	3/1/2020 2:40 PM	Youth	\$1,200.000	Technical Ed...	\$425.000
Nancy Ande...	\$200.000	Paid	3/1/2020 2:40 PM	Youth	\$1,200.000	Technical Ed...	\$425.000
Jim Glynn (s...	\$200.000	Open	3/1/2020 2:40 PM	Community	\$500.000	Special events	\$375.000
Nancy Ande...	\$100.000	Paid	3/1/2020 2:40 PM	Community	\$500.000	Special events	\$375.000
Paul Cannon...	\$75.000	Open	3/1/2020 2:40 PM	Community	\$500.000	Special events	\$375.000
Maria Camp...	\$700.000	Paid	3/1/2020 2:40 PM	Education	\$2,000.000	Scholarship ...	\$825.000

*Global notification with information message bar*

## Form settings in modern designer

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	✓ Jun 7, 2020	-	✓ Jun 7, 2020

## Business value

Makers no longer have to switch from the Power Apps form designer to the classic designer to manage security roles, fallback forms, or the order forms show in a model-driven app.



## Feature details

Makers can use the Power Apps form designer to easily manage security roles for accessing a form, select a fallback form that ensure users always see a form when working with entities, tables, or records, and quickly set the order forms show in an app using form settings.

*Form settings*

## App for Outlook checker

Enabled for	Public preview	Early access	General availability
End users, automatically	-	✓ Aug 16, 2020	To be announced

## Business value

Helps customers self-serve the majority of issues without having to rely on Microsoft support or the product team.

## Feature details

App for Outlook checker helps users to diagnose and troubleshoot any issues that they encounter and helps them monitor the overall health of App for Outlook to take any preventive measures.

- Users can navigate to the checker directly from the error and see the details and any resolutions for that issue.
- Users can launch the checker on-demand using the **CTRL + ALT + Y** keyboard shortcut combination from the App for Outlook at any time to take a look at various components, their health, and any resolutions for historical failures.

## Large file and image support in model-driven forms

Enabled for	Public preview	Early access	General availability
End users by admins, makers, or analysts	✓ Apr 20, 2020	-	To be announced

### Business value

- File and image entity attribute can be added to any part of the form.
- Files can be uploaded up to 128 MB.
- Images can be uploaded up to 30 MB.

### Feature details

Attachments in forms used to be limited to 5 MB, which limit the ability to add large files, such as PDF, images, and videos to items. New large file and image support in model-driven forms will allow users the ability to have large attachments in their apps--up to 128 MB for files and 30 MB for images.

The image shows two side-by-side screenshots of a model-driven form, illustrating the change in attachment support. Both forms have a 'Section Title' and fields for 'Account Name', 'Phone', 'Fax', 'Website', 'Document', 'Ticker Symbol', and 'Parent Account'. In the left screenshot, the 'Document' field has an 'Add file' button. In the right screenshot, the 'Document' field shows a preview of a file named 'CDS Office Theme' with a close button (X), indicating that larger files can now be attached and previewed.

### Large file control

# Power Automate

## Overview of Power Automate 2020 release wave 1

Microsoft Power Automate makes it possible to grow 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. There are three major investment areas for the 2020 release wave 1 (April-September 2020).

First, it's easier than ever for citizen developers to build powerful automation across the **300+ connectors** in Power Automate. This includes new, intelligent experiences that build on AI Builder and integrated experiences in Microsoft Teams, Microsoft Azure, and the other services in Microsoft Power Platform.

Second, **UI flows**, a robotic process automation (RPA) feature, will be released to general availability in this release wave. UI flows automate mundane, rules-based tasks with point-and-click simplicity—whether the app is old or new, on-premises or in the cloud. This now includes both attended (where you're logged in to the machine) and unattended scenarios (where the flow runs in the background on a virtual machine).

Third, Power Automate enables modelling and running human-driven business process with the **modern approval** and **business process flow** features. There are new capabilities in this area, including an easier way to connect your business process flows with automated flows.

Watch release overview [video](#).

Use Power Automate [documentation](#) to get expert information and answers to address your needs, regardless of how you use Power Automate.

## What's new and planned for Power Automate

This topic lists features that are planned to release from April 2020 through September 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see [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 day of release.

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

## More intelligent and powerful capabilities for Power Automate makers

The citizen developers of Microsoft Power Platform now have richer capabilities when they are building out business processes inside of Power Automate.

Feature	Enabled for	Public preview	Early access*	General availability
<a href="#">Interactive adaptive cards</a>	Admins, makers, or analysts, automatically	-	-	✓ Apr 9, 2020
<a href="#">Azure integration with Power Automate</a>	Admins, makers, or analysts, automatically	-	-	✓ Apr 19, 2020
<a href="#">Common expressions simplified</a>	Admins, makers, or analysts, automatically	-	-	✓ May 13, 2020
<a href="#">Discover, learn, and create flows with seamless new experiences</a>	Admins, makers, or analysts, automatically	-	-	✓ May 13, 2020
<a href="#">Build AI-infused workflows</a>	Admins, makers, or analysts, automatically	-	-	✓ Jun 1, 2020

## UI automation for applications and websites

Automate repetitive tasks across services and applications using UI flows in Power Automate.

Feature	Enabled for	Public preview	Early access*	General availability
<a href="#">Automate Citrix remote apps and remote desktops</a>	Admins, makers, or analysts, automatically	✓ Jul 14, 2020	-	-
<a href="#">Solutioning support for UI flows</a>	Admins, makers, or analysts, automatically	-	-	✓ Apr 1, 2020
<a href="#">Advanced editor capabilities</a>	Admins, makers, or analysts, automatically	-	-	✓ Apr 2, 2020

Feature	Enabled for	Public preview	Early access*	General availability
<a href="#">Advanced error handling for UI flows</a>	Admins, makers, or analysts, automatically	-	-	✓ Apr 2, 2020
<a href="#">Automate web-based applications</a>	Admins, makers, or analysts, automatically	✓ Nov 4, 2019	-	✓ Apr 2, 2020
<a href="#">Automate Windows applications</a>	Admins, makers, or analysts, automatically	✓ Nov 4, 2019	-	✓ Apr 2, 2020
<a href="#">Unattended automation in UI flows</a>	Admins, makers, or analysts, automatically	✓ Mar 2, 2020	-	✓ Apr 2, 2020
<a href="#">IME support for UI flows</a>	Admins, makers, or analysts, automatically	✓ Apr 2, 2020	-	✓ Apr 2, 2020
<a href="#">Retry for desktop UI flows</a>	Admins, makers, or analysts, automatically	✓ Apr 2, 2020	-	✓ Apr 2, 2020
<a href="#">Securely save sensitive text</a>	Admins, makers, or analysts, automatically	-	-	✓ Jun 1, 2020
<a href="#">Run multiple concurrent UI flows on a single Windows Server device (High-density)</a>	Admins, makers, or analysts, automatically	-	-	✓ Jun 28, 2020
<a href="#">Support for loops in UI flow scripts</a>	Admins, makers, or analysts, automatically	-	-	✓ Jul 7, 2020
<a href="#">Native support for commonly used applications</a>	Admins, makers, or analysts, automatically	-	-	✓ Sep 7, 2020

## World-class business process capabilities

Power Automate provides world-class business process capabilities for its users that span endpoints and experiences.

Feature	Enabled for	Public preview	Early access*	General availability
<a href="#">Power Automate availability in UAE</a>	Admins, makers, or analysts, automatically	-	-	✓ Apr 22, 2020
<a href="#">Power Automate availability in China</a>	Admins, makers, or analysts, automatically	-	-	✓ Jun 2, 2020
<a href="#">Contextual flows power automation in Microsoft Teams</a>	Admins, makers, or analysts, automatically	-	-	✓ Aug 23, 2020
<a href="#">Instant flow steps in business process flows are now generally available</a>	Admins, makers, or analysts, automatically	✓ Jun 7, 2019	-	✓ Aug 23, 2020

\* Some features are available for you to opt-in as part of early access on February 3, 2020, including all mandatory changes that impact end users. Learn more about [early access](#).

Description of **Enabled for** column values:

- **End users, automatically:** These features include change(s) to the user experience for end 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.
- **End 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 end users.

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

## More intelligent and powerful capabilities for Power Automate makers

### Overview

The citizen developers of Microsoft Power Platform now have richer capabilities when they are building out business processes inside of Power Automate.

### Interactive adaptive cards

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ Apr 9, 2020

### Business value

Extended capabilities for contextual process-driven information share and facilitated input collection for Power Automate flow makers in business, developer, or IT pro scenarios.

### Feature details

Adaptive cards are a developer favorite for building beautiful card scenarios that work in context and adapt to user configurations, such as dark or light theme. Power Automate opens this opportunity to citizen developers by providing an embedded WYSIWYG action for Microsoft Teams. This feature significantly extends frontline worker scenarios within a Microsoft Teams channel, as it further enables flow makers to target data interactions based on the business process and in context with the Microsoft Teams channel or member. Adaptive cards will expedite knowledge-share and collaboration by removing the need for user interface design skills.

### Azure integration with Power Automate

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ Apr 19, 2020

### Feature details

In our continuous effort to improve the experience for Azure developers on Microsoft Power Platform, we've streamlined the experience for creating flows by using a template from the Azure portal.

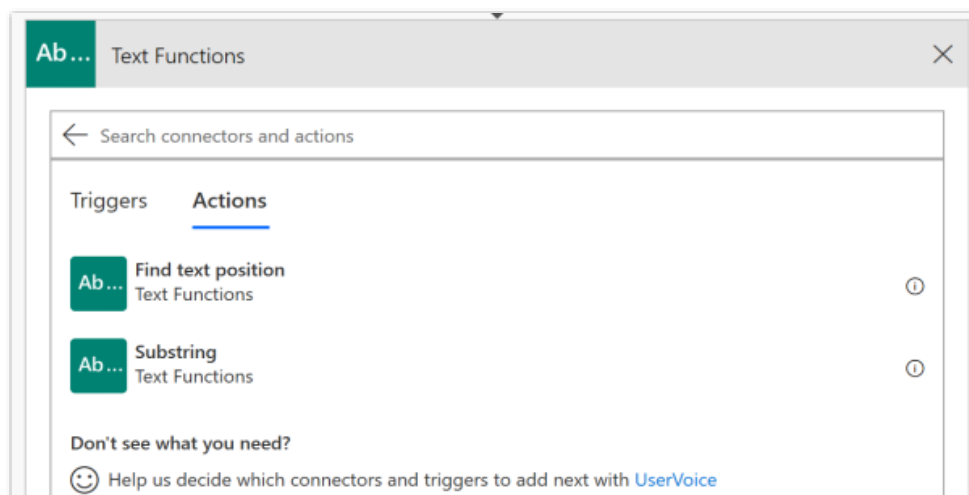
We also added templates to support common enterprise scenarios. For example, one of these templates gives the ability for someone to receive a notification when their costs increase by 10% day over day.

### Common expressions simplified

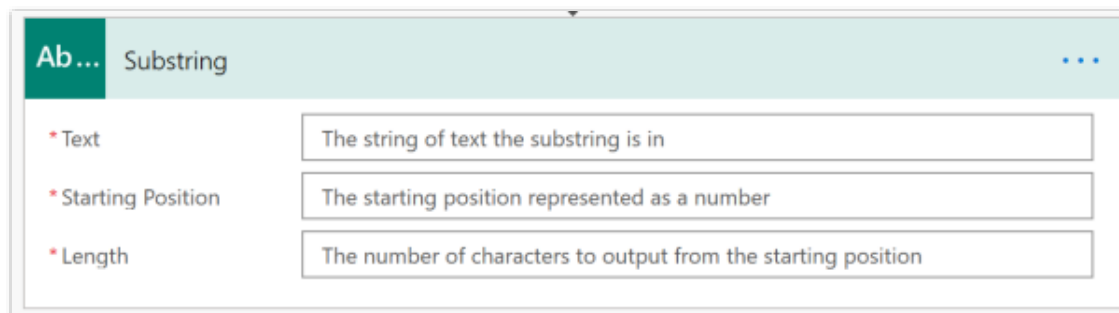
Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ May 13, 2020

### Feature details

During 2020 release wave 1, we will be adding five new text expression actions, making text manipulations and formats significantly easier to configure. With this feature, users with any skill level can benefit from the value of advanced expressions in Logic Apps.



#### List of expression actions



#### Expressions card



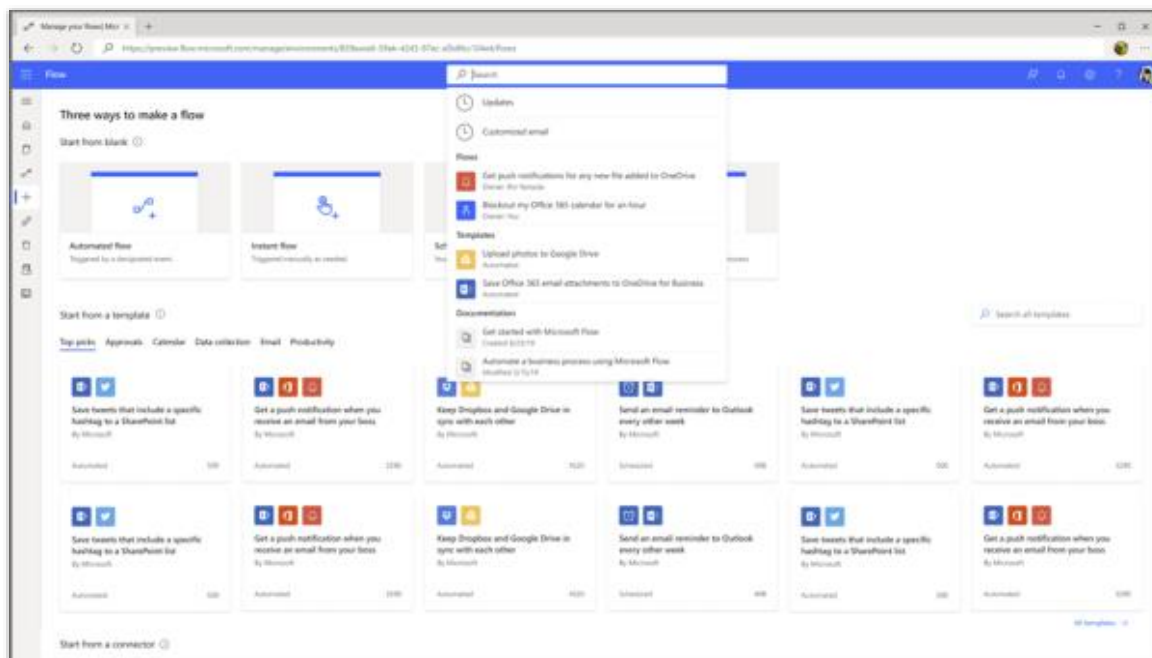
## Discover, learn, and create flows with seamless new experiences

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ May 13, 2020

### Feature details

In 2020 release wave 1, we are creating new experiences that will make it easier for you to discover everything you can do with Power Automate.

