

**Microsoft Power Platform** 

2020 RELEASE WAVE 2 PLAN

Features releasing from October 2020 through March 2021

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# Microsoft Power Platform: 2020 release wave 2 plan

The Microsoft Power Platform release plan for the 2020 release wave 2 describes all new features releasing from **October 2020** through **March 2021** for Power BI, Power Apps, Power Automate, Al Builder, Power Virtual Agents, and Common Data Model and data integration.

# 2020 release wave 2 overview

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

- Power BI is investing in three key areas that drive a data culture: amazing data experiences, modern enterprise BI, and insights where decisions are made. Power BI Desktop includes many new capabilities for users to create content quickly and easily, enabling authors to empower their users, enterprise-grade content creation, and AI-infused authoring experiences. Power BI Mobile adds split-view support for iPad. Power BI Service integrates with Azure Synapse to automatically create and manage materialized views on larger Power BI models as well as enhanced integration with SharePoint lists to build additional custom reports. We continue to enhance our data protection capabilities enabling customers to classify and label sensitive data.
- Power Apps includes 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. Makers will be able to create Power Apps directly within Microsoft Teams in order to easily customize the Teams experience. Makers will be able to add custom pages to model-driven apps using the app designer, bringing together the best of canvas and model capabilities including custom layouts and components.
  - Al Builder introduces new Al scenarios for receipt scanning and translation, and improvements to connect to remote training data. The Al builder home page and model details page are updated to improve discoverability and integration with Power Apps and Power Automate.
  - Power Apps portals adds Power Virtual Agents as a component in the Power Apps portals Studio, as well as support for code components created using Power Apps component framework.

- Power Automate will update the offering to combine the best of WinAutomation with the cloud-based AI Builder and connector-based capabilities in automated flows. This new version will offer customers a way to automate everything from Office apps to legacy terminal applications that haven't been updated in decades. In addition, there are further enhancements coming to automated flows running in the cloud, including richer automation and approval experiences.
- <u>Power Virtual Agents</u> includes expanded capabilities in the authoring experience, deeper Microsoft Teams integration, tools to create richer content, adaptive cards capabilities, authentication improvements, and improved Power Automate integration.
  - Microsoft Power Platform offers a range of <u>governance and administration</u> capabilities that span Power Apps, Power Automate, and Common Data Service. These capabilities are designed to help the administrators and IT pros 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.
- <u>Data integration</u> provides built-in connectivity to the Microsoft Power Platform and more, with data across hundreds of business systems, enabling rich and intelligent experiences. There are many new capabilities in this release wave in areas such as dual-write, export to Data Lake, Microsoft Power Platform connectors, Microsoft Power Platform dataflows, Microsoft Power Platform gateway, and Power Query Online.

**IMPORTANT** The Dynamics 365 features coming in the 2020 release wave 2 have been summarized in a separate <u>release plan</u>.

# Key dates for the 2020 release wave 2

This release plan describes functionality that may not have been released yet. Delivery timelines and projected functionality may change or may not ship (see <u>Microsoft policy</u>).

Here are the key dates for the 2020 release wave 2.

Milestone	Date	Description
Release plans available	July 8, 2020	Learn about the new capabilities coming in the 2020 release wave 2 (October 2020 – March 2021) across Dynamics 365 and the Microsoft Power Platform.
Early access available	August 3, 2020	Test and validate new features and capabilities that will be a part of the 2020 release wave 2, coming in October, before they get enabled automatically for your end users. You can view the Microsoft Power Platform 2020 release wave 2 early access features now.

Milestone	Date	Description
General availability	October 1, 2020	Production deployment for the 2020 release wave 2 begins. Regional deployments will start on October 2, 2020.

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

- **Users, automatically** These features include changes to the 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 2.

Let us know your thoughts. Share your feedback on the <u>Microsoft Power Platform community</u> <u>forum</u>. We will use your feedback to make improvements.

# 2020 release wave 2 features available for early access

This topic lists the features that can be enabled for testing in your environment beginning **August 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 <a href="Opt in to 2020 release wave 2 updates">Opt in to 2020 release wave 2 updates</a>.

**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 <u>2020 release wave 2 features available for early access</u>.

# **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
Ability to interact with emails in mobile app	End users, automatically	Aug 1, 2020	Oct 2020
Address key chart customization gaps in Unified Interface	End users, automatically	Aug 1, 2020	Oct 2020
Business Q&A integration with Common Data Service relevance search	End users, automatically	Oct 1, 2020	-
Improved model-driven app header, sitemap, and app switching	End users, automatically	Aug 3, 2020	Oct 2020

Feature	Enabled for	Early access	General availability
Transition to Unified Interface	End users, automatically	Aug 1, 2020	Dec 2020
UX improvements to sub grids and form tabs on mobile	End users, automatically	Aug 1, 2020	Oct 2020

# Power BI

# Overview of Power BI 2020 release wave 2

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 three key areas that drive a data culture:

- Amazing data experiences
- Modern enterprise BI
- Insights where decisions are made

Review our release announcements from Microsoft Business Applications Summit 2020.

# **Amazing Data Experiences**

To build a data culture, every single individual needs to have instantly familiar experiences combined with AI-infused insights. Get monthly updates that include enhanced reporting capabilities to make it easier than ever to author compelling content as well as a continued focus on enabling AI insights that are immediately impactful. 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. This enables individuals across an organization to drive and grow the data culture within organizations.

# Modern enterprise BI

Power BI can scale to meet the most demanding needs of large enterprise customers, which is why more and more customers are choosing to standardize on Power 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, reporting, application lifecycle management, and data management at worldwide scale.

# Insights where decisions are made

The third, and perhaps the area of innovation that customers value the most, is to help weave BI deep into the fabric of the organization.

- **Trust**: Trust is foundational for customers to adopt a BI platform broadly. The Power BI team is committed to a fully open platform at the data tier with Common Data Model support, at the semantic model tier with support for the industry standard XMLA protocol, and a completely open visualization stack. In addition we have invested in Data Protection which helps protect data even when it is exported out of Power BI, as well as a comprehensive set of certifications to ensure that Power BI is fully compliant with regulations around the world.
- **Data Stack**: Power BI is designed to work with data wherever it lives in the cloud or onpremises through 150+ connectors that ship out of the box and new connectors that are added every month; however, when customers are building new BI, analytics, or data warehousing projects we are making it radically easy with Azure Synapse Analytics. With built-in capabilities for data ingestion, data preparation, machine learning, and visualization, Synapse accelerates time to value, reduces total cost of ownership, and provides incredible performance over large data volumes.
- **Action**: Customers value the ability to quickly move from insight-to-action-to-automation. Power Platform makes this uniquely possible through Power BI, Power Apps, Power Automate, and Power Virtual Agents. The products are designed to work together to make it easy for customers to adapt quickly to changing business requirements.
- **Collaboration**: Insights become more valuable as they are shared. By integrating Power BI deeply with Office 365, Microsoft Teams, Excel, PowerPoint, and more, we bring insights to where everyone works and collaborates.

# What's new and planned for Power BI

This topic lists features that are planned to release from October 2020 through March 2021. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see <u>Microsoft policy</u>).

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 ( $\checkmark$ ) shows which features have been released for public preview or early access and for general availability.

# **Power BI Desktop**

Helping report creators analyze data, find insights, and visually communicate to their users.

Feature	Enabled for	Public preview	General availability
Lasso select for datapoints	End users, automatically	Oct 2020	
On-canvas watermarks	End users by admins, makers, or analysts	Oct 2020	
Power Automate visual	End users by admins, makers, or analysts	Oct 2020	
Small multiples visual	End users by admins, makers, or analysts	Oct 2020	
User editing of DirectQuery query parameters	End users by admins, makers, or analysts	Oct 2020	
Visual axis zooming	End users by admins, makers, or analysts	Oct 2020	
DirectQuery over Power BI and Azure Analysis Services	Admins, makers, or analysts, automatically	Nov 2020	
Apply all button for report filters	End users by admins, makers, or analysts	✓May 26, 2020	Oct 2020
Q&A synonym improvements	End users by admins, makers, or analysts	-	Dec 2020
DirectQuery support for Q&A	Admins, makers, or analysts, automatically	-	Jan 2021

## **Power BI Mobile**

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

Feature	Enabled for		General availability
Split view support for iPad	End users by admins, makers, or analysts	Aug 2020	Oct 2020

# **Power BI Service**

In order to build a data culture, everyone needs to be able to discover and collaborate on insights.