You can now search for connectors, templates, documentation, community, and blog posts in universal search. Universal search will even help you find guided learning tutorials to get started in a few steps.



### Universal search UI

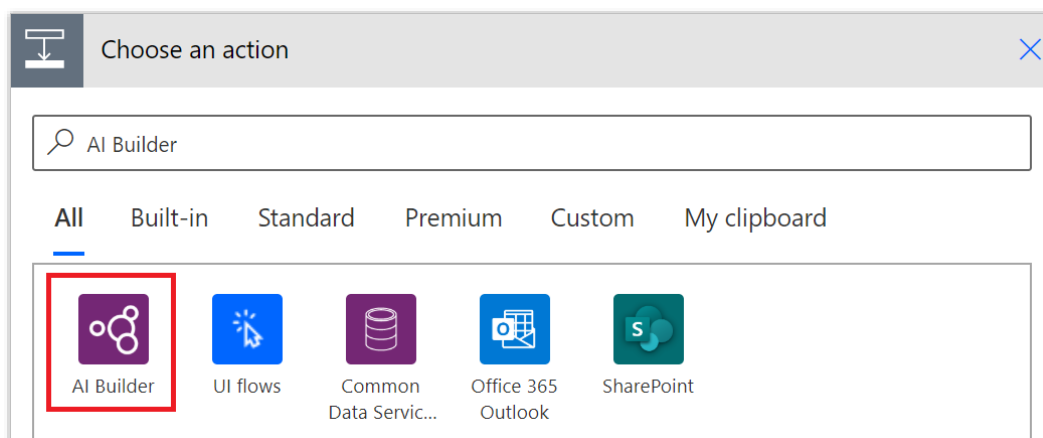
## Build AI-infused workflows

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ Jun 1, 2020

### Feature details

In the May 2020 update of Power Automate, we introduced dedicated actions for AI Builder. Most of the AI Builder model types now have their own actions in Power Automate. You can find these actions when you search for the type of action you want to automate.

If you search for “AI Builder” when creating a new step in Power Automate, you will be able to select the AI Builder group icon.



### AI Builder group

You can also look for the type of action you want to automate, and then select the AI Builder action that fits your needs. These new actions also include improvements, such as dropdown lists for languages and document types. For more information about AI Builder, and the models that are supported by these new actions, see [AI Builder in Power Automate overview](#).

### See also

[Introducing AI Builder dedicated actions in Power Automate](#) (blog)

## UI automation for applications and websites

### Overview

We are introducing **UI flows**, a new feature that helps you automate applications that can only be automated from their front end and do not have APIs. With this release, we are supporting UI automation across services and applications running on-premises and in the cloud.

With **UI flows** in Power Automate, you can record mouse clicks, keyboard use, and data entry to automate manual, repetitive, and time-consuming tasks to improve workplace productivity. **UI flows** enable you to create, manage, and execute UI automation scripts in a secure, centralized environment.

### Automate Citrix remote apps and remote desktops

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	✓ Jul 14, 2020	-	-

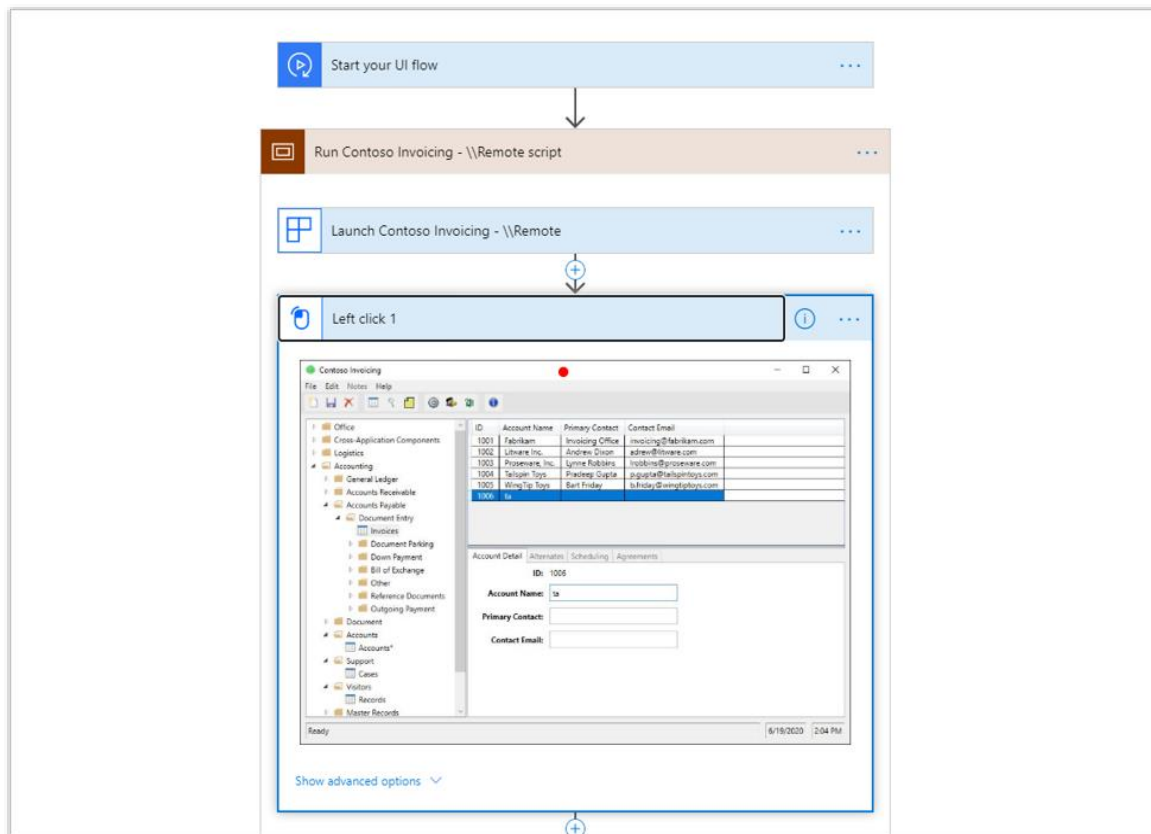
### Feature details

Power Automate, with [UI flows](#), allows anyone to create Robotic Process Automation (RPA) that can replay UI interactions with web and desktop applications.

We recently announced a new preview feature to [record and replay automation on Remote Desktop sessions](#) without the need to install additional software on the remote computer.

We are happy to announce that Citrix Workspace users can now test in preview our new feature which will allow you to [record and replay actions from your Citrix remote applications and desktop](#).

Since the UI flows recorder cannot access the logical elements on Citrix during the recording, UI flows uses custom Azure AI technology (image recognition and text extraction from images using Tesseract OCR) to make automation possible.



### *Contoso actions in a UI flow with a recording of a Citrix remote app*

To use this feature, you will need the following:

- A Windows 10, Window Server 2016, or Window Server 2019 machine
- [The latest version](#) of UI flows running on this machine
- Citrix Workspace 2002 or above

### See also

[Automate Citrix remote apps and remote desktops with the July 2020 update to UI flows in Power Automate](#) (blog)

## Solutioning support for UI flows

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ Apr 1, 2020

### Business value

Makers are now able to import and export their UI flows. This feature will help you better manage the application lifecycle of your UI flows and its dependencies through a seamless and user-friendly experience.

### Feature details

With this feature, you can create your UI flows in solutions, easily export them into a package, and then import them across different environments for your ALM needs.

### See also

[Finally – Application Lifecycle Management \(ALM\) on the Power Platform explained](#) (blog)

## Advanced editor capabilities

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ Apr 2, 2020

### Feature details

With this feature, you can build complex UI flows with advanced business logic by including conditions, switch cases, and terminate actions in your UI automation scripts.

### See also

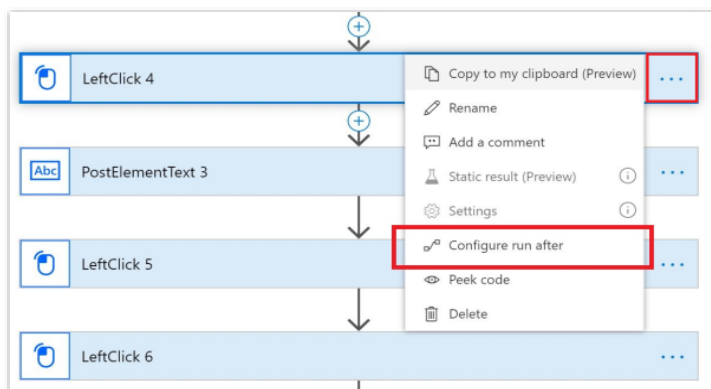
[Error handling and control logic for UI flows](#) (blog)

## Advanced error handling for UI flows

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ Apr 2, 2020

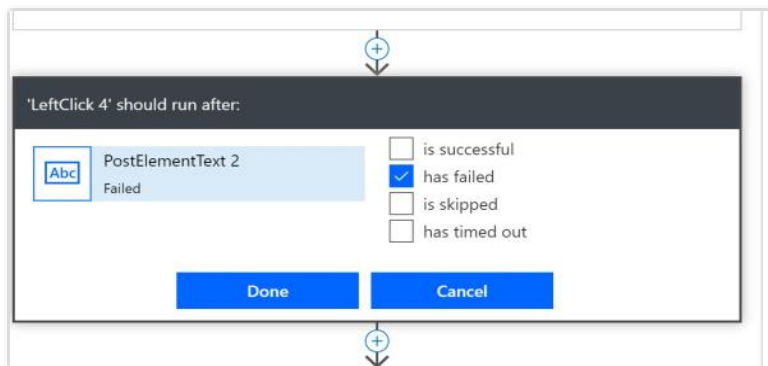
### Feature details

Users can enable error handling capabilities within UI automation scripts to prevent the flow run from failing if a particular step fails. The editor will have the capability to handle such expected errors and let the automation finish its execution. This can be done by selecting the **Configure Run After** option.



### Configure run after

The user can then select an alternate condition to start the next step, instead of the default case.



### Error handling

### See also

[Error handling and control logic for UI flows](#) (blog)

## Automate web-based applications

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	✓ Nov 4, 2019	-	✓ Apr 2, 2020

### Feature details

Power Automate customers can use the Selenium Integrated Development Environment (IDE) to automate web-based applications.

**NOTE** UI flows for web apps supports the latest version of Google Chrome and the beta release of Microsoft Edge (Chromium) browsers.

### See also

[Announcing general availability of robotic process automation in Microsoft Power Automate](#) (blog)

[Create and test your web UI flows](#) (docs)

## Automate Windows applications

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	✓ Nov 4, 2019	-	✓ Apr 2, 2020

### Feature details

Users can automate many Windows desktop applications with a no-code, point-and-click approach. Users can easily record actions on a Windows desktop to turn manual, repetitive steps into automated workflows.

Follow these steps to automate a Windows desktop application:

1. Select **My flows**.
2. Select the **UI flows (preview)** tab.
3. Select **New > Desktop app > Next**.
4. Give your app a name and then select **Next**.
5. Select the **Recording** card and then select **Launch recorder**.

6. Select **Record** and then perform the steps you want to automate.
7. Select **Done**.

The UI flows recorder captures mouse clicks and the keyboard input.

You can then test your UI flow and use it instead of performing the recorded steps manually.

### See also

[Announcing general availability of robotic process automation in Microsoft Power Automate](#) (blog)

[Create and test desktop UI flows](#) (docs)

### Unattended automation in UI flows

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	✓ Mar 2, 2020	-	✓ Apr 2, 2020

### Feature details

With this release, we are adding a feature that allows UI flows to run without user supervision (unattended). Unattended UI flows is the best option for application and website automations that do not need human intervention before or after the UI flow runs. Here are a few usage scenarios for unattended mode:

- Use AI Builder and UI flows to insert PDF invoices or purchase orders that you receive via email into legacy systems.
- Onboard new employees across multiple legacy systems in finance, HR, and business tools.
- Perform custom reconciliations across different finance systems.
- Build weekly reports from data sources only available within legacy applications and then send a notification based on threshold values.

When running unattended, UI flows automatically signs into target devices running Windows 10, Windows Server 2016, or Windows Server 2019. Once the automation completes, UI flows signs out from the device and reports its activity in Power Automate.

Users can then view the flow run history with the associated target device. If there are runtime errors, screenshots allow users to analyze what went wrong to improve their flows.

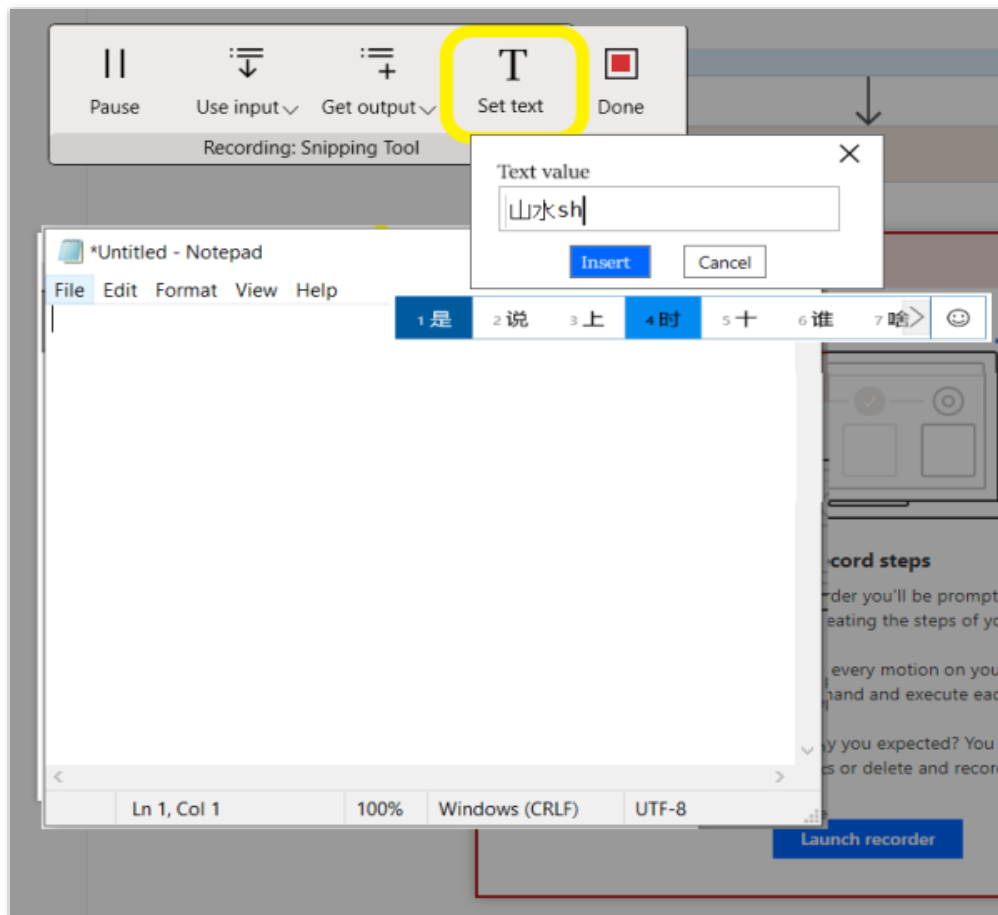


## IME support for UI flows

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	✓ Apr 2, 2020	-	✓ Apr 2, 2020

### Feature details

UI flows will support recording and playback actions that use Input Method Editors (IMEs). A **Set text** mode is added into the UI flows recorder. When users need to record an action that contains strings in any language, they select the **Set text** button to bring up an input box and then enter string values into the box. The value will be recorded and played back accordingly, independent of the keyboard layout or IME used during recording time.



*Use IME through 'Set text' option during recording*

## Retry for desktop UI flows

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	✓ Apr 2, 2020	-	✓ Apr 2, 2020

### Feature details

In UI automation, there could be delays before some elements display. This delay can cause intermittent automation failures. Retry logic can help improve the reliability of UI automation; however, retrying slows performance. With this release, we're giving users more granular controls to perform retry at different levels (including per machine or agent and per individual step). This will allow users to properly apply retry logic where the automation will most likely fail, without sacrificing the overall performance.

## Securely save sensitive text

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ Jun 1, 2020

### Feature details

Users need **sensitive text**, such as passwords or connection information, to sign into applications that they automate with UI flows. This is useful when applications require usernames and passwords to authenticate users. With sensitive text, you can securely save your secure strings and reuse them to automate applications with UI flows. This feature is convenient when multiple users need to automate the same application without revealing the credentials.

## Run multiple concurrent UI flows on a single Windows Server device (High-density)

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ Jun 28, 2020

## Feature details

Power Automate, with UI flows, allows anyone to create robotic process automation (RPA) that can replay UI interactions with web and desktop applications. Since the April 2020 release, you can already run concurrent UI flows using a cluster of devices.

The June 2020 release brings support for multi-user sessions for Windows Server (High-density). This will allow you to run multiple UI flows in parallel on a single Windows Server machine, saving on infrastructure costs.

To configure multi-user sessions on Windows Server you will need the following:

- A Windows Server 2016/2019 machine with the on-premises gateway installed
- The latest version of UI flows running on this machine
- Two or more user accounts to create UI flows connections that target the gateway on the Windows Server 2016/2019 machine

**NOTE** If you want to use more than two parallel user sessions on Windows Server you will need Remote Desktop Services enabled. [Learn more about Remote Desktop Services](#).

For more details about this feature, go to [Run attended and unattended UI flows](#).

## See also

[Run multiple concurrent UI flows on a single Windows Server device – High Density](#) (blog)

## Support for loops in UI flow scripts

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ Jul 7, 2020

## Feature details

We will provide the ability to use loops, including *for-each* and *do-until*, within UI automation scripts. This feature ensures that users no longer need to break their UI automation scripts to use loops. Instead, you can use loops within the UI automation.

## See also

[Announcing support for Loops and Array inputs in UI flows](#) (blog)

## Native support for commonly used applications

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ Sep 7, 2020

### Feature details

We are adding built-in automation support for some Windows applications. This feature enables users to use libraries for commonly used applications in frequently used scenarios, making automation faster and more robust.

### See also

[Power Automate UI Flows August 2020 update](#) (blog)

## World-class business process capabilities

### Overview

Power Automate provides world-class business process capabilities for its users that span endpoints and experiences. These include significant experience improvements for users so that they can now accomplish basic scenarios with business processes offline.

### Power Automate availability in UAE

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ Apr 22, 2020

### Feature details

You can now set up Power Automate environments in the United Arab Emirates (UAE) region.

## Power Automate availability in China

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ Jun 2, 2020

### Feature details

You can now set up Power Automate environments in China. The services for this are a physically separated instance of cloud services operated and transacted by a local operator, Shanghai Blue Cloud Technology Co., Ltd ("21Vianet"). This is a wholly owned subsidiary of Beijing 21Vianet Broadband Data Center Co., Ltd. located in China.

For more information, see [Microsoft Azure operated by 21Vianet](#).

## Contextual flows power automation in Microsoft Teams

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	-	-	✓ Aug 23, 2020

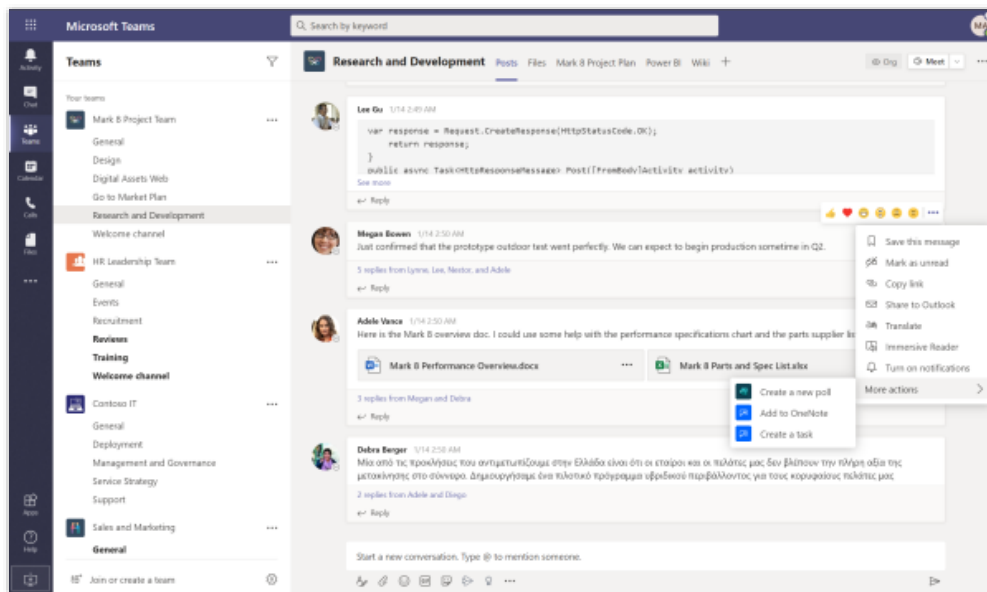
### Feature details

Power Automate is now the way that any user can have rich, automatic behaviors in Microsoft Teams. Our vision is to deliver world-class experiences for integrating flows directly into Microsoft Teams.

This means that users can:

- Get notified about important updates in their teams from external services and then act on them.
- Interact with services through commands and actions directly built into the Microsoft Teams experience.
- Automate teamwork by setting up workflows based on Microsoft Teams events.

These new capabilities are enabled through both the Microsoft Teams *apps* (for example: a dedicated Power Automate tab) as well as contextually via menu items from entities like messages.



### *An example of the For a selected message trigger in Microsoft Teams*

With this update, we will launch the following triggers and actions for the Microsoft Teams connector:

- **For a selected message:** This is an instant trigger that starts a workflow from a Microsoft Teams message via the *more actions* menu. Makers can collect inputs from users contextually and use message properties like the subject, sender, and message body within their flow.
- **When a new person joins a team:** This automated trigger starts events based on when a person joins a team. This can be used for scenarios like setting up a welcome message or triggering tasks for onboarding a person to a team.
- **Post an adaptive card and wait:** This action allows simple data collection from Microsoft Teams users via an adaptive card. Makers can create a custom input form and send it to a user or a channel, and then wait for a response. Power Automate will stay in a suspended state until the user responds.

Some example scenarios include:

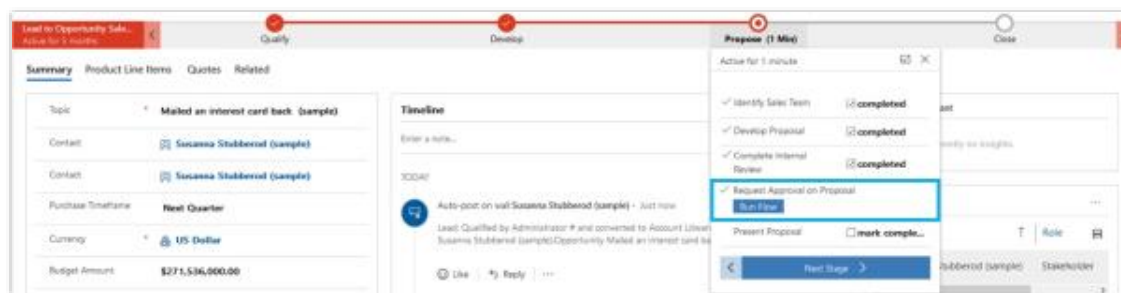
- Save a message to OneNote for later use.
- Create a work item in Azure DevOps from a message.
- Create an opportunity in Dynamics 365 from a message.
- As a team admin, you can send out a welcome message, which includes links to onboarding resources, to new users when they join your team.
- Collect additional details in Microsoft Teams when a planner task is created.

## Instant flow steps in business process flows are now generally available

Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	✓ Jun 7, 2019	-	✓ Aug 23, 2020

### Feature details

In the previous release, we [previewed](#) instant flow steps in business process flows to automate tasks and approvals from inside a stage of a business process. You can even mark instant flow steps as complete/incomplete from your flow!



*Flow step in business process flow*

### See also

[Preview Instant Flow steps in Business Process Flows](#) (blog)

# Power Virtual Agents

## Overview of Power Virtual Agents 2020 release wave 1

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.

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. As users interact with a bot, the author can see which topics are performing well, and which need improvement.

The 2020 release wave 1 brings improvements in the authoring experience with expanded variable functionalities, multi author capabilities so your team can work to improve the bot together, multi-language support to reach your customers in their own language, and much more.

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.

## What's new and planned for Power Virtual Agents

This topic lists features that are planned to release from April 2020 through September 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see [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 day of release.

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



## Bot configuration

Configure the bot to suit business needs.

Feature	Enabled for	Public preview	General availability
<a href="#">Addition of a new data location Canada</a>	End users by admins, makers, or analysts	-	✓ Apr 1, 2020
<a href="#">Customizable bot behavior when no topic is triggered</a>	Admins, makers, or analysts, automatically	-	✓ Apr 1, 2020
<a href="#">Create and manage Power Virtual Agents directly from Power Apps</a>	Admins, makers, or analysts, automatically	-	✓ Jun 30, 2020
<a href="#">Single Sign-On</a>	Admins, makers, or analysts, automatically	-	✓ Jun 30, 2020
<a href="#">HIPAA, SOC, and ISO compliance</a>	End users by admins, makers, or analysts	-	✓ Aug 6, 2020

## Core authoring

Utilize the Power Virtual Agents conversational editor to construct your dialogs, add variables or synonyms, and incorporate Power Automate flows that enable you to connect to other systems.

Feature	Enabled for	Public preview	General availability
<a href="#">Export and import bots using solutions</a>	Admins, makers, or analysts, automatically	✓ May 29, 2020	-
<a href="#">Pass context to a bot from the calling site</a>	Admins, makers, or analysts, automatically	-	✓ May 29, 2020
<a href="#">Use global variables across topics within a bot</a>	Admins, makers, or analysts, automatically	-	✓ May 29, 2020

Feature	Enabled for	Public preview	General availability
<a href="#">Multiple users can edit topics at the same time within a bot</a>	Admins, makers, or analysts, automatically	-	✓ Jul 10, 2020
<a href="#">Support for additional languages</a>	Admins, makers, or analysts, automatically	✓ May 29, 2020	✓ Aug 24, 2020

Description of **Enabled for** column values:

- **End users, automatically:** These features include change(s) to the user experience for end 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.
- **End 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 end users.

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

## Bot configuration

### Overview

The bot 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 and Facebook channels, and direct embedding a bot in web-based mobile apps.

### Addition of a new data location Canada

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	-	✓ Apr 1, 2020

### Feature details

Many enterprise organizations need to store their data in a specific geographic location. With this release, we are expanding the [list of data locations](#) to include an eighth location: Canada. Organizations will be able to store data for their bots in a Canadian-specific data location.

### See also

[Data locations for organizations using Power Virtual Agents](#) (docs)

### Customizable bot behavior when no topic is triggered

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Apr 1, 2020

### Feature details

When a topic can't be matched or triggered based on what the user types, bot authors will be able to customize how the bot behaves (such as what it says or what actions it should take) by using a dedicated system topic.