Feature	Enabled for	Public preview	General availability
Data lineage and impact analysis enhancements	Admins, makers, or analysts, automatically	Oct 2020	-
Endorsement of Power BI reports and apps	Admins, makers, or analysts, automatically	Oct 2020	-
Power BI data as an Excel data type	End users, automatically	Oct 2020	-
Azure Synapse integration	Admins, makers, or analysts, automatically	Nov 2020	
Analyze in Power BI from SharePoint lists	End users, automatically	Dec 2020	
Data protection enhancements	End users by admins, makers, or analysts	Dec 2020	
Support for dataflows in deployment pipelines	Admins, makers, or analysts, automatically	Mar 2021	
Support for different incremental refresh policies in a deployment pipeline	End users, automatically	Mar 2021	
Support for paginated reports in deployment pipelines	Admins, makers, or analysts, automatically	Mar 2021	

Feature	Enabled for	Public preview	General availability
Overload alerts	Admins, makers, or analysts, automatically	-	Oct 2020
Ability for Power BI administrators to upgrade classic workspaces to V2 workspaces	End users, automatically	-	Oct 2020
<u>Dataflows DirectQuery</u>	End users by admins, makers, or analysts	-	Oct 2020
Dataset refresh overview	Admins, makers, or analysts, automatically	-	Oct 2020
Enhanced export and subscription support for Power BI reports	End users, automatically	-	Oct 2020
New look rollout to all users	End users, automatically	-	Oct 2020
Connect to Power BI datasets directly in Excel	End users, automatically	<b>V</b> May 11, 2020	Oct 2020
Power BI dataflows and ADLS Gen2 integration at workspace level	End users by admins, makers, or analysts	-	Dec 2020
Azure Monitor integration	Admins, makers, or analysts, automatically	-	Jan 2021
Advanced network isolation	Admins, makers, or analysts, automatically	-	Mar 2021

# 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 <u>International availability guide</u>. For more information about geographic areas and data centers (regions), go to the <u>Dynamics 365 and Power Platform availability page</u>.

# Power BI Desktop

## **Overview**

With each 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:

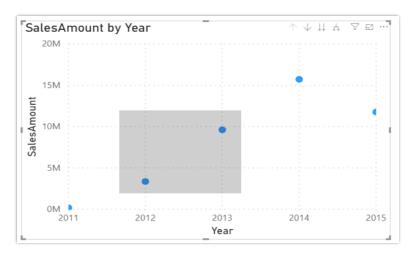
- **PowerPoint for data**: Millions of people are familiar with how to use Microsoft Office, especially PowerPoint. Users want to create content in Power BI Desktop as quickly and easily as they can create a slide in PowerPoint. A familiar user experience is key to ensuring that customers feel welcome. 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
  navigate through their reports, understand the story in their data, and find answers to their
  own questions. We'll provide new capabilities to help report creators make intuitive reports
  for those users.
- **Enterprise-grade content creation**: 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 Al-infused authoring experiences: Power BI Desktop will infuse Al
  throughout the report authoring experience, which will enable analysts to find new insights,
  create engaging content more easily, and empower their users with engaging Al
  visualizations.

# **Lasso select for datapoints**

Enabled for	Public preview	General availability
End users, automatically	Oct 2020	-

#### **Feature details**

Power BI users can select multiple datapoints at once using a lasso action. The lasso selects all datapoints inside the boundaries of the lasso. This will allow users to conveniently select datapoints for cross-filtering and highlighting. Launch the lasso action by clicking and dragging while the mouse is over the plot area of a visual.



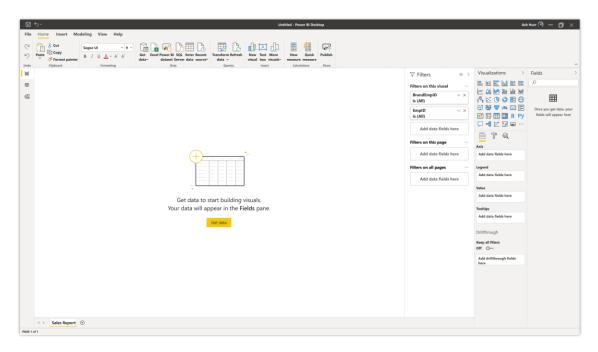
Lassoing datapoints on a scatter chart

#### **On-canvas watermarks**

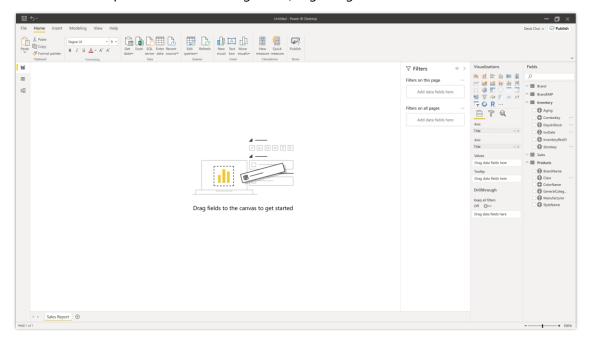
Enabled for	Public preview	General availability
End users by admins, makers, or analysts	Oct 2020	-

### **Feature details**

For new Power BI users, it can be difficult to know where to start. We will provide on-canvas watermarks to help guide new users taking their very first steps to get data, populate the fields pane, and drag and drop visuals.



Power BI Desktop's canvas with new guides for getting data



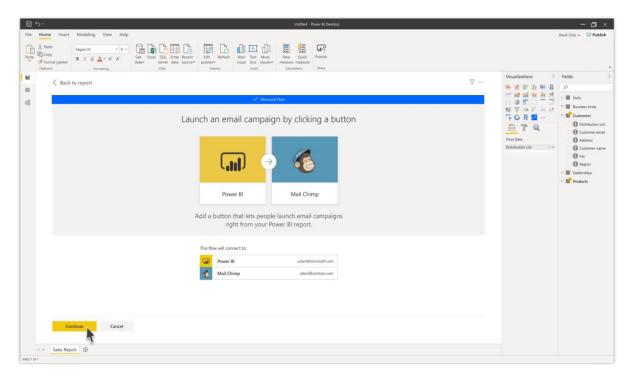
Power BI Desktop's canvas with guides for creating a visual

#### **Power Automate visual**

<b>Enabled for</b>	Public preview	General availability
End users by admins, makers, or analysts	Oct 2020	-

#### **Feature details**

Report consumers want to act on the insights they find, and many times those actions happen outside of Power BI (e.g., send a note, create a task, copy the data). Report creators want built-in automation for their consumers but need to ensure that actions are performed on the data that the consumer has selected. By introducing a Power Automate visual like Power Apps, authors can embed a button directly in a report that can be used to trigger a flow. The executed flow can be contextual by considering the filters set by the consumer at the time the button is selected.



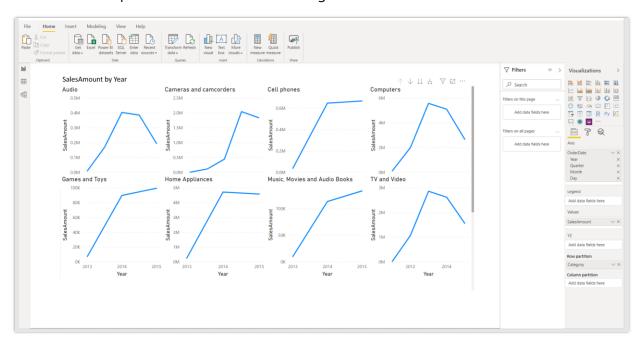
Configuring the Power Automate visual within Power BI Desktop

# **Small multiples visual**

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

#### **Feature details**

Small multiples, or trellising, splits a visual into multiple versions of itself, presented side-by-side. The visual's data is partitioned across these versions by a chosen dimension (e.g., splitting a "sales over time" line chart by product lines or geo-regions). It is a staple of data visualization which eases comparison between different categories of a dataset.