### See also

[Configure the system fallback topic in Power Virtual Agents](#) (docs)

### Create and manage Power Virtual Agents directly from Power Apps

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Jun 30, 2020

### Feature details

Power Apps app makers will be able to create and manage their bots directly from the [Power Apps maker portal](#). They'll be able to see a list of all the bots they have access to in the selected environment, see basic information about the bots, and quickly go to Power Virtual Agents to make changes to their bot.

### See also

[Create chatbots from Power Apps](#) (docs)

## Single Sign-On

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Jun 30, 2020

### Feature details

When using **User authentication** with Single Sign-On, users will be automatically signed into the bot if they are signed into the hosting website. This removes the need for users to type their username and password multiple times.

### See also

[Configure single sign-on with Azure Active Directory](#) (docs)

## HIPAA, SOC, and ISO compliance

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	-	✓ Aug 6, 2020

### Feature details

Create chatbots with Power Virtual Agents that can handle protected health information (PHI) when your organizations are bound by HIPAA (a health information privacy act in the United States). Power Virtual Agents also acquired System and Organization Controls (SOC 2) and [ISO](#) certifications.

Scenarios that involve PHI include using a chatbot to:

1. Ask individuals to provide their health information (blood pressure, weight, and so on).
2. Capture health information and personally identifying information, such as the customer's IP address or email address.
3. Give calculated health recommendations (decision engine).

**NOTE** Power Virtual Agents is not intended for use as a medical device. For the intended use of Power Virtual Agents and medical devices, go to this [disclaimer](#).

## See also

[Standards compliance and certification](#) (docs)

## Core authoring

### Overview

Use the authoring canvas in Power Virtual Agents to create and edit topics and add trigger phrases and variables. Extend your bot's conversational capabilities with Power Automate.

### Export and import bots using solutions

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ May 29, 2020	-

### Feature details

Enterprise organizations set up different environments (for example, for testing or production) for their bots to manage change control, governance, data residency, and latency requirements.

With the ability to export or import bots using [solutions](#), admins will be able to move their bots across multiple [environments](#).

## See also

[Export and import bots using solutions](#) (docs)

### Pass context to a bot from the calling site

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ May 29, 2020

### Feature details

Bot authors will be able to specify parameters using the URL query string from the host website so that the bot can take in extra context information.

## See also

[Reusing variables across topics, and setting variable values from external sources](#) (blog)

[Reuse variables across topics](#) (docs)

### Use global variables across topics within a bot

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ May 29, 2020

#### Feature details

Bot authors will be able to pass variables from one topic to another and use bot-level variables across all topics. This allows authors to keep the conversation context within an entire bot conversation rather than just within a single topic. It will also help the bot avoid asking unnecessary questions.

#### See also

[Reusing variables across topics, and setting variable values from external sources](#) (blog)

[Reuse variables across topics](#) (docs)

### Multiple users can edit topics at the same time within a bot

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Jul 10, 2020

#### Feature details

Multiple users will be able to edit different conversation topics within a bot, which helps organizations ensure that employees with the right domain expertise implement conversation improvements.

For example, one author can be editing a topic about networking issues while another author is editing a topic about store hours.

#### See also

[Collaborate on bots](#) (docs)

## Support for additional languages

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ May 29, 2020	✓ Aug 24, 2020

### Feature details

Power Virtual Agents is scaling up to support a larger set of languages. In addition to English, bots will be able to understand and converse in more languages, including French, German, Spanish, Italian, Portuguese, and Chinese (a bot will only support one language). We will continue to increase support for additional languages over time. Note that the exact order and timing of language availability remain subject to change.

### See also

[Supported languages](#) (docs)

# Common Data Service

## Overview of Common Data Service 2020 release wave 1

[Common Data Service](#) is the data platform for Microsoft Power Platform and Dynamics 365 apps. Common Data Service makes it easier for professional developers and citizen developers alike to have deep, powerful data integration, and it helps to lead their companies and organizations into the future.

The 2020 release wave 1 provides significant improvements for cascading operations, which enhance the performance and reliability of complex data management throughout Common Data Service. Additionally, language improvements in FetchXML, SDKs, and OData endpoints provide more nuanced control when comparing, sorting, and organizing data.

[Capabilities from Common Data Service](#) are also at the center of Project Oakdale. Project Oakdale delivers a built-in, low-code data platform for Microsoft Teams and enables everyone to easily build and deploy apps and intelligent chatbots in Teams with Microsoft Power Apps and Microsoft Power Virtual Agents. The 2020 release wave 1 included the public preview of Project Oakdale.

## What's new and planned for Common Data Service

This topic lists features that are planned to release from April 2020 through September 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see [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 day of release.

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

Feature	Enabled for	Public preview	General availability
<a href="#">Column comparison using FetchXML, SDK, and OData</a>	Admins, makers, or analysts, automatically	-	✓ Jul 17, 2020



Feature	Enabled for	Public preview	General availability
<a href="#">Cascade merge - skip parent detection</a>	Admins, makers, or analysts, automatically	-	✓ Aug 21, 2020
<a href="#">Cleanup for inherited access rights</a>	End users, automatically	✓ Feb 3, 2020	✓ Aug 31, 2020
<a href="#">Retrieve access origin (Web API only)</a>	Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020

Description of **Enabled for** column values:

- **End users, automatically:** These features include change(s) to the user experience for end 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.
- **End 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 end users.

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## Column comparison using FetchXML, SDK, and OData

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Jul 17, 2020

### Feature details

In Common Data Service, users can perform a column comparison for the following condition operators using SDK, FetchXML, or OData endpoints:

- Equal
- NotEqual
- GreaterThan

- GreaterEqual
- LessThan
- LessEqual

This will allow the comparison of an attribute against a specific value and return all found records or allow the comparison of two attributes to return all records with a matching value.

Below are the limitations for the current Common Data Service column comparison support:

- Only two columns may be compared at a time.
- Multi-value condition operators are not supported. (For example, "in")
- Extended condition operators are not supported. (For example, *creditlimit* > *spends*+1000)
- Incompatible attribute comparison is not supported. (For example, *int* vs *int* attributes is a valid comparison, but *int* vs *string* attributes is not a valid comparison.)

## See also

[Use column comparison in queries](#) (docs)

## Cascade merge - skip parent detection

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Aug 21, 2020

## Feature details

When performing a cascade merge operation, the job may fail if it reaches a record that has been deleted between the time the merge job was created and the time it completes. App makers have the option to disable this check when configuring an entity for cascade merge.

Cascade merge operations that fail due to this issue will now have clearer error messages. All error messages will also include a link to a document outlining the option and what it will do.

**Previous:** Merge warning: sub-entity will be differently parented.

**New:** Unable to merge because sub-entity will lose parenting. You can disable the parent check prior to execution.

**Previous:** Merge warning: sub-entity will be differently parented.

**New:** Unable to merge because sub-entity will be parented differently. You can disable the parent check prior to execution.

## Cleanup for inherited access rights

Enabled for	Public preview	General availability
End users, automatically	✓ Feb 3, 2020	✓ Aug 31, 2020

### Business value

Ensure child records have appropriate access permissions if a parent record's cascading access option is changed from **Cascade All** to **Cascade None**.

### Feature details

Sometimes, an organization will have the cascading option of certain entities set as **Cascade All** to allow access rights to be inherited. If the organization later changes this option to **Cascade None**, it prevents future changes, but the child entity records still have their initial inherited access. A new message API has been added to clean up those inherited access rights.

If a user makes the changes from **Cascade All** to **Cascade None**, a system job that executes the new API will be triggered automatically to clean up the entity inherited access rights.

### See also

[CreateAsyncJobToRevokeInheritedAccessRequest Class](#) (docs)

## Retrieve access origin (Web API only)

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020

### Business value

This feature improves data security by enabling organizations to determine how access to entity records has been granted. This allows the system to more easily revoke inherited rights when a change is made.

### Feature details

This new message API finds the origin of access for a given object ID by walking up the 1:N relationship tree until reaching a point where the access can be identified based on any of the following:

- Ownership of the entity
- Parent entity
- Access is from a record in the Principal Object Access table on the entity or a parent entity

Relationship settings are ignored while walking up the tree because they could have been changed after access was given.

# AI Builder

## Overview of AI Builder 2020 release wave 1

AI Builder is a Microsoft Power Platform capability for teams with the business expertise to easily automate processes and predict outcomes to improve business performance. AI Builder is a turnkey solution that brings the power of Microsoft AI through a point-and-click experience. You can now build AI without knowing programming or data science. Using AI is made even easier with integration directly into Power Apps and Power Automate.

Coming with the 2020 release wave 1, in addition to Prediction and Business Card Reader, the following scenarios will become generally available and require AI units to run: Form Processing, Object Detection, Language Detection, Text Recognition, Sentiment Analysis, and Key Phrase extraction.

2020 release wave 1 also introduces new AI scenarios in preview as well as improvements to existing ones to help improve business process performance. Improvements in AI Builder focus not only on introducing AI Models but also on integrating deeper with Microsoft Power Platform.

## What's new and planned for AI Builder

This topic lists features that are planned to release from April 2020 through September 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see [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 day of release.

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

## Better integration with Power Apps and Power Automate

AI Builder is adding new capabilities in Power Apps and Power Automate to make it easier to consume your AI models.

Feature	Enabled for	Public preview	General availability
<a href="#">Geo expansion</a>	Admins, makers, or analysts, automatically	-	✓ Apr 2, 2020
<a href="#">AI Builder operation group in Power Automate</a>	Admins, makers, or analysts, automatically	-	✓ Jun 3, 2020
<a href="#">On-demand prediction</a>	End users by admins, makers, or analysts	✓ Sep 1, 2020	To be announced

## General availability of AI scenarios

Several AI scenarios in preview are now generally available.

Feature	Enabled for	Public preview	General availability
<a href="#">Form processing updates</a>	Admins, makers, or analysts, automatically	-	✓ Apr 2, 2020
<a href="#">Object detection</a>	Admins, makers, or analysts, automatically	-	✓ Apr 2, 2020
<a href="#">Text recognition</a>	Admins, makers, or analysts, automatically	-	✓ Apr 2, 2020
<a href="#">AI models for object detection and forms processing are solution-aware</a>	End users by admins, makers, or analysts	-	✓ Apr 30, 2020

## New AI scenarios

AI Builder is adding new AI capabilities to address additional business problems.

Feature	Enabled for	Public preview	General availability
<a href="#">Easily add AI Builder text models to your Power Apps applications by using new controls and formulas</a>	End users by admins, makers, or analysts	✓ May 14, 2020	
<a href="#">Receipt processing</a>	Admins, makers, or analysts, automatically	✓ Jul 28, 2020	
<a href="#">Text translation</a>	Admins, makers, or analysts, automatically	✓ Jul 28, 2020	
<a href="#">Use Power Automate prebuilt templates to add AI to your business processes</a>	End users by admins, makers, or analysts	✓ Apr 1, 2020	✓ Apr 2, 2020
<a href="#">Extract entities from text with prebuilt entity extraction models</a>	Admins, makers, or analysts, automatically	✓ Apr 2, 2020	✓ Jun 26, 2020
<a href="#">Customize your entity extraction model</a>	End users by admins, makers, or analysts	✓ Apr 24, 2020	✓ Jun 26, 2020
<a href="#">Customize your text classification model for categorizing your text</a>	End users by admins, makers, or analysts	✓ Apr 24, 2020	✓ Jun 26, 2020
<a href="#">Numerical prediction</a>	End users by admins, makers, or analysts	✓ May 1, 2020	To be announced
<a href="#">Multiclass support for prediction</a>	End users by admins, makers, or analysts	✓ May 1, 2020	To be announced
<a href="#">Schedule training and inference</a>	End users by admins, makers, or analysts	✓ Sep 1, 2020	To be announced

Description of **Enabled for** column values:

- **End users, automatically:** These features include change(s) to the user experience for end 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.
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For a list of the countries or regions where Dynamics 365 business applications are available, see the [International availability guide](#). For more information about geographic areas and data centers (regions), go to the [Dynamics 365 and Microsoft Power Platform availability page](#).

## Better integration with Power Apps and Power Automate

### Overview

Power Automate integration in AI Builder makes it easy to use your AI models in Power Automate. The newly-released AI Builder connector allows you to select an AI model to easily add AI to your automated workflows. For example, you can perform form processing on PDF files attached to emails from a designated sender and then save the extracted information in a SharePoint list.

### Geo expansion

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Apr 2, 2020

### Feature details

AI Builder has been added in the following region: Japan and South America

To find out which AI Builder features are available in your region. Check out the [Feature availability by region](#) documentation page.

### See also

[Feature availability by region](#) (docs)



## AI Builder operation group in Power Automate

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Jun 3, 2020

### Feature details

Power Automate integration in AI Builder makes it easier to use your AI models in Power Automate. The newly released AI Builder operation group allows you to select an AI model to easily add intelligence to your automated workflows. For example, you can perform form processing on a PDF attached to an incoming email from a given sender and then save the extracted information in a SharePoint list.

## On-demand prediction

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ Sep 1, 2020	To be announced

### Feature details

Prediction models can be invoked on demand. You can provide input data to a prediction model and get the outcomes inferred for you in real-time.

## General availability of AI scenarios

### Overview

AI Builder is releasing the following scenarios to General availability: Object detection, Form processing, Text recognizer, Language Detection, Text Recognition, Sentiment Analysis, and Key Phrase extraction.

These scenarios will require the AI Builder capacity add-on licensing.

## Form processing updates

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Apr 2, 2020

### Feature details

Form processing has been released for general availability in AI Builder; therefore, it requires AI Builder capacity add-on licensing in Microsoft Power Platform.

With form processing, you can accelerate your business processes by automating information extraction from forms you work with every day like invoices, purchase orders, tax forms, and others. Once you build your AI model to extract information from your forms, you can use this model in Power Apps to capture a form and extract its data within an app. You can also use it in Power Automate to create automated workflows to extract data from forms coming from multiple systems.

With the latest update to form processing, you can explicitly tag (in preview) fields which are not automatically detected by AI Builder. Form processing now supports increased file size for training of 50 MB and 500 pages for PDF documents.

The experience to explicitly tag fields which are not automatically detected is targeted to be released by the end of April.

### See also

[Overview of form processing model](#) (docs)

## Object detection

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Apr 2, 2020

### Feature details

Object detection has been released for General availability in AI Builder; therefore, it requires AI Builder capacity add-on licensing.

When your business process involves recognizing or counting objects, you can use object detection in AI Builder to automate the process using images. Object detection with AI Builder improves the automation of your business processes in two steps:

1. Build and train your AI model to recognize objects (such as products or parts) in images.
2. Solve your end-to-end business problems by using your AI model in Power Apps. These apps can detect and count objects that are captured by the device's camera.

We've added many improvements since the last release to streamline the user experience and to increase the accuracy of object detection models.

- **Manual object name definition:** AI Builder allows customers who don't have their object names in Common Data Service to provide their list of object names by typing them directly in the experience.
- **Model specialization:** You can select a specialization mode that will increase the accuracy for specific kind of object detection. The new mode is product retail detection that will improve recognition of object on shelves and brand detection to help you recognize brand in images.
- **Support for data connections in the experience:** The experience to upload images in object detection has been extended to support importing images from SharePoint, OneDrive, and Azure blob storage. Users can now get all the images they need without leaving the AI Builder experience.
- **Improved PCF control:** The control now exposes additional information like the confidence score of each detected object. This information can be used to build more tailored business processes in your apps.

### Geographic areas

This feature will be released into the following Microsoft Azure geographic areas:

- United States
- Europe
- Asia Pacific
- United Kingdom
- Australia
- Canada

### See also

[Overview of object detection model](#) (docs)

## Text recognition

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Apr 2, 2020

### Feature details

Text recognition has released for General availability in AI Builder; therefore, it requires AI Builder capacity to use.

You can extract text from images using this feature not only in Power Automate but also in Power Apps using the new text recognizer component on the AI Builder menu. The text recognizer component in Power Apps lets you see and interact with text extracted from the images.

### Geographic areas

This feature will be released into the following Microsoft Azure geographic areas:

- United States
- Europe
- Asia Pacific
- United Kingdom
- Australia
- Canada

### See also

[Preview: Overview of category classification model](#) (docs)

## AI models for object detection and forms processing are solution-aware

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	-	✓ Apr 30, 2020

### Feature details

AI Builder object detection and forms processing models now support application lifecycle management (ALM) and can be packaged into solutions once you publish them.

It's possible to limit how a model can be customized after it is imported in the model's managed properties.

All packaging capabilities for AI models can be managed in the Power Apps solution explorer.

## New AI scenarios

### Overview

AI Builder continues to invest in delivering new AI scenarios to let business users automate their process and predict outcomes.

## Easily add AI Builder text models to your Power Apps applications by using new controls and formulas

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ May 14, 2020	-

### Feature details

Easily add your prebuilt or custom text models to your new or existing Power Apps applications by using the new formula bar feature. You can quickly and easily add intelligence to your text controls using formulas.

### See also

[Use formulas for text AI models preview](#) (docs)

## Receipt processing

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Jul 28, 2020	-

### Feature details

Save time on your expense reporting. Use AI to extract and save receipt data automatically. The receipt processing prebuilt model identifies common receipt fields, such as the merchant information, the list of purchased items, and their prices. You can use the receipt processing prebuilt model in both Power Automate and Power Apps.

### See also

[Receipt processing model preview](#) (docs)

## Text translation

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Jul 28, 2020	-

### Feature details

The text translation prebuilt model translates your text data in real time into more than 60 languages. You could use it to remove the language barrier within your company. The text translation model can also automatically detect the language of the text data you want to translate.

### See also

[Text translation model Preview](#) (docs)

## Use Power Automate prebuilt templates to add AI to your business processes

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ Apr 1, 2020	✓ Apr 2, 2020

### Feature details

New prebuilt templates make it easier to add your prebuilt or custom text models to new flows. Now you can quickly and easily add intelligence to your flows to help process text.

## Extract entities from text with prebuilt entity extraction models

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Apr 2, 2020	✓ Jun 26, 2020

### Feature details

With prebuilt entity extraction models, you can quickly use the predefined entity lists and model to extract entities from your text.

### See also

[Entity extraction model](#) (docs)

## Customize your entity extraction model

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ Apr 24, 2020	✓ Jun 26, 2020

### Feature details

The AI Builder entity extraction model allows you to start from a set of prebuilt entities and refine them to your needs. You can also bring your own entities which you've tagged with the examples you want your business to extract from.

### See also

[Overview of the entity extraction custom model preview](#) (docs)

## Customize your text classification model for categorizing your text

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ Apr 24, 2020	✓ Jun 26, 2020

### Feature details

Category classification custom model allows you to start from a set of prebuilt categories and refine them to your needs or bring your own set of tags and text to customize the model to your business needs.

### See also

[Overview of the category classification custom model](#) (docs)

## Numerical prediction

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ May 1, 2020	To be announced

### Feature details

AI Builder prediction models support a preview capability to predict a number. Now, you can use AI builder intelligence to predict things like product ratings, price estimates, time to completion, and so on.

### See also

[Overview of the prediction model](#) (docs)



## Multiclass support for prediction

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ May 1, 2020	To be announced

### Feature details

AI Builder prediction supports multiple outcome prediction to make predictions from a list of more than two possible outcomes. Examples of multiple outcome prediction include:

- Will a shipment arrive early, on time, late, or very late?
- Which product would a customer be interested in?
- Will the business flow be completed as a success, a failure, postponed, or cancelled?

### See also

[Overview of the prediction model](#) (docs)

## Schedule training and inference

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ Sep 1, 2020	To be announced

### Feature details

You can specify a cadence for your model to automatically run and retrain. This capability is available for new and existing prediction models.

# Governance and administration

## Overview of Microsoft Power Platform governance and administration 2020 release wave 1

Microsoft Power Platform offers a range of governance and administration capabilities that span across Power Apps, Power Automate, and Common Data Service. These capabilities are designed to help the administrators and IT professionals in the organization set up, secure, manage, govern, and monitor the use and adoption of the 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 administrators of Microsoft Power Platform, rich tooling experiences, such as PowerShell cmdlets and Management Connectors, are also available to provide additional, fully-automatable management capabilities for use beyond the out-of-the-box portal experiences.

## What's new and planned for Microsoft Power Platform governance and administration

This topic lists features that are planned to release from April 2020 through September 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see [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 day of release.

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

### An enhanced, unified Power Platform admin center

Power Platform admin center is now offering a unified experience to manage environments, deployments, users, and capacity as well as to analyze usage and performance of your apps and components.

Feature	Enabled for	Public preview	General availability
<a href="#">New environment provisioning fully transitioning to the Power Platform admin center</a>	Admins, makers, or analysts, automatically	✓ May 1, 2020	-
<a href="#">User access diagnostic experience</a>	Admins, makers, or analysts, automatically	✓ Sep 1, 2020	
<a href="#">Early access updates</a>	End users, automatically	✓ Feb 3, 2020	✓ Apr 1, 2020
<a href="#">Retry experience for early access opt-in updates</a>	Admins, makers, or analysts, automatically	✓ Feb 3, 2020	✓ Apr 1, 2020
<a href="#">Storage reporting will be based on customer licenses and capacity add-ons</a>	Admins, makers, or analysts, automatically	✓ Apr 1, 2020	✓ Apr 24, 2020
<a href="#">Manage Dynamics 365 apps, Power Apps, and Power Automate in the Power Platform admin center</a>	Admins, makers, or analysts, automatically	-	✓ May 7, 2020
<a href="#">New, enhanced data loss prevention experience in the Power Platform admin center</a>	Admins, makers, or analysts, automatically	✓ May 1, 2020	✓ Aug 21, 2020
<a href="#">Storage capacity enforcement</a>	Admins, makers, or analysts, automatically	✓ Jul 27, 2020	✓ Aug 21, 2020

Description of **Enabled for** column values:

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

## An enhanced, unified Power Platform admin center

### Overview

[Power Platform admin center](#) is now the single admin experience for Power Apps and Power Automate. It is offering unified experience to manage environments, deployments, users, capacity, and usage. Powerful analytics helps admins to investigate and diagnose issues with their deployments, and the integrated help and support experience allows them to find the help they need and escalate to Microsoft Support when necessary.

### New environment provisioning fully transitioning to the Power Platform admin center

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ May 1, 2020	-

### Business value

Managing environments today requires administration in the Dynamics 365 admin center and Power Platform admin center for a lot of customers. This change will help unify management in a single place to increase customer satisfaction.

### Feature details

Today, there are two different entry points for provisioning new environments: **Dynamics 365 admin center** and **Power Platform admin center**. This has caused some confusion, and we are working diligently to unify these experiences moving to a single provisioning experience in the Power Platform admin center.

Starting in April, all customers can provision environments from Power Platform admin center. An available database capacity of 1GB is a prerequisite for being able to provision an environment.

## User access diagnostic experience

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Sep 1, 2020	-

### Business value

Managing user access often requires troubleshooting across the Dynamics 365 admin center, the Microsoft 365 admin center, and the Power Platform admin center with information on users' access status. New features in the Power Platform admin center will enable admins to understand users' presence and status in Common Data Service environments and take required action across the various portals to troubleshoot access issues. This way, admins can troubleshoot users' access issues without having to file support tickets to Microsoft.

### Feature details

The set of features to help admins troubleshoot user access issues will include the following:

1. Users experiencing access issue when logging into a Common Data Service environment or when accessing model-driven apps can see more context on the issue, including the cause of the issue, the environment's name, error code, and a link to troubleshooting documentation. When they share this context with admins, it can help admins troubleshoot and address the access issue.
2. Through a new experience in the Power Platform admin center for Common Data Service environments, admins can:
  - view a list of all users present in the environment and find specific users by searching the list.
  - run diagnostics on a user who is facing an issue when accessing the environment, see their access status with recommended solutions, take actions, and see updated status.
  - add missing users to the environment.

### Early access updates

Enabled for	Public preview	General availability
End users, automatically	✓ Feb 3, 2020	✓ Apr 1, 2020

## Business value

Try to validate these new features before they are automatically enabled to your users.

## Feature details

Customers and partners can validate the upcoming features and capabilities months in advance before they're enabled automatically during major releases. From the Power Platform admin center, admins can enable the early access update that allows you to try to validate these new features in a non-production environment and get ready to roll out the changes to users.

## See also

[Opt in to early access updates](#) (docs)

## Retry experience for early access opt-in updates

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Feb 3, 2020	✓ Apr 1, 2020

## Business value

Admins can try to restart a failed update for an app on their own before reaching out to Microsoft Support.

## Feature details

During early access of a release, admins can opt in to updates to preview early access features. If an update fails for an app, there will be a retry button available to restart the update process for the failed apps. This will allow admins to restart the update process for the failed app without being stuck in the failed state.

## See also

[Updates status and Retry](#) (docs)

## Storage reporting will be based on customer licenses and capacity add-ons

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Apr 1, 2020	✓ Apr 24, 2020

### Business value

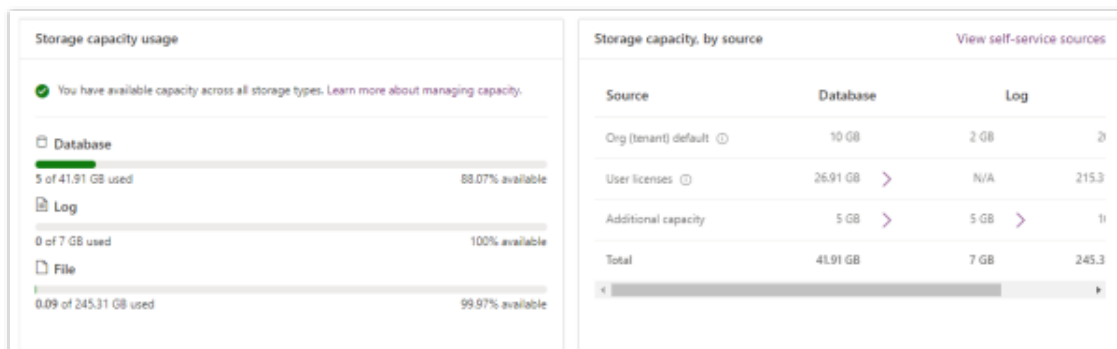
New updated storage reporting will provide clarity to our customers for managing the capacity.

### Feature details

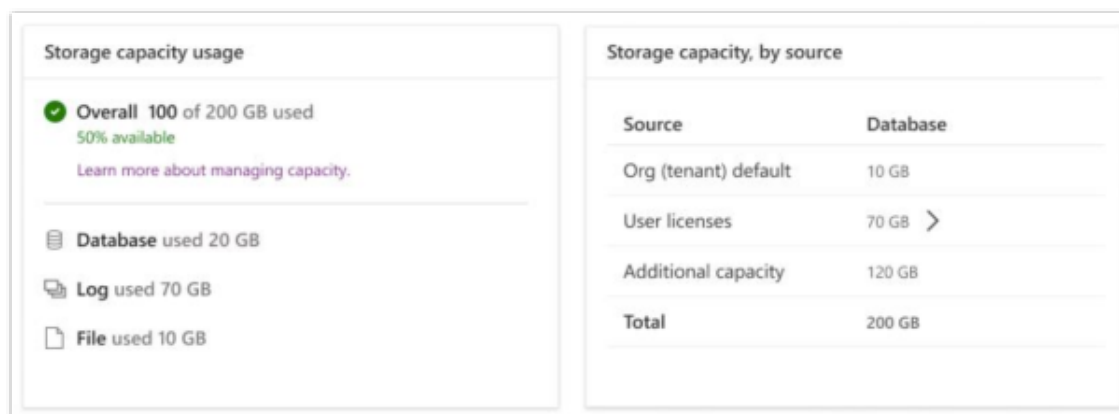
In April 2019, we introduced Common Data Service capacity storage that is optimized for and divides data into different storage units across relational data, attachments, and audit logs. New Dynamics 365 Customer Engagement and Power Apps customers receive a tenant wide default entitlement for each of these three storage types and additional per user subscription license entitlements. Extra storage can be purchased in 1GB increments, if needed. Existing customers are not impacted by this change until the end of their current Power Apps, Power Automate or Dynamics 365 subscription, when renewal is required. This means that two licensing models will be in market.