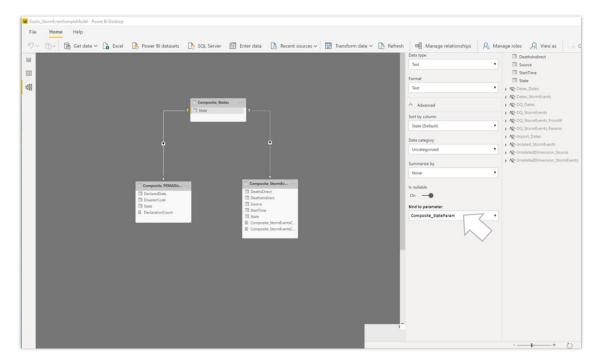
Multiple small charts on a Power BI report

#### **User editing of DirectQuery query parameters**

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

#### **Feature details**

Prior to dynamic query parameters, the only way to set parameter values was through Power BI Desktop. This new feature allows parameters to be updated dynamically based on filter or slicer selections made by report viewers in reading view. This feature will be supported only for those DirectQuery sources that use the M Engine and will allow the setting of parameters that are an exact value or a set of values within a slicer or filter card.



#### Query parameter binding

This feature can also be useful for query performance optimizations. By binding columns to query parameters, model authors have additional control over how filter selections get incorporated into DirectQuery source queries. If the model authors understand the intended semantics of their filters, then they often know how to write efficient queries against their data source; therefore, they can ensure filter selections get incorporated into source queries at the right point to achieve their intended results with improved performance.

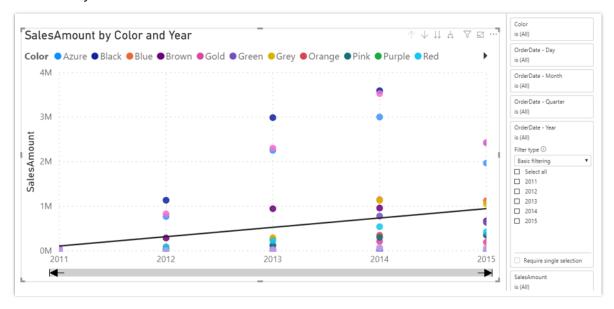
# Visual axis zooming

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

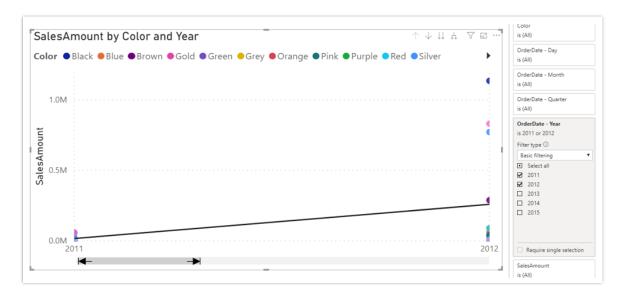
#### **Feature details**

Visual zooming adjusts the level of detail being displayed in a visual without losing contextual information about the rest of the data. For example, unlike filters, changing the zoom of a visual will not recalculate trendlines for the data with fewer data points.

**NOTE** The screenshot examples show recalculation with filters but otherwise demonstrates the functionality of this feature.



A scatter chart with a zoom slider on the X axis



A scatter chart with a zoomed in X axis showing a smaller range of values

# **DirectQuery over Power BI and Azure Analysis Services**

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Nov 2020	-

#### **Feature details**

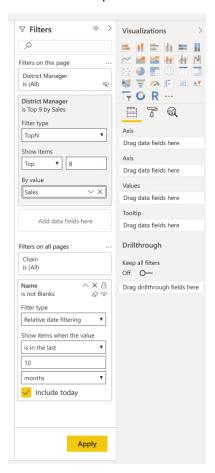
Most organizations provide centralized, certified datasets for their users to build reports. These are either Azure Analysis Services (AAS) models or Power BI certified and shared datasets. DirectQuery over AAS models allows authors to connect to these datasets and either extend them with their own measures or combine them with other imported data (e.g., Excel files). In this way, organizations can scale their enterprise datasets by allowing users to leverage them in more self-service scenarios. Authors can bring in their own local data sources while still leveraging the authoritative Power BI or AAS datasets created by others in their organization. Any combination of one or more connections to AAS models, DirectQuery tables from other data sources, or even imported data can be used for flexible modeling over enterprise and self-service data.

# Apply all button for report filters

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	<b>✓</b> May 26, 2020	Oct 2020

#### **Feature details**

With this feature, report authors can allow their report consumers to apply many filter modifications at once. This feature can be helpful for reports authors who want to optimize the filter pane for query performance. Also, this capability will be useful for any report consumer who doesn't want to wait for the report to update each time a single filter variable is applied. By applying many filter modifications at once, the consumer spends less time waiting to see the impact on the report visuals. This feature will be off by default, and report authors can turn it on or off at the report level.



An apply button now appears in the Filters pane in Power BI reports

# **Q&A** synonym improvements

<b>Enabled for</b>	Public preview	General availability
End users by admins, makers, or analysts	-	Dec 2020

#### **Feature details**

The experience of adding synonyms for Power BI Q&A will add two new capabilities:

- add synonyms in bulk.
- auto-suggest synonyms based on report names as well as report renames.

# **DirectQuery support for Q&A**

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

#### **Feature details**

Q&A will work in DirectQuery mode.

#### **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.

# Split view support for iPad

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

#### **Feature details**

Customers using the Power BI mobile apps on iPad can now view multiple Power BI items sideby-side. With split view, users can open more than one app window and compare what they see for a better understanding of their data.

#### Power BI Service

#### **Overview**

In order to build a data culture, everyone needs to be able to discover and collaborate on insights. To help organizations foster that data culture, we'll invest in the following:

- Bring insights to where people get work done in Office: Power BI will be deeply
  integrated in the tools users know and love: Excel, Microsoft Teams and SharePoint.
- **Self-service analytics**: With deep feedback from our community, we are adding new features to make 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.

# Data lineage and impact analysis enhancements

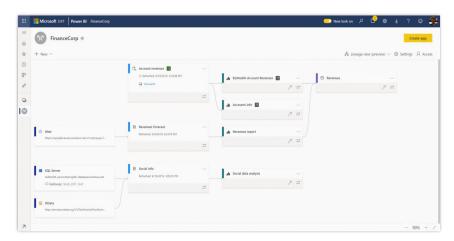
Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2020	-

#### **Feature details**

BI professionals use Power BI today to build projects that span numerous artifacts: data sources, dataflows, datasets, reports, and dashboards. Providing insights about the data lineage in these projects has many benefits, including:

- shaping efficient work processes,
- empowering users to better manage existing dependencies,
- troubleshooting issues in projects,
- deriving the potential impact of planned changes,
- · determining data lineage,
- gaining confidence for important business KPIs, and
- helping BI professionals understand exactly where their data comes from and assess usage of artifacts.

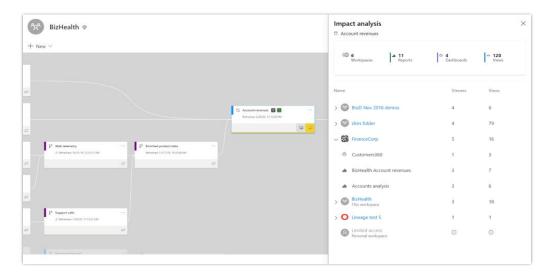
It is already possible to visualize data lineage within a workspace, including cross-workspace dependencies, and APIs to extract lineage information are already supported. Recently, we announced the general availability of additional Power BI lineage capabilities that improve the experience for professionals and administrators who need to understand the relationships between the different artifacts and manage Power BI projects in their organization.