Following the introduction of Common Data Service capacity, we updated our capacity reporting to show database, log, and file entitlement for all our customers. This change in reporting has caused some confusion to customers who are still on the previous licensing model. We are now addressing this.

If you are a customer who is still on the previous licensing model for storage, you will see one single capacity for entitlement. If you are a customer who transitioned to the licensing model introduced on April 1, 2019, you will see your storage capacity entitlement and usage by database, log, and file as it appears in the Power Platform admin center today.



*Report for customers on licensing model introduced on April 1, 2019*



*Report for customers on previous licensing model*

## Manage Dynamics 365 apps, Power Apps, and Power Automate in the Power Platform admin center

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ May 7, 2020

### Feature details

Historically, admin experiences for Dynamics 365 apps, Power Apps, Power Automate, and Common Data Service have been spread across multiple portals, lacking a single, unified, end-to-end experience. With this launch, now you can administer Dynamics 365 apps, Power Apps, and Power Automate in the Power Platform admin center.

You will be able to perform the following key admin operations:

**Dynamics 365 apps:** You can get the details of Dynamics 365 apps that are available for your organization and install or configure them to a specific environment. You can also upgrade existing Dynamics 365 apps or acquire new apps from AppSource. In case of any installation or upgrade failure error, details will be exposed, which will help you troubleshoot more effectively.

**Power Apps:** You can monitor the details regarding who created the app, what the usage in the organization is, connections associated with it, and set governance controls and data loss prevention policies. You can also manage share and access of any app within the organization.

**Power Automate:** You can enable, disable, or delete flows. You can monitor the details regarding who created the flow, when it was last modified, how the flow is being used in the organization, connections associated with it, and set governance controls and data loss prevention policies.



## New, enhanced data loss prevention experience in the Power Platform admin center

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ May 1, 2020	✓ Aug 21, 2020

### Feature details

This feature will enable tenant and environment admins to use Power Platform admin center to set up data loss prevention (DLP) policies. Admins will also be able to mark any partner connectors or Microsoft Premium connectors as "blocked" using the new **Block connectors** capability. This will be in addition to the existing support of classifying the remaining connectors into **Business** and **Non-Business** categories. Marking a connector as "blocked" at the tenant or environment level would ensure that Power App and Power Automate makers can no longer use these connectors in canvas apps and flows at all within the designated scope of the DLP policy.

### Storage capacity enforcement

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Jul 27, 2020	✓ Aug 21, 2020

### Business value

As we are experiencing an increasing level of customers exceeding entitled capacity, we need to ensure customers are freeing up and archiving data more frequently or buying additional capacity to be in compliance. With this change we will be enforcing storage capacity entitlement, to ensure customers cannot inadvertently fall out of compliance.

### Feature details

When an organization's storage capacity usage is greater than the entitled capacity, the following admin operations will be blocked:

- Create new environment (requires minimum 1GB capacity available)
- Copy an environment
- Restore an environment

To be compliant with storage usage requirements, customers can always free up storage, archive data, delete unwanted environments, or buy more capacity. To learn more about capacity add-

ons, see the **Add-ons** section in the [Dynamics 365 Licensing Guide](#) or the [Power Apps and Power Automate Licensing Guide](#). You can work through your organization's standard procurement process to purchase capacity add-ons.

# Microsoft Power Platform pro development

## Overview of Power Platform pro development 2020 release wave 1

Microsoft Power Platform offers a rich spectrum of extensibility points and tooling capabilities providing the professional developer a great experience for extending the platform. The intent of the pro developer investments is to not only help ensure a no cliffs experience for the citizen developer but also to make sure the enterprise can fully leverage all application development skills in the enterprise.

The upcoming investments range from additional releases of the [Power Apps CLI](#) and the [Power Apps Build Tools](#) as well as continued investments in deeper integration with Microsoft Azure services.

## What's new and planned for Microsoft Power Platform pro development

This topic lists features that are planned to release from April 2020 through September 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see [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 day of release.

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

### Deep integration with Microsoft Azure

Feature	Enabled for	Public preview	General availability
<a href="#">Create an app in Azure SQL and use it in Power Apps</a>	End users, automatically	✓ Jun 1, 2020	✓ Sep 30, 2020

Feature	Enabled for	Public preview	General availability
<a href="#">Use APIM to publish Azure functions and APIs as custom connectors</a>	End users, automatically	✓ Sep 2, 2020	✓ Sep 30, 2020

## Rich pro-developer tooling

Feature	Enabled for	Public preview	General availability
<a href="#">Power Apps checker PowerShell module and Azure DevOps Power Apps checker task</a>	Admins, makers, or analysts, automatically	✓ Jul 15, 2019	✓ Jun 1, 2020
<a href="#">Power Apps CLI support for plug-ins</a>	Admins, makers, or analysts, automatically	✓ Jun 1, 2020	To be announced

Description of **Enabled for** column values:

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## Deep integration with Microsoft Azure

### Overview

In 2020 release wave 1, we will continue our journey to more deeply integrate with Microsoft Azure services and the Azure portal, allowing developers to more seamlessly extend the use of Azure services to Microsoft Power Platform.

## Create an app in Azure SQL and use it in Power Apps

Enabled for	Public preview	General availability
End users, automatically	✓ Jun 1, 2020	✓ Sep 30, 2020

### Business value

Having an app will provide your citizen developers with an easy way to add, edit, or delete data within a database without any knowledge of coding. Power Apps gives users the ability to create a fully functioning UX on top of their database in a matter of minutes.

### Feature details

This Azure portal blade in Microsoft Azure SQL Database now gives users the ability to create an app connected to the data stored in their database. Within the Azure blade, users can also access to the Power Apps community, support, and additional learning materials.

## Use APIM to publish Azure functions and APIs as custom connectors

Enabled for	Public preview	General availability
End users, automatically	✓ Sep 2, 2020	✓ Sep 30, 2020

### Business value

This feature enables developers to publish APIs and functions as Power Apps custom connectors to API Management (APIM) from within Visual Studio.

### Feature details

With this feature, a developer can select or configure APIM settings while they publish their APIs to Windows, Linux, or container service. At a high level, the publishing experience from within Visual Studio will be:

1. Select an operating system, such as Windows, Linux, or container service.
2. Select the container registration service.
3. Configure the APIM properties.
4. Create the API or function.

## Rich pro-developer tooling

### Overview

Power Apps Build Tools is designed to allow professional developers to set up fully-automated Continuous Integration and Continuous Delivery (CI/CD) pipelines for Power Apps and Power Automate solutions, and Power Apps CLI is designed to support pro-developer extensibility capabilities.

Both of these features will continue to release new enhancements as part of 2020 release wave 1. Power Apps Build Tools will add support for additional tasks and be made generally available, and Power Apps CLI will be extended to support additional components of Microsoft Power Platform.

### Power Apps checker PowerShell module and Azure DevOps Power Apps checker task

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Jul 15, 2019	✓ Jun 1, 2020

### Feature details

Using the Power Apps checker PowerShell module or Azure DevOps checker task, you can now continuously validate your solutions as part of the solution build process and identify issues early on in the development lifecycle. This new capability enables you to locate and correct solution problems during development, resulting in improved efficiency and reduced development costs.

### See also

[Feature exploration](#) (video)

[Use Power Apps checker](#) (blog)

[Use the Power Apps checker web API](#) (docs)

## Power Apps CLI support for plug-ins

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Jun 1, 2020	To be announced

### Feature details

Support for plug-ins and web resources is being added to the Power Apps CLI, which enables developers to use the same familiar tools and commands, whether you are building Power Apps component framework controls, plug-ins, or web resources.

# Data integration

## Overview of data integration 2020 release wave 1

Data integration team's vision is to democratize data integration for business users so it is seamless to extract, transform and load data into Common Data Service and Azure Data Lake Storage from any data source, and to provide structure and meaning to that data through Common Data Model. We are investing in three key pillars:

- **Common Data Model** establishes industry wide structure and semantics of underlying data so that customers can then reason about that data through various business application solutions, analytics, and machine learning (ML) algorithms. In this milestone we will extend the reach of Common Data Model through SDKs and language-specific object models to support developers and partners, better in-product experiences and beyond.
- **Microsoft Power Platform dataflows**. Power Query is the industry leading smart data prep tool and evolves by infusing AI/ML into data transformations and by extending dataflows to all of Microsoft Power Platform.
- Enhanced **data integration** by enabling analytics on Common Data Service data, Office data integration to enable new insights, new and enhanced connectors, improvements in connectivity platform, extending dual-write, improving Data Export Service, and enhancing Gateway for enterprises and Robotics Process Automation (RPA).

## What's new and planned for data integration

This topic lists features that are planned to release from April 2020 through September 2020. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see [Microsoft policy](#)).

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

### Common Data Model

Common Data Model is the shared metadata definition language, semantics, and tools used by applications and solutions to enable consistency of the meaning of data across applications and solutions.



Feature	Enabled for	Public preview	General availability
<a href="#">New Common Data Model standard entity definitions</a>	Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020
<a href="#">Enhanced Common Data Model SDK functionality</a>	Admins, makers, or analysts, automatically	✓ Jun 30, 2020	✓ Sep 30, 2020
<a href="#">Empower out-of-the-box analytics</a>	Admins, makers, or analysts, automatically	✓ Aug 31, 2020	To be announced

## Dual-write

Dual-write provides a tightly coupled, near real-time and bi-directional integration between the Finance and Operations apps and Common Data Service.

Feature	Enabled for	Public preview	General availability
<a href="#">One-click to unlink dual-write environment</a>	Admins, makers, or analysts, automatically	-	✓ May 13, 2020
<a href="#">Removal of tenant admin-level consent requirement</a>	Admins, makers, or analysts, automatically	-	✓ Jun 10, 2020
<a href="#">Ability to add a company after linking your environment with pre-existing data</a>	Admins, makers, or analysts, automatically	-	✓ Jul 6, 2020
<a href="#">Ability to bulk handle entity maps across environments</a>	Admins, makers, or analysts, automatically	-	✓ Aug 12, 2020
<a href="#">Automated data movement operations between connected environments</a>	Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020

## Export to Data Lake

The Export to Data Lake service enables continuous replication of Common Data Service entity data to Azure Data Lake Storage, which can then be used to run analytics, such as Power BI reporting and machine learning.

Feature	Enabled for	Public preview	General availability
<a href="#">Export to Data Lake support for Microsoft Government Cloud</a>	Admins, makers, or analysts, automatically	✓ Sep 30, 2020	-
<a href="#">Export to Data Lake supported in additional regions</a>	Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020

## Microsoft Power Platform connectors

A critical part of data integration and the suite of products it supports — Power Apps and Power Automate — is connectivity to external data sources. The connector platform has two key objectives – providing a platform that allows partners and customers to develop connectors.

Feature	Enabled for	Public preview	General availability
<a href="#">Integration of ISV Studio into the connector certification portal</a>	Admins, makers, or analysts, automatically	✓ Apr 30, 2020	
<a href="#">Office 365 Groups Mail connector for Power Apps and Power Automate</a>	Admins, makers, or analysts, automatically	✓ Jun 15, 2020	
<a href="#">More connectors for Microsoft Power Platform</a>	Admins, makers, or analysts, automatically	✓ Sep 15, 2020	
<a href="#">FAQs for the certification process</a>	Admins, makers, or analysts, automatically	-	✓ Apr 1, 2020
<a href="#">Give feedback directly from the documentation pages</a>	Admins, makers, or analysts, automatically	-	✓ Apr 1, 2020

Feature	Enabled for	Public preview	General availability
<a href="#">Provide documentation guidance for next steps when connectors and operators are deprecated</a>	Admins, makers, or analysts, automatically	-	✓ Apr 1, 2020
<a href="#">Improved landing page experience for connectors</a>	Admins, makers, or analysts, automatically	-	✓ May 1, 2020
<a href="#">Support for multiple account owners in the connector certification portal</a>	Admins, makers, or analysts, automatically	-	✓ May 1, 2020
<a href="#">Submit documentation during the certification process</a>	Admins, makers, or analysts, automatically	-	✓ May 15, 2020
<a href="#">Summary page with connectors and their metadata</a>	Admins, makers, or analysts, automatically	-	✓ May 15, 2020
<a href="#">Improved certification experience for open sourced connectors</a>	Admins, makers, or analysts, automatically	-	✓ Aug 31, 2020
<a href="#">Informative and consistent experience verifying the quality of connector artifacts</a>	Admins, makers, or analysts, automatically	-	✓ Aug 31, 2020
<a href="#">Stronger documentation, tutorials, and guidelines for contributors to the open source repository</a>	Admins, makers, or analysts, automatically	-	✓ Aug 31, 2020
<a href="#">Improved connector metadata within connectors documentation</a>	End users, automatically	✓ Feb 3, 2020	✓ Aug 31, 2020
<a href="#">More certified and custom connectors in our open source repository</a>	Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020

## 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 from a wide variety of data sources into Common Data Service and Azure Data Lake Storage in Common Data Model format.

Feature	Enabled for	Public preview	General availability
<a href="#">Generate a new dataflow from Power Query queries in an existing Excel file</a>	Admins, makers, or analysts, automatically	✓ Sep 21, 2020	
<a href="#">Dataflow scheduling enhancements</a>	Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020
<a href="#">Reassign dataflow owner</a>	Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020

## Microsoft Power Platform gateway

The on-premises data gateway is a well-established product that is widely used by enterprises to access on-premises data sources from services like Power BI, Power Apps, Power Automate, and others.