#### Data lineage

Moving forward, we plan to enhance the existing data lineage capabilities and add additional impact analysis capabilities, including:

- providing impact analysis for datasets, both from the admin portal and Power BI Desktop.
   This will allow users to derive impact for planned changes and for troubleshooting purposes.
- providing impact analysis for connected data sources.
- allowing users to act (such as notify contacts) based on the predicted impact.
- providing in-place usage information for both data lineage and impact analysis.



Impact analysis

#### See also

Data lineage (docs)

# **Endorsement of Power BI reports and apps**

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2020	-

#### **Feature details**

Power BI already provides the ability to endorse (promote or certify) organizational trustworthy data assets, thus increasing the visibility in the organization to valuable, high-quality data assets. These endorsement capabilities allow data owners and creators to promote or certify <u>dataflows</u> and <u>datasets</u>.

We will extend these endorsement capabilities to Power BI reports and apps as well.

# Power BI data as an Excel data type

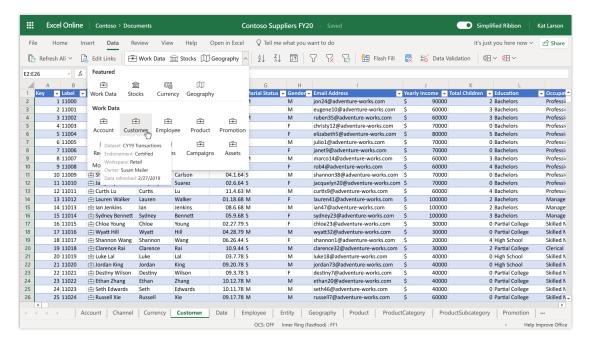
Enabled for	Public preview	General availability
End users, automatically	Oct 2020	-

#### **Feature details**

Power BI data in Excel's data types offer quick access to reference data to:

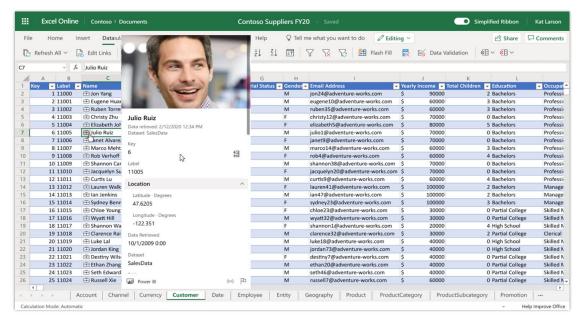
- speed up analysis by making reference data easy to discover
- keep data connected and up to date from enterprise systems
- broaden who in the organization can benefit from enterprise data in Power BI

Power BI data model authors can mark tables in Power BI dataset to be shown in Excel's data types gallery. Users of Excel with Microsoft 365 E5 plan discover these through the Excel ribbon. Excel users can link individual cells to a row in a Power BI dataset through search experiences by selecting a specific data type or searching across data types published from certified datasets. By curating data types in certified datasets, organizations can ensure Excel users see official corporate data first to help in authoritative decision making.



Select Power BI data type

Once a cell is linked to Power BI, users can see data from table columns in Excel's info cards, add it to the cell using a reference function, and refresh that data to keep it up to date.



#### View Power BI data type

Excel users will only see data types for which they have permission in Power BI. The public preview will support a subset of the datasets available in Power BI.

# **Azure Synapse integration**

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Nov 2020	-

#### **Feature details**

Azure Synapse will automatically create and manage materialized views on larger Power BI models. The materialized views will be based on usage and query patterns. Power BI queries to Azure Synapse in DirectQuery mode will automatically use the materialized views. This feature will provide enhanced performance and user concurrency.

# **Analyze in Power BI from SharePoint lists**

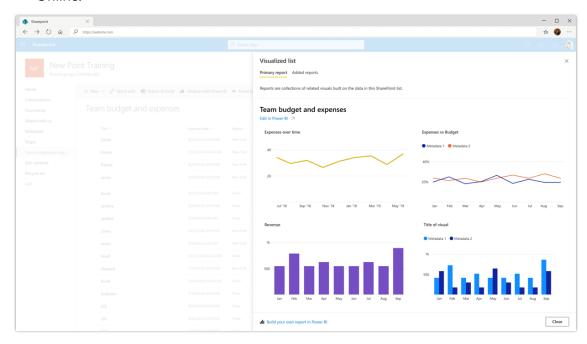
Enabled for	Public preview	General availability
End users, automatically	Dec 2020	-

#### **Feature details**

Many teams and organizations use SharePoint lists to organize information and collaborate on this structured data. To quickly understand their data, users transform their lists into charts and visuals by building reports in tools like Power BI Desktop; however, this process is often challenging for new list users and requires a steep learning curve.

To help all users easily visualize their SharePoint list data, we are integrating Power BI within SharePoint Online and providing users with abilities to:

- automatically generate Power BI visuals on the list data with a single click,
- build additional custom reports in the Power BI service (this includes model generation capabilities in the web), and
- publish custom reports from Power BI and have those reports also display in SharePoint Online.



Analyze in Power BI from a SharePoint list

# **Data protection enhancements**

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

#### **Feature details**

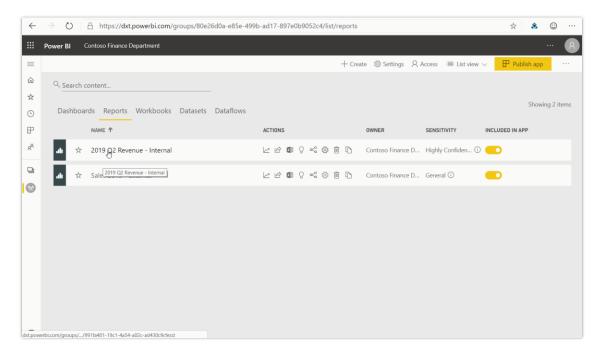
Providing information protection capabilities in Power BI is critical to enabling our customers to control and protect their sensitive enterprise data. To achieve this goal, we have integrated the capabilities of Microsoft's leading security solutions for information protection, threat protection, and Microsoft Cloud app security.

Some of these data protection enhancements are already available. This includes allowing customers to classify and label sensitive data in Power BI. These labels are displayed throughout the Power BI service and in the Power BI mobile apps, and label-specific permissions are enforced when data is exported out of Power BI. Customers can also monitor user access and activity including real-time risk analysis and protection.

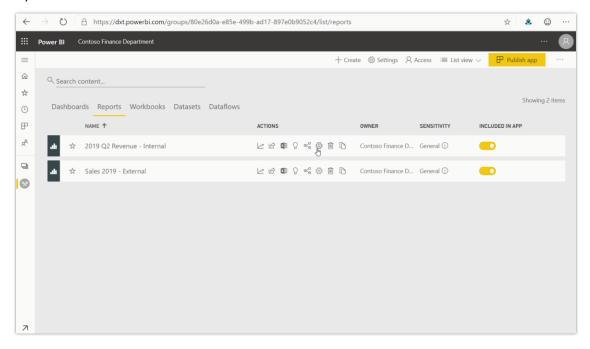
Moving forward, we are continuing to strengthen these capabilities, by allowing customers to:

- apply sensitivity labels and protection to Power BI Desktop files (.pbix).
- persist sensitivity labels and enforce protection in Power BI Embedded (SaaS embedding).
- support inheritance of labels between artifacts, starting with inheritance upon creation of new Power BI assets.
- provide APIs for administrators to retrieve asset sensitivity labels.

Sensitivity labels are currently available and will persist when applied to Power BI content and exported to Excel, PowerPoint, and PDF files; however, with this release we are taking Sensitivity labels one step further. When you connect to a Power BI dataset from Excel, that dataset's sensitivity label will be inherited and applied to the Excel file and all associated outcomes, such as headers/footers and encryption.



#### Export to Excel



Set sensitivity label

#### See also

Data protection in Power BI (docs)

# Support for dataflows in deployment pipelines

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

#### **Feature details**

Dataflows are an essential part of the Power BI data pipeline. In this feature, we will support managing dataflows, including:

- 1. detecting changes that are made to a dataflow and highlighting those changes in the pipeline **compare** feature.
- 2. deploying new and updated dataflows across the lifecycle stages (dev/test/prod).
- 3. maintaining the relationship of dataflows with datasets across deployments and pipeline stages.

# Support for different incremental refresh policies in a deployment pipeline

Enabled for	Public preview	General availability
End users, automatically	Mar 2021	-

## **Feature details**

Incremental refresh can be very useful in a Power BI deployment pipeline, where BI creators can manage enterprise-scale content and deployments; however, the incremental refresh policy is still defined in Power BI Desktop.

In this feature, we will enable deployment pipelines to set different incremental refresh policies for datasets for each stage in the pipeline so that dev/test/prod datasets will retain different partitions and data while allowing dataset owners to upgrade the model.

# Support for paginated reports in deployment pipelines

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

#### **Feature details**

Paginated reports can be deployed and managed in a deployment pipeline.

## **Overload alerts**

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2020

#### **Feature details**

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

# Ability for Power BI administrators to upgrade classic workspaces to V2 workspaces

Enabled for	Public preview	General availability
End users, automatically	-	Oct 2020

#### **Feature details**

Classic workspaces will be deprecated and V2 workspaces will become the default experience. Power BI will provide administrator tools to ease this transition. Migrating classic workspaces to the new workspace experience is a top priority for many organizations. Power BI will provide tools to enable organizations to move all Office 365 group-based workspaces to the new workspace experience, including:

- a Power BI admin API to bulk upgrade classic workspaces
- a Power BI admin portal setting to stop the creation of new classic workspaces, including those automatically created when an Office 365 group is created

Power BI

Workspace administrators will see a banner in the workspace content list encouraging them to upgrade workspaces. Classic workspaces will be deprecated and may not offer all functionality available in the new workspace experience.

Key dates:

**October 1, 2020**: Power BI will stop allowing the default creation of classic workspaces for all organizations.

**April 1, 2021 or later**: Power BI will initiate a required upgrade of all workspaces to the new workspace experience.

# **Dataflows DirectQuery**

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	-	Oct 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.

## **Dataset refresh overview**

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2020

#### **Feature details**

Power BI Premium customers will be able to view historical and current loads of dataset refreshes in their Premium capacities.

# **Enhanced export and subscription support for Power BI reports**

Enabled for	Public preview	General availability
End users, automatically	-	Oct 2020

#### **Feature details**

This feature includes updates to subscriptions and to export limitations. Subscriptions are one the most popular ways to share and consume content in the Power BI service. We are adding support for one of the top requests on Power BI UserVoice today, which is the ability to include a full email attachment of the Power BI report as a PowerPoint (PPTX) or PDF document. Additionally, as authors continue to create reports with lots of pages, we're increasing the number of pages you can export to a maximum of 50 pages for both PPTX and PDF.

## New look rollout to all users

Enabled for	Public preview	General availability
End users, automatically	-	Oct 2020

#### **Feature details**

The Power BI service **New look** option will become the default experience for all Power BI service users. This feature will include:

- changes that we have made to the consumption experiences for reports and dashboards,
- the new workspaces list experience,
- a face-lift for the navigation UI elements to match the Fluent design language, and
- changes to page navigation based on customer feedback.

Before making **New Look** the default, we will provide users with a *one-month notice* so that they have time to update any internal training materials or documentation.

#### See also

The 'new look' of the Power BI service (docs)

# **Connect to Power BI datasets directly in Excel**

Enabled for	Public preview	General availability
End users, automatically	<b>✓</b> May 11, 2020	Oct 2020

#### **Feature details**

Certified and promoted datasets in Power BI provide organizations with a mechanism to distinguish their most valued and trusted datasets. Today, Power BI users are able to analyze this data in Excel by using a live, connected experience. We're adding a new way to connect to certified and promoted datasets that will make it easier for all Office 365 E5 users to find, connect, and analyze data from these datasets directly from Excel.

# Power BI dataflows and ADLS Gen2 integration at workspace level

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

## **Feature details**

Customers will be able to connect their Power BI dataflows with Azure Data Lake Storage Gen2 (ADLS Gen2) at the workspace level.

# **Azure Monitor integration**

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

#### **Feature details**

Azure Monitor integration will allow customers to connect their Power BI environment to preconfigured Azure Log Analytics workspaces. This will provide long term data storage, retention policies, ad hoc query capability, and the ability to analyze the log data directly from Power BI.

## **Advanced network isolation**

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

## **Feature details**

This new feature adds support for various network isolation capabilities from Azure. This includes Azure Virtual Networks (VNets) and Azure Private Links.

# Power Apps

# Overview of Power Apps 2020 release wave 2

Microsoft 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, a 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 2 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.

# What's new and planned for Power Apps

This topic lists features that are planned to release from October 2020 through March 2021. 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 (V) shows which features have been released for public preview or early access and for general availability.

# **Power Apps portals improvements**

Power Apps portals are enabling low-code makers to roll out experiences to broad external audiences.

Feature	Enabled for	Public preview	Early access*	General availability
Power Virtual Agents as a component of the Power Apps portals Studio	Admins, makers, or analysts, automatically	Oct 2020	-	

Feature	Enabled for	Public preview	Early access*	General availability
Support for entity permission configuration using the Power Apps portals Studio	Admins, makers, or analysts, automatically	Oct 2020	-	-
Power Apps component framework control support in Power Apps portals	Admins, makers, or analysts, automatically	Dec 2020	-	-
Power Apps portals web API (General availability)	Admins, makers, or analysts, automatically	-	-	Feb 2021

# 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
Business Q&A integration with Common Data Service relevance search	End users, automatically	-	Oct 2020	-
Organize business logic in your app with components	Admins, makers, or analysts, automatically	Oct 2020	-	
Makers can add a custom page in the model-driven app designer	End users by admins, makers, or analysts	Dec 2020	-	-
Preview modern model-driven app designer and sitemap enable is more productive	Admins, makers, or analysts, automatically	Dec 2020	-	-
Ability to interact with emails in mobile app	End users, automatically	-	Aug 2020	Oct 2020

Feature	Enabled for	Public preview	Early access*	General availability
Address key chart customization gaps in Unified Interface	End users, automatically	-	Aug 2020	Oct 2020
UX improvements to sub grids and form tabs on mobile	End users, automatically	-	Aug 2020	Oct 2020
New, improved global search experience in model-driven apps	End users by admins, makers, or analysts	-	-	Oct 2020
Improved model-driven app header, sitemap, and app switching	End users, automatically	-	Aug 2020	Oct 2020
Enable Power BI report or dashboard to be a model-driven app system dashboard	End users by admins, makers, or analysts	Jul 2020	-	Nov 2020
<u>Transition to Unified Interface</u>	End users, automatically	-	Aug 2020	Dec 2020
Recurring appointment support on mobile app	End users by admins, makers, or analysts	Oct 2020	-	Dec 2020
Power Apps component framework for canvas apps	End users by admins, makers, or analysts	✓ Feb 26, 2020	-	Mar 2021

<sup>\*</sup> Some features are available for you to opt-in as part of early access on August 3, 2020, including all mandatory changes that impact end users. Learn more about <u>early access</u>.

# 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 Power Platform availability page.

# **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.

# Power Virtual Agents as a component of the Power Apps portals Studio

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

#### **Feature details**

This feature will allow portals makers to drag and drop a Power Virtual Agents bot component on their portal, similar to the Power BI component.

# Support for entity permission configuration using the Power Apps portals Studio

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

#### **Feature details**

As a part of this feature, we'll enable a simplified experience of setting up complex entity permissions from within portals Studio.

# Power Apps component framework control support in Power Apps portals

<b>Enabled for</b>	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	Dec 2020	-	-

#### **Feature details**

Power Apps component framework enables app makers to create code components to use across apps. As part of this release, we'll support code components created using Power Apps component framework inside Power Apps portals.

# Power Apps portals web API (General availability)

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

#### **Feature details**

This feature will make Power Apps portals CRUD web API generally available for all customers.