Feature	Enabled for	Public preview	General availability
<a href="#">Automate the installation of gateways</a>	Admins, makers, or analysts, automatically	✓ May 6, 2020	
<a href="#">Data source management enhancements</a>	Admins, makers, or analysts, automatically	✓ Sep 30, 2020	-

## Power Query Desktop

Feature	Enabled for	Public preview	General availability
<a href="#">Smart data extraction from text and CSV files in Power Query Desktop</a>	Admins, makers, or analysts, automatically	✓ Aug 12, 2020	-
<a href="#">Automatic table detection from Excel files</a>	Admins, makers, or analysts, automatically	✓ Sep 20, 2020	
<a href="#">Automatic table detection from JSON files</a>	Admins, makers, or analysts, automatically	✓ Sep 20, 2020	
<a href="#">SharePoint Online List connector</a>	Admins, makers, or analysts, automatically	✓ Sep 30, 2020	

## Power Query Online

Feature	Enabled for	Public preview	General availability
<a href="#">Copy and paste queries from Power Query Desktop into Power Query Online</a>	Admins, makers, or analysts, automatically	✓ Aug 31, 2020	
<a href="#">Power Query Online Query Editor Schema-only view</a>	End users by admins, makers, or analysts	✓ Sep 1, 2020	
<a href="#">Add column from examples</a>	Admins, makers, or analysts, automatically	✓ Sep 20, 2020	
<a href="#">Smart data extraction from web pages using Web by example</a>	Admins, makers, or analysts, automatically	✓ Sep 20, 2020	-
<a href="#">Azure China region support</a>	End users, automatically	-	✓ Sep 30, 2020
<a href="#">Snowflake connector</a>	End users, automatically	-	✓ Sep 30, 2020

Feature	Enabled for	Public preview	General availability
<a href="#">View native query for supported connectors</a>	End users, automatically	-	✓ Sep 30, 2020

Description of **Enabled for** column values:

- **End users, automatically:** These features include change(s) to the user experience for end 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.
- **End 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 end users.

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

## Common Data Model

### Overview

Common Data Model is the shared data language used by applications to enable consistency of the meaning of data across applications. It provides modular and extensible business entities (account, lead, opportunity, and so on) and also observational data concepts (such as link clicks and email opens). It unifies data in a well-known schema across data silos, applications, and deployments. Although Common Data Model started in Common Data Service and Dynamics 365, it's bringing the same semantic consistency to Azure Data Lake Storage with Common Data Model folders, allowing an organization to take advantage of AI and machine learning on a scale that wasn't previously possible. Common Data Model enables business and analytics applications to interoperate over a variety of areas, including sales, service, healthcare, higher education, and more. The span of products, platforms, and services that implement, produce, and consume data in Common Data Model form continues to grow both inside and outside of Microsoft.

## New Common Data Model standard entity definitions

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020

### Feature details

The set of Common Data Model standard entities that is published and open sourced on GitHub continues to grow as more applications and data producers contribute to the standard. New concepts submitted by subject matter experts are diligently reviewed before being publicly released. Similarly, extensions to existing concepts (like Account and Contact) are done with a careful review of the current semantics, which ensures alignment. With this release, we are extending the standard entity definitions to include observation and perception models as well as Industry Accelerators standard entities.

## Enhanced Common Data Model SDK functionality

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Jun 30, 2020	✓ Sep 30, 2020

### Feature details

The Common Data Model SDK continues to be delivered as open source via GitHub. We plan to accelerate adoption of Common Data Model by having first and third parties build out-of-the-box and custom solutions. The plan is to add new functionality to the Common Data Model SDK, such as robust telemetry, the ability to use a customer's own Common Data Model entity definitions, and making Common Data Model semantic traits usable for Power BI and Power Query out of the box.

### See also

[Enhanced Common Data Model SDK functionality](#) (docs)

## Empower out-of-the-box analytics

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Aug 31, 2020	To be announced

### Feature details

Common Data Model will continue to grow its semantic ontology to support out-of-the-box machine learning and AI models, such as the customer churn prediction model. This functionality will allow users to have a guided experience that provides an expected data source for machine learning and AI models, and it increases the accuracy of their results. It will also enable the preservation of valuable metadata and the capture of new semantics for data enrichment and insights scenarios. Find links to files with updated standard semantics [here](#).

## Dual-write

### Overview

Customers use and monitor their sales processes with Common Data Service while all aspects of fulfillment and invoicing use the rich functionality of Finance and Operations apps.

Dual-write allows our customers to think about these applications as a system to which they can write simultaneously. It provides a tightly coupled near real time and bi-directional integration between the Finance and Operations apps and Common Data Service. Once an entity map, for example Account – Customer, is enabled for dual-write, any create, update change in the Customer entity in Finance and Operations apps results in writes, in near-real time, to the Account entity in Common Data Service and vice versa.

### One-click to unlink dual-write environment

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ May 13, 2020

### Feature details

Our customers are regularly testing dual-write in their sandbox or test environments and need to quickly unlink their environments and start again. Previously, customers had to disable all entity maps before unlinking an environment. This may seem cumbersome and sometimes not



possible as one of the environments may not be available. This new feature provides a quick way to unlink your environments.

### See also

[Use the dual-write wizard to link your environments](#) (docs)

## Removal of tenant admin-level consent requirement

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Jun 10, 2020

### Feature details

In order for Common Data Service and the Finance and Operations apps to communicate, a tenant admin needed to explicitly give consent to the applications. This is not always practical (for example, the persona provisioning Project Operations will require additional approval and involve more staff which can be time consuming). With this feature, we will remove this prerequisite and the need for explicitly giving consent to the applications.

### See also

[System requirements and prerequisites](#) (docs)

## Ability to add a company after linking your environment with pre-existing data

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Jul 6, 2020

### Feature details

The company or legal entity list doesn't remain static and is constantly changing. There may be a need to add new companies especially during a phased rollout or acquisitions. Up until now, you were unable to add a company or legal entity without system down-time where you have to unlink and relink your environment, which can be expensive, especially due to pre-existing data. With this feature, you will be able to add a company in a live environment without the need for unlinking.

## See also

[Edit a legal entity after dual-write setup](#) (docs)

## Ability to bulk handle entity maps across environments

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Aug 12, 2020

## Feature details

Currently, you have the ability to move dual-write artifacts, such as entity maps across environments. With this feature, you'll be able to bulk enable these entity maps so that you can replicate the state of entity maps with little effort.

## See also

[Manage multiple entity maps](#) (docs)

## Automated data movement operations between connected environments

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020

## Feature details

Our customers need to create daily copies of their dual-write enabled production environment to a sandbox. While doing this, they also want to minimize downtime related to manually connecting the dual-write enabled sandbox environments. With this feature, you will be able to automate these operations without the need to manually link the environments.

## Export to Data Lake

### Overview

The **Export to Data Lake** service enables continuous replication of Common Data Service entity data to Azure Data Lake, which can then be used to run analytics, such as Power BI reporting, machine learning, data warehousing, or other downstream integration purposes. It simplifies the technical and administrative complexity of operationalizing entities for analytics and managing schema and data. Within a matter of minutes, you will be able to link a Common Data Service

environment to a data lake in your Azure subscription, select standard or custom entities, and export it to Data Lake. Any data or metadata changes (initial and incremental) in Common Data Service is automatically pushed to the lake without any additional actions.

This service also empowers our first party AI apps (Customer Insights, Sales Insights, CCA, and AI Builder, etc.) by continuously pushing Common Data Service data to the Azure Data Lake.

In 2020 release wave 1, we are making additional investments to increase Enterprise adoption.

### Export to Data Lake support for Microsoft Government Cloud

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Sep 30, 2020	-

#### Feature details

We are making the Export to Data Lake service compliant with Microsoft Government Cloud (GCC - L2) so that government customers can benefit from this service.

### Export to Data Lake supported in additional regions

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020

#### Feature details

With this release, **Export to Data Lake** is now available in France and the UAE regions.

## Microsoft Power Platform connectors

### Overview

A critical part of data integration and the suite of products it supports — Power Apps and Power Automate — 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 it 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 like SQL Server, SAP, Oracle Database, Outlook, and more.

### Integration of ISV Studio into the connector certification portal

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Apr 30, 2020	-

#### Feature details

The integration of the connector certification portal into ISV Studio allows partners to navigate to ISV Studio to manage and submit connectors for certification. Partners will be able to use the full portal experience from within the ISV Studio; therefore, partners will no longer need to navigate to the standalone portal.

#### See also

[Connector Certification now in ISV Studio](#) (docs)

### Office 365 Groups Mail connector for Power Apps and Power Automate

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Jun 15, 2020	-

#### Feature details

The Office 365 Groups Mail connector for Power Apps and Power Automate provides users the ability to connect with their Office 365 Groups mail. The connector allows the user to send email conversations to the group, responds to mail sent to a group, and automates based on mail in a group. Customers have frequently requested this connector.

#### See also

[Use our new Office 365 Groups Mail Connector!](#) (docs)

## More connectors for Microsoft Power Platform

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Sep 15, 2020	-

### Feature details

We continuously add new connectors for Power Apps and Power Automate as we engage partners and ISVs to build them. As the ecosystem grows, we expect more partners and ISVs to build and certify connectors. We'll also continue to add features to existing connectors.

### Connectors released in April 2020

- Connect2All
- Sendmode
- DocumentsCorePack
- TRIGGERcmd
- OpenText CS by One Fox
- Industrial App Store
- Cloudmersive Barcode
- Blackbaud Raisers Edge NXT
- Tilkee
- Azure VM
- Azure App Service
- CivicPlus Transform
- RiskIQ

### Connectors released in May 2020

- Eduframe
- Microsoft 365 message center
- LIFX
- Virus Total
- Office 365 Groups Mail

- Azure IoT Central V3

### Connectors released in June 2020

- Engagement Cloud
- timeghost
- Otto.bot
- Xpertdoc
- Cloudmersive NLP
- Shifts for Microsoft Teams
- OpenText eDOCS by One Fox
- HouseRater QA
- WorkSpan
- PIPware KPIs

### Connectors released in July 2020

- CPQSync
- Pure Leads
- IN-D KYC India
- Motimate
- SMSLink
- SMSAPI
- AXtension Content Gate
- Cloudmersive File Processing

### Connectors released in August 2020

- Recorded Future
- FORCAM FORCE Bridge
- PDF Blocks
- Poka
- Zanner Scaffolder
- Ticketing.events
- Ventipix Asset and Inventory

- Apptigent PowerTools LITE
- BillsPLS
- DataScope Forms
- LINK Mobility
- MeetingRoomMap
- Notiivy Browser Notifications
- Gravity Forms by reenanced
- GetMyInvoices

### Connectors released in September 2020

- IN-D Payables
- Cloudmersive Video and Media
- GetAccept
- Nitro
- MotaWord Translations
- CDK Drive Service Vehicles

### FAQs for the certification process

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Apr 1, 2020

### Feature details

We see many frequently asked questions (FAQs) during and after the connector certification process. With this release, we will provide more helpful documentation in the form of a list of FAQs that partners ask. These FAQs cover topics, such as the requirements to make a connector generally available, marketing benefits, and more.

### See also

[Frequently asked questions - Connector Certification Program](#) (docs)

## Give feedback directly from the documentation pages

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Apr 1, 2020

### Feature details

Currently, there is no easy procedure for users to provide feedback and raise issues regarding documentation. With this release, we will provide a way to provide feedback and report issues directly from the documentation page.

### See also

[Instructions on providing feedback for connectors](#) (docs)

## Provide documentation guidance for next steps when connectors and operators are deprecated

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Apr 1, 2020

### Feature details

When an owner deprecates a connector or operation, we want to provide a clean transition experience for users to move to the new version with minimal effort. To do this, we will provide documentation that clearly warns users that the connector or operation is deprecated. Additionally, we will recommend a supported connector or operation to replace the deprecated features.

### See also

[Evolving your API with version control](#) (docs)



## Improved landing page experience for connectors

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ May 1, 2020

### Feature details

Currently, the landing page experience for our connectors' documentation is a summary article. We will provide an improved landing page experience for the connectors' documentation to help users quickly and efficiently get to the information they want.

### See also

[Connectors documentation](#) (docs)

## Support for multiple account owners in the connector certification portal

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ May 1, 2020

### Feature details

Currently, only one account can manage a connector submission, so communication between a partner and our certification team depends on a single point of contact. We also do not support notifying multiple stakeholders of communication.

With this release, partners can now add other account owners to help manage a connector submission. All account owners will receive notifications and updates on the connectors and will be able to manage the connector certification process.

## Submit documentation during the certification process

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ May 15, 2020

## Feature details

As part of an effort to improve the documentation for connectors, partners can now use the connector certification portal to submit documentation. Partners will be able to use this process to submit connector documentation in markdown and relevant files, including images. This will improve the user's experience, and they can now find better documentation for custom connectors.

## See also

[Instructions on submitting your connector to Microsoft](#) (docs)

## Summary page with connectors and their metadata

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ May 15, 2020

## Feature details

Currently, you must go to each connector's documentation page to see metadata, such as whether the connector is in Preview or General availability and whether it's a premium or standard connector. To provide a friendlier, more efficient experience, we will have an easy-to-view summary page of connectors with key metadata for each connector.

## See also

[Connector reference overview](#) (docs)

## Improved certification experience for open sourced connectors

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Aug 31, 2020

## Feature details

Per feedback from partners looking for an improved certification experience after open sourcing, we are allowing partners to designate an open sourced connector they own to be certified from the certification portal experience. The portal will retrieve the files from the open source repository, so the partner does not have to provide and upload a local copy.

## See also

[Contributing](#) (docs)

## Informative and consistent experience verifying the quality of connector artifacts

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Aug 31, 2020

## Feature details

We will provide a cleaner experience in our validation tools to help connector developers verify the quality of their connectors. This will include clearly communicated requirements, clear error messages, and consistency across standards.

## Stronger documentation, tutorials, and guidelines for contributors to the open source repository

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Aug 31, 2020

## Feature details

We are adding more README.md files, process documentation, and tutorials to assist contributors to the open source repository for connectors so that they can better understand the process of deploying and contributing to connectors.