# 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.

# **Business Q&A integration with Common Data Service relevance search**

Enabled for	Public preview	Early access	General availability
End users, automatically	-	Oct 2020	-

#### **Feature details**

Business Q&A supports natural language to search your sales data in Common Data Service. Here is a detailed list of features that will be supported in the public preview:

- 1. Return instant answer for a users natural language query.
  - For example, if you search for **who is the owner of Alpine Ski House**, Business Q&A will return the owners full name for the account **Alpine Ski House**. The format of the answer could be single record or a table with a list of relevant records.
- 2. Support feedback to each individual query, including thumbs up, thumbs down, and detailed feedback.
- 3. Support different types of natural language queries from simple to complex. Here are a few examples:

Query	Output
Search by keyword, such as, Alpine Ski House or Alpine ski account	Looks for account record
True natural language, for example, who is the owner of Alpine Ski House	Looks for owner of account
Search enhanced by Bing knowledge, for example, <b>AUCUW</b>	Looks for account named Alpine University - Contoso University Washington
Search with world common knowledge, such as <b>acct in US</b>	Looks for account records in United States
Search for records missing data, for example contacts missing email	Looks for contact records missing email address value in the email address column
Search with numerical values	Open opportunities with est revenue bigger than 1mm
Search with dates and holidays	Opportunities may be closed before New Year's or opportunities closed in the last three months
Search with complex natural language queries	Contacts job title is manager or CIO and lives in west coast city of US

# Organize business logic in your app with components

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

#### **Feature details**

Use the Power Apps formula language to create reusable business logic across apps tied to data events. Reusable logic enables makers to build apps with complex business logic quickly, using the Excel-like language in reusable components within and across apps.

# Makers can add a custom page in the model-driven app designer

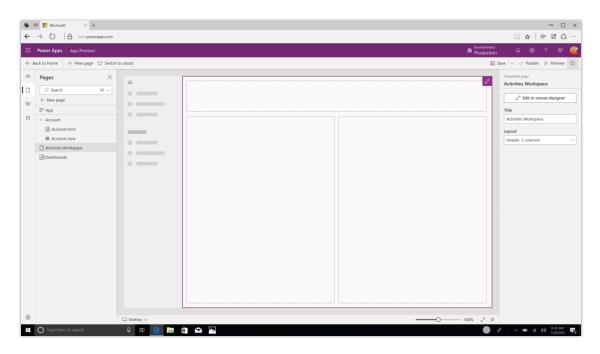
Enabled for	Public preview	Early access	General availability
End users by admins, makers, or analysts	Dec 2020	-	-

#### **Business value**

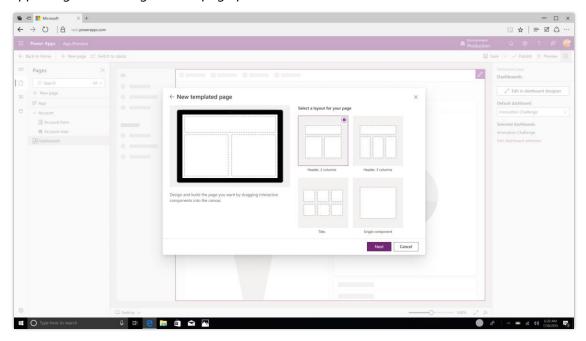
Enables model apps to create custom layouts and use PCF controls in ways that are not possible with the model-driven app form and dashboard pages.

## **Feature details**

Using a modern app and sitemap designer, makers can add custom pages into their modeldriven app. The custom page enables more flexibility in the components, behavior, and visuals. Custom pages are authored using the canvas designer, which support no/low code configuration of controls and components.



## App designer showing custom page preview



App designer prompting to create new custom page

# Preview modern model-driven app designer and sitemap enable is more productive

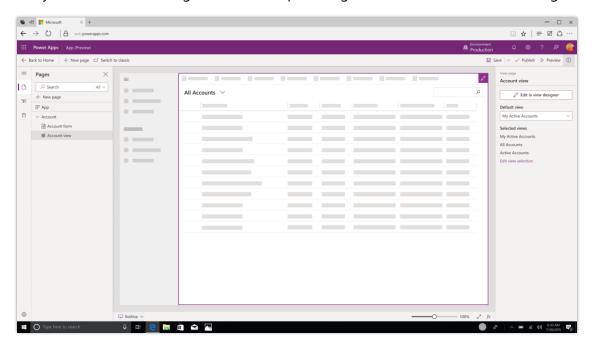
Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	Dec 2020	-	-

#### **Business value**

Enable authoring model-driven app and sitemap in context and aligned with other designers in the Power Apps shell. Reduce the barrier for adding new features and enabling new page experiences.

#### **Feature details**

This new app designer is making app authoring easier with several key changes. It adds a page-based authoring approach that complements existing sitemap/entity authoring. A preview canvas is added to clarify the parts of the app that are being edited. It leverages the modern entity, form, and view designers as well as providing access to the other classic designers.



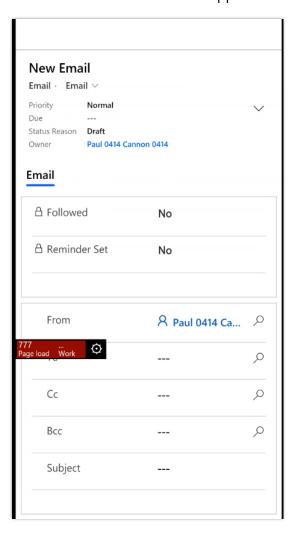
App designer with view page preview

# Ability to interact with emails in mobile app

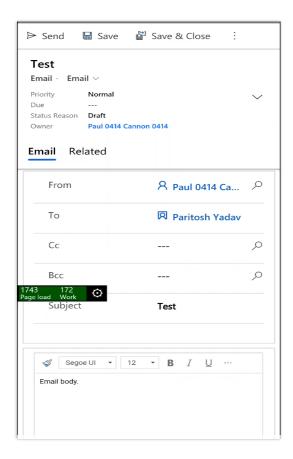
Enabled for	Public preview	Early access	General availability
End users, automatically	-	Aug 2020	Oct 2020

## **Feature details**

Users will be able to create, edit, send, and reply to emails using the Power Apps mobile app for both canvas and model-driven apps.



Email on mobile example



Email on mobile

# Address key chart customization gaps in Unified Interface

Enabled for	Public preview	Early access	General availability
End users, automatically	-	Aug 2020	Oct 2020

#### **Feature details**

With this release, Unified Interface charting has been updated to support common non-designer customizations available in the classic web client. These customizations are more advanced since they are only available through XML editing from export and import of the chart definition. This included adding X and Y axis support for grid line color, grid tick marks, data label color, data label hiding, axis label hiding, and axis line color. On the Y axis, support was enabled for minimum, maximum, and intervals. On funnel charts, the neck height and neck width can be defined to adjust the bottom tapering. On the pie, funnel, and multiple donut charts, support was added for border width and border color to enable more visual definition.



# UX improvements to sub grids and form tabs on mobile

<b>Enabled for</b>	Public preview	Early access	General availability
End users, automatically	-	Aug 2020	Oct 2020

#### **Feature details**

Usability improvements on how data is presented on a form for model-driven apps on mobile.

- Sub grids have a prominent header that separates them from the rest of the sections on the form.
- Empty sub grids display the option to add a new record inline, reducing the number of taps needed to add a record.
- Commands on the sub grid are also updated to show up in a drawer from the bottom of the screen, consistent with the page-level commands.
- Form tabs are more discoverable; with the tabs, you can scroll and span horizontally across
  the screen. When you select a tab, it adjusts the header just enough to reveal the next few
  tabs.

# New, improved global search experience in model-driven apps

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

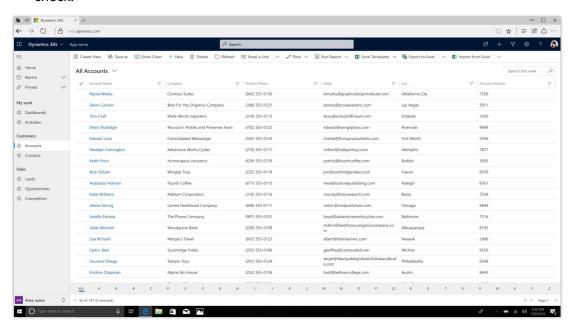
#### **Feature details**

Global search experience in model-driven apps is easy, intuitive, and modern. Prominent search bar, zero query experience with suggestions on recent searches and records, automatic record suggestions based on the typed query, improvements to the search results page, and high-quality results allow users to search for their information easily and quickly. Improvements to search experience will be available for users using relevance search on desktop.

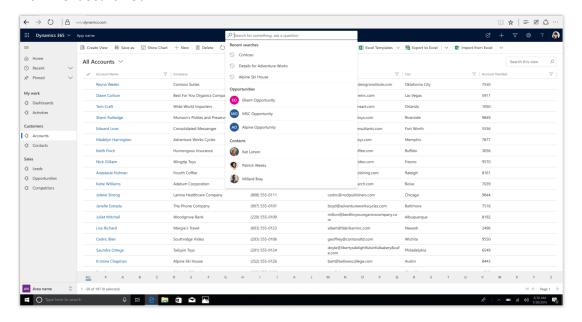
## High level details:

- When relevance search is enabled on the environment then it will be available by default to users.
- Prominent and globally discoverable search bar in the header.
- Zero query experience with support for recent searches and recently accessed records.

- Automatic suggestions of records based on the typed query.
- New, improved search results page with easy display and selection of records.
- High quality results with improved ranking and support for basic capabilities, such as spell check.



## Prominent search bar



Recent searches and records

# Improved model-driven app header, sitemap, and app switching

Enabled for	Public preview	Early access	General availability
End users, automatically	-	Aug 2020	Oct 2020

#### **Business value**

Improved reliability and usability of model-driven app header, sitemap, and app switching.

## **Feature details**

The model-driven app shell has had several enhancements for usability and reliability. The header has an updated Office app launcher, and when clicking on the app name, it will open the inline app switcher. When the website is opened without an app parameter, the message bar enables switching to a specific app. The classic sitemap controls have been replaced with the modern sitemap control for better usability. The embedded mode is updated to an experience aligned with the web browser providing a neutral styling to blend into the host.

## Enable Power BI report or dashboard to be a model-driven app system dashboard

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

#### **Business value**

Enable rich analytics to be included in model-driven apps as part of solution application lifecycle management (ALM).

#### **Feature details**

We are now adding support for customizers to define a system dashboard referencing a Power BI report or dashboard. There is now a new type of dashboard that prompts for the workspace and either a report or dashboard. The workspace and report/dashboard can either be stored statically, which works for a single environment or using an environment variable, which allows configuration per environment.

## **Transition to Unified Interface**

Enabled for	Public preview	Early access	General availability
End users, automatically	-	Aug 2020	Dec 2020

#### **Feature details**

Unified Interface for model-driven apps will be the standard in 2020 release wave 2. The classic web client will not be available after 2020 release wave 2. As part of this process we want to make it as easy as possible for you to make the move; therefore, we've introduced a new transition service to switch environments across to Unified Interface prior to December 1, 2020. Environments that aren't transitioned prior to December 1, 2020, will be automatically switched to the Unified interface. This will be applied by location across a multi-week schedule.

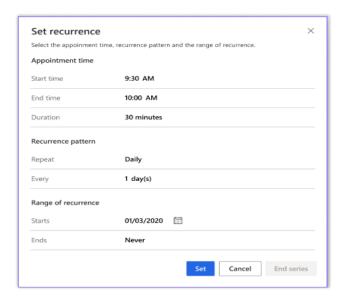
For more information, see Moving forward with your transition to Unified Interface.

# Recurring appointment support on mobile app

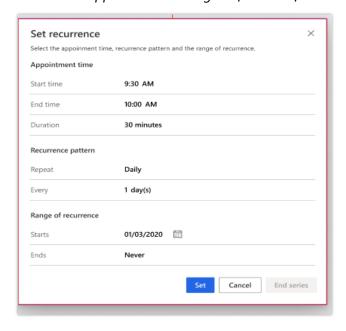
Enabled for	Public preview	Early access	General availability
End users by admins, makers, or analysts	Oct 2020	-	Dec 2020

## **Feature details**

Users will be able to set up recurring appointments using the Power Apps mobile app.



# Recurrence appointment dialog Unified Interface



Recurrence appointment dialog in Unified Interface

# **Power Apps component framework for canvas apps**

Enabled for	Public preview	Early access	General availability	
End users by admins, makers, or analysts	<b>✓</b> Feb 26, 2020	-	Mar 2021	

#### **Business value**

By taking advantage of the Power Apps component framework, professional developers can now procure or build their own custom UI extensions for canvas apps.

#### **Feature details**

Power Apps code components are reusable, metadata-driven, and solution-aware so they can easily be packaged and moved across organizations to support multiple form factors. Once imported, any canvas app maker can simply add these components to their app, enabling custom functionality that is not available out of the box.

Public preview of Power Apps component framework allows developers and makers to add data sets and test their custom components in canvas apps, taking advantage of the growing list of supported framework APIs. Pro-dev extensibility on a low-code platform opens up possibilities enabling the best of both worlds.

#### See also

Feature exploration (video)

Announcing the public preview of canvas components and Power Apps component framework (blog)

Code components for canvas apps (docs)

# Power Automate

# Overview of Power Automate 2020 release wave 2

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 (RPA).

At Build 2020, we announced the acquisition of <u>Softomotive</u>, the maker of **WinAutomation**. WinAutomation is a leading low-code RPA offering, used by thousands of customers with thousands of features built over 15 years. It has a rich desktop-based IDE for customers to build out powerful automation over their applications and is available for free for all Power Automate RPA customers. In 2020 release wave 2, we will update the offering to combine the best of WinAutomation with the cloud-based AI builder and connector-based capabilities in automated flows. This new version will offer customers a way to automate everything from Office apps to legacy terminal applications that haven't been updated in decades.

In addition, there are further enhancements coming to automated flows running in the cloud, including richer automation and approval experiences in other offerings from Microsoft Teams to Dynamics 365 Finance and Operations. Power Automate is the world's first cloud-native automation platform that can meet the needs of end users and developers alike, spanning from their PCs to planet-scale services running in Azure.

# What's new and planned for Power Automate

This topic lists features that are planned to release from October 2020 through March 2021. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see <u>Microsoft policy</u>).

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 ( $\checkmark$ ) shows which features have been released for public preview or early access and for general availability.

# **Improved integration with Power Platform products**

Improved and deep integration with other Power Platform products, such as Power Apps and Power Bl.

Feature	Enabled for	Public preview	Early access*	General availability
Smoother on-ramps for Power Automate and Power Apps	Admins, makers, or analysts, automatically	-	-	Oct 2020

# **Integration with Microsoft Teams**

Create and use Power Automate flows within Microsoft Teams.

Feature		Public preview	Early access*	General availability
Templatizing and distributing common business process scenarios	Admins, makers, or analysts, automatically	-	-	Oct 2020

# New UI flows (RPA) capabilities

Increase scale and app compatibility with these new robotics process automation (RPA) capabilities.

Feature	Enabled for	Public preview	Early access*	General availability
Add support to pass arguments to the launch application step in UI flows	Admins, makers, or analysts, automatically	Jun 2020	-	Oct 2020
Add WinAutomation actions to UI flows	Admins, makers, or analysts, automatically	Jun 2020	-	Oct 2020
UI flows allow users to customize the retry and the timeout settings for each action	Admins, makers, or analysts, automatically	Jun 2020	-	Oct 2020

Feature	Enabled for	Public preview	Early access*	General availability
Add delay actions to UI flows	Admins, makers, or analysts, automatically	Jul 2020	-	Oct 2020
Native support for widely used business applications in UI flows	Admins, makers, or analysts, automatically	Sep 2020	-	Oct 2020
Run UI automation scripts on virtual machines	Admins, makers, or analysts, automatically	-	-	Oct 2020
Easier setup, creation, and runtime configuration of UI flows	Admins, makers, or analysts, automatically	Sep 2020	-	Oct 2020
New and improved management and monitoring for UI flows	Admins, makers, or analysts, automatically	Sep 2020	-	Oct 2020
Scale unattended UI flows	Admins, makers, or analysts, automatically	Sep 2020	-	Oct 2020

<sup>\*</sup> Some features are available for you to opt-in as part of early access on August 3, 2020, including all mandatory changes that impact end users. Learn more about <u>early access</u>.