## See also

[Microsoft Power Platform Connectors](#) (docs)

## Improved connector metadata within connectors documentation

Enabled for	Public preview	General availability
End users, automatically	✓ Feb 3, 2020	✓ Aug 31, 2020

### Feature details

We will be expanding our connectors documentation to support our users. We will add more public metadata, such as Publisher, service owner, support contact, and links to end service privacy policy documentation.

### See also

[Connector reference overview](#) (docs)

## More certified and custom connectors in our open source repository

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020

### Feature details

We will create and set up more connectors in our open source repository for developers to use, build on top of, and contribute to. The specific connectors to be added will be determined by high priority requests from our community and other stakeholders.

As of September 2020, we have open sourced over 100 certified connectors, including popular ones like **Planner**, **Azure AD**, **Office 365 Users**, and **Office 365 Groups Mail**. More than ten custom connectors from various community members are also open sourced. You can learn more about the open source repository [here](#).

## 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 data sources into Common Data Service and Azure Data Lake storage in Common Data Model format.

Dataflows provide the building blocks that allow Microsoft to enable out-of-box analytics and AI insights to its users, such as the analytic and insights provided by AI Builder or Dynamics 365 Customer Insights, making them a huge differentiator for the company's Dynamics 365 offerings.

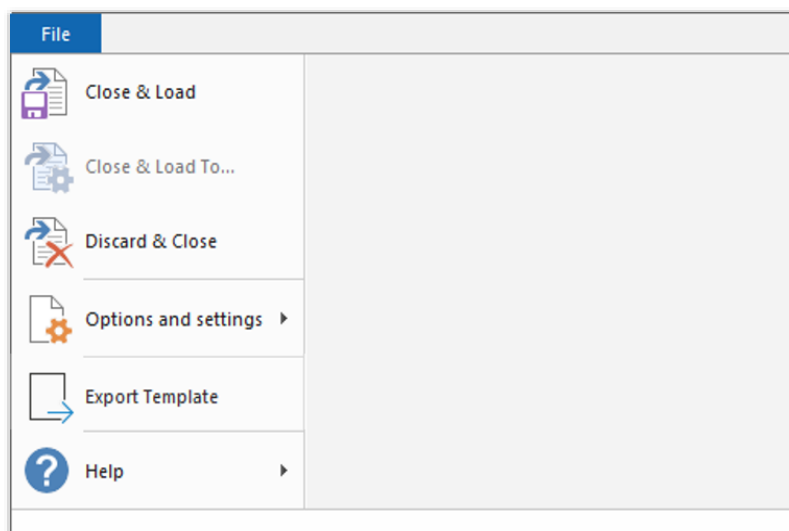
### Generate a new dataflow from Power Query queries in an existing Excel file

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Sep 21, 2020	-

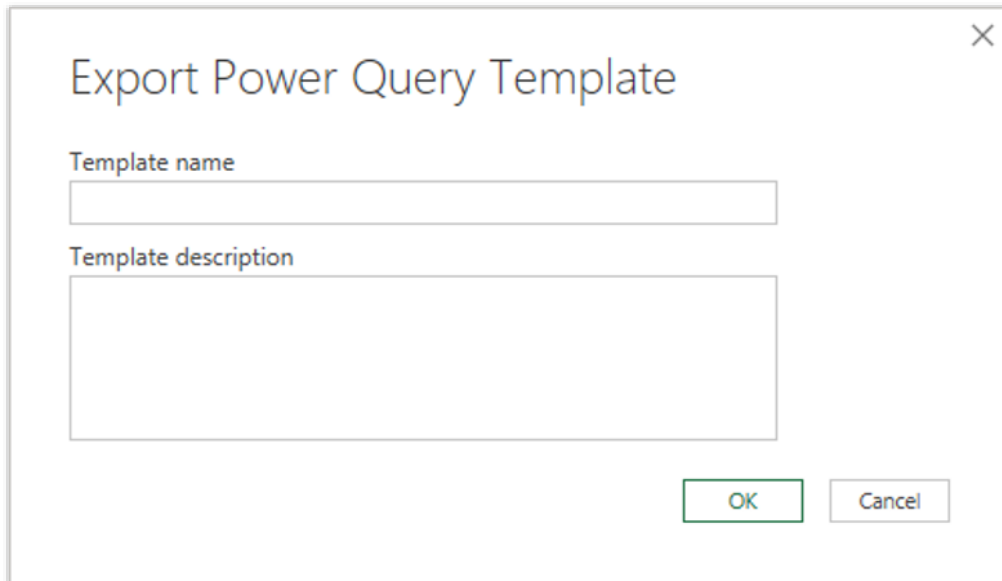
#### Feature details

You can create Power Query templates from your queries in Excel workbooks that can be used to create new Microsoft Power Platform dataflows from the same queries to seamlessly transition from manually refreshed datasets to cloud powered dataflows that keep your data updated.

Power Query templates can easily be shared with other people, making it easier to leverage existing queries from other authors.

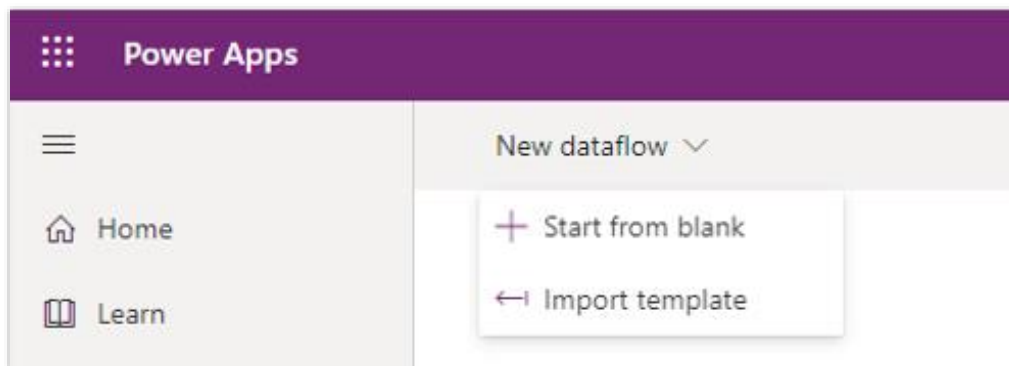


*Create Power Query templates from the File menu in Power Query in Excel*



The dialog box is titled "Export Power Query Template" and has a close button (X) in the top right corner. It contains two input fields: "Template name" and "Template description". The "Template name" field is a single-line text box, and the "Template description" field is a multi-line text box. At the bottom right, there are two buttons: "OK" and "Cancel".

*Set your Power Query template properties*



*Create new Microsoft Power Platform dataflows by importing Power Query templates*

### See also

[Generate a new dataflow from Power Query queries in an existing Excel file](#) (docs)

## Dataflow scheduling enhancements

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020

### Feature details

Power Platform dataflows allow any Power Platform customer to easily define ETL pipelines (dataflows) to ingest data into Common Data Service or their company's **Business data lake** (Azure Data Lake Storage). Dataflows run in the cloud and are either manually triggered or can be scheduled to trigger automatically. With this set of enhancements, customers will be able to schedule dataflows to run either on a frequency, specific times, opt-in to receive email notifications in the event of run failures, and enjoy overall performance improvements in the experience to configure refresh settings and view run results.

## Reassign dataflow owner

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	✓ Sep 30, 2020

### Feature details

Sometimes, dataflow ownership needs to be reassigned from one person to another (for example, if the owner of the dataflow leaves the organization or if changes need to be made for collaboration purposes). Environment administrators can now view all dataflows created in the environment by searching for them by owner, and they can reassign dataflow ownership to another person in the environment.

## Microsoft Power Platform gateway

### Overview

The **on-premises data gateway** is a well-established product that is widely used by enterprises to access on-premises data sources and transfer petabytes of data weekly. Today, gateways are used with either one or a combination of services and applications, such as Power BI, Power Apps, Power Automate, Logic Apps, and others. Based on Enterprise requests, we plan to continue focusing on making on-premises data gateways an enterprise-grade product with features like enhancements to load balancing, monitoring, and integration with additional services in the current milestone.

## Automate the installation of gateways

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ May 6, 2020	-

### Feature details

Today, gateway admins must manually install and register gateways on every machine where the gateway is needed. This manual process takes significant effort in large organizations with many gateways. To address this, we're adding a new feature that enables you to install and register gateways via the command prompt.

### See also

[PowerShell Gallery - Gateway install and add](#) (docs)

## Data source management enhancements

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Sep 30, 2020	-

### Feature details

We've been working on centralizing gateway management in the admin center. We'll continue this effort by introducing data source management for Power BI to the admin center. In 2020 release wave 1, we'll make available a read-only list of on-premises Power BI and cloud data sources and features like sort, search, and others. We'll continue to improve this experience in future releases.

### See also

[On-premises data gateway management](#) (docs)

## Power Query Desktop

### Overview

Power Query provides a no-code experience for non-technical users to seamlessly connect, transform, and combine data from hundreds of data sources. Power Query is natively integrated



into several Microsoft offerings, both in the desktop experience and through a web-based experience built on Microsoft Azure.

### Smart data extraction from text and CSV files in Power Query Desktop

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Aug 12, 2020	-

#### Feature details

Text/CSV by example will become available within Power Query Desktop. This feature allows users to extract data from semi-structured text and CSV files by providing sample output values based on file contents from which Power Query will infer the extraction rules. The overall user paradigm for this feature is similar to **Web by example**. You can read more about Web by example [here](#).

#### See also

[Smart data extraction from text and CSV files in Power Query Desktop](#) (blog)

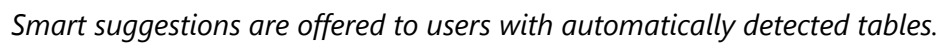
[Text/CSV by Example preview](#) (docs)

### Automatic table detection from Excel files

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Sep 20, 2020	-

#### Feature details

When using the Excel connector, this new feature will automatically identify sections of each Excel spreadsheet to extract into a table and show them under a **Suggested Tables** group in the **Navigators**, as shown in the first screenshot below. Previously, unless data was formatted as **Tables** or **Named Ranges** in Excel, users had to scrape the relevant rows or columns with specific transforms (such as skip rows and remove columns) from worksheet objects, as shown in the second screenshot below.



[Power Query Excel connector](#) (docs)

## Automatic table detection from JSON files

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Sep 20, 2020	-

### Feature details

When using the JSON connector, this new feature will automatically flatten the JSON into a table. Previously, users had to flatten records and lists manually. This new feature also adds support for JSON lines (or newline delimited JSON where each line in the file is a JSON string).

### See also

[Power Query JSON connector](#) (docs)

## SharePoint Online List connector

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Sep 30, 2020	-

### Feature details

A new SharePoint Online List connector will be previewed in Power BI Desktop. Compared to the existing connector, this new connector will have improved performance around column expansions and table joins, improved paging, and a better user experience overall.

### See also

[SharePoint Online List](#) (docs)

## Power Query Online

### Overview

Power Query provides a no-code experience for non-technical users to seamlessly connect, transform, and combine data from hundreds of data sources. Power Query is natively integrated into several Microsoft offerings, both in the desktop experience and through a web-based experience built on Microsoft Azure.

## Copy and paste queries from Power Query Desktop into Power Query Online

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Aug 31, 2020	-

### Feature details

Users will be able to right-click on items within the queries pane in Power Query Desktop and then paste those items into Power Query Online. This will take care of copying all selected queries as well as any other queries that are being referenced.

This feature is already available within Power Query Desktop and allows users to easily move their queries between Power BI Desktop and Excel Workbook. With these planned enhancements, users will also be able to seamlessly move their queries into Power Query Online projects, such as dataflows within Power Apps, Customer Insights, Power BI, and others.

### See also

[Copy and paste queries from Power Query Desktop into Power Query Online](#) (docs)

## Power Query Online Query Editor Schema-only view

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	✓ Sep 1, 2020	-

### Feature details

A new **Schema-only view** will be introduced within the Power Query Online Query Editor. This view will allow customers to apply schema-only transformations (for example, Remove/Rename/Reorder Columns, Change Column Data Types, and others) more efficiently when working against tables with a large number of columns.

### See also

[Power Query Online Query Editor Schema-only view](#) (docs)

## Add column from examples

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Sep 20, 2020	-

### Feature details

**Add column from examples** will become available in Power Query Online.

With **Add column from examples** in the Power Query Editor, you can add new columns to your data simply by providing one or more example values for the new columns. You can create the new column examples from a selection or provide input based on all existing columns in the table.

This feature is already available in Power Query Desktop. You can learn more about it in this [documentation article](#).

### See also

[Add a column from examples](#) (docs)

## Smart data extraction from web pages using Web by example

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	✓ Sep 20, 2020	-

### Feature details

**Web by example** will become available within Power Query Online. This feature allows users to extract data from semi-structured web pages by providing sample output values based on web page content from which Power Query infers the extraction rules. You can find more details about existing Power Query Desktop Web by example capabilities [here](#).

### See also

[Get webpage data by providing examples](#) (docs)

## Azure China region support

Enabled for	Public preview	General availability
End users, automatically	-	✓ Sep 30, 2020

### Feature details

We will be bringing Power Query Online support to Azure China. This will enable products that incorporate Power Query Online (such as Power BI Dataflows, Power Apps Dataflows, or Customer Insights) to enable dataflow capabilities in Azure China as part of their overall support/roll-out plans for that region.

## Snowflake connector

Enabled for	Public preview	General availability
End users, automatically	-	✓ Sep 30, 2020

### Feature details

Currently available in Power BI Desktop, we will enable the Snowflake connector for Power Query Online. This connector will allow users to connect to Snowflake. You can read more about the existing connector in Power BI Desktop [here](#).

## View native query for supported connectors

Enabled for	Public preview	General availability
End users, automatically	-	✓ Sep 30, 2020

### Feature details

Today in Power Query Desktop, users have the capability to view the native query emitted by certain connectors, such as the SQL connector. This capability allows users to easily see what query they're emitting as a result of operations in Power Query, and it can be used to tell when something has stopped folding.

This feature will be lighting up in Power Query Online, bringing additional self-diagnostic capabilities to users. Alongside query diagnostics, it will allow users to have a much better understanding of what is being retrieved from their data sources.

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](#).