Description of **Enabled for** column values:

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- **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 <u>International availability guide</u>. For more information about geographic areas and data centers (regions), go to the <u>Dynamics 365 and Power Platform availability page</u>.

# Improved integration with Power Platform products

#### Overview

Power Automate will provide improved and deep integration with other Power Platform products to enable better application lifecycle management (ALM) scenarios and simpler inclusion of flows within Power Apps and Power BI.

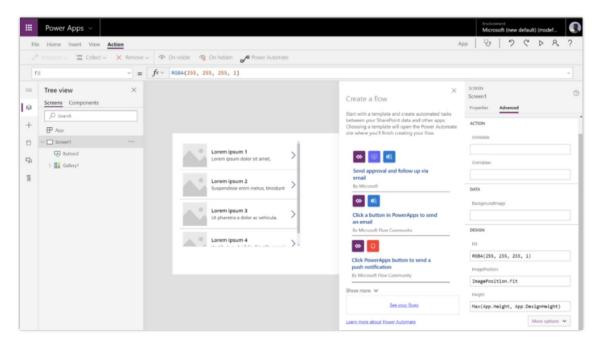
# **Smoother on-ramps for Power Automate and Power Apps**

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

#### **Feature details**

Customers are looking to build better, more-integrated apps that seamlessly work with existing capabilities in the Power Platform; however, integrating the Power Apps and Power Automate together to make a more robust application can be a challenging experience for a maker.

We are planning a more integrated solution for Power Automate within Power Apps that utilizes existing Power Automate widget solutions to onboard users and more easily add a flow into a canvas app from within the studio experience. The widget would help makers get started by providing inline templates for popular scenarios, considering the context and the data sources with which the user is working. The goal is to provide users with a fully integrated experience, so that they can create and add a flow to a Power app completely in context.



## Power Apps and flows

After the flow is added, there will be first-class knowledge of the flow in the app itself. This means the app can automatically respond to changes in the connections or parameters in the flow. Users will never need to delete and re-add the flow from their app to make it work after changes in the flow.

# **Integration with Microsoft Teams**

## **Overview**

Create and use Power Automate flows within Microsoft Teams, including in-context flow triggers, simpler template acquisition, and integrated approvals experiences.

# Templatizing and distributing common business process scenarios

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

#### **Feature details**

There are common tasks that most organizations need, from recruitment to vacation management. We will provide templates for administrators and makers to build these processes

directly from within applications such as Microsoft Teams, allowing them to customize the experiences to fit their needs.

These templates include building blocks for a variety of industries, such as retail. These integrations will be done using a dedicated app to acquire, customize, and manage business processes within integration points.

Unlike the current experience, these templates will leverage the "diet designer" – a streamlined way to provide configuration to a template without having to see the full designer experience.

# New UI flows (RPA) capabilities

## **Overview**

Robotics process automation (RPA) with UI flows enables customers to automate their legacy applications at the UI layer. With these new capabilities, you will be able to increase the scale as well as benefit from new programmability and compatibility features.

# Add support to pass arguments to the launch application step in UI flows

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

#### **Feature details**

The first step in a UI flow is always the **launch application** step. Sometimes, the maker needs to pass command line arguments to the **launch application** step. With this feature, we are adding a new input textbox under the **Show advanced options** section to allow makers to provide command line arguments that will be passed to the application during launch.

## Add WinAutomation actions to UI flows

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

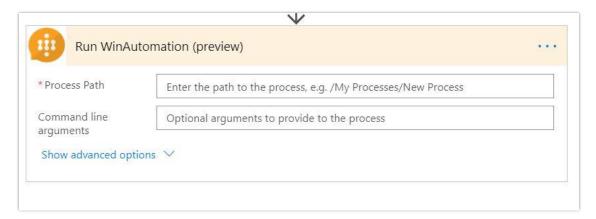
## **Business value**

First step to integrate WinAutomation into Power Automate.

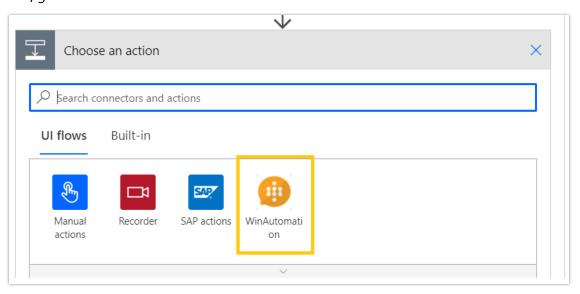
## **Feature details**

This is the first step that enables makers to use WinAutomation processes with Power Automate. A new **WinAutomation** action is added into UI flow designer to allow users to run a WinAutomation process. Follow these steps to use this feature:

- 1. Create a WinAutomation process outside of Power Automate.
- 2. Create a UI flow, and then select the new **WinAutomation** action.
- 3. Configure the action to with the path and any optional parameters for the WinAutomation process to be run. UI flows will automatically kick off the process through the gateway on the local machine as well as monitor the process run to completion.



## Configure the WinAutomation action



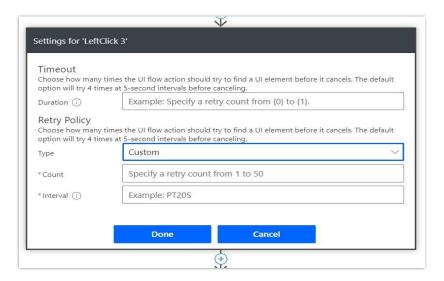
New action for WinAutomation

# UI flows allow users to customize the retry and the timeout settings for each action

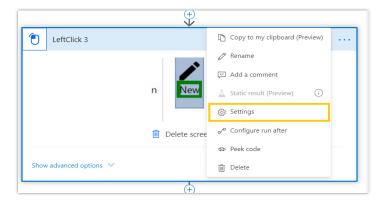
Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	Jun 2020	-	Oct 2020

### **Feature details**

Users can customize the retry policy and the timeout settings for each action in a UI flow. These customizations include setting different retry counts or retry intervals for any steps that are likely to fail. These customizations will improve the reliability and performance of UI flow scripts at runtime.



## Users can specify a custom retry policy or timeout value



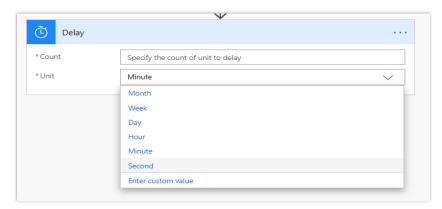
Users can customize this setting from UI flow designer

# Add delay actions to UI flows

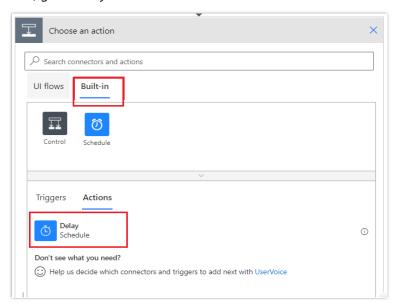
Enabled for	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	Jul 2020	-	Oct 2020

## **Feature details**

With this feature, makers can add **delay** actions wherever they are needed in UI flows. Add the **delay** action wherever your UI flows need additional time to get the application into the correct state.



# Configure delay action



Select new delay action

# Native support for widely used business applications in UI flows

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

#### **Feature details**

We are adding built-in automation support for key applications that are leveraged across businesses, such as SAP and Excel. This feature enables users to build UI flows which use libraries for these commonly used applications in frequently used scenarios. This up-levels concepts, so that instead of working with basic keyboard or mouse-click interactions, users can interact with the logic components of an application instead. This will mean businesses can create more resilient automation of their business-critical processes.

# Run UI automation scripts on virtual machines

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

#### **Feature details**

This feature enables you to use the UI flows record and playback feature to automate applications that run on virtual machines, including Microsoft Remote Desktop.

# Easier setup, creation, and runtime configuration of UI flows

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

## **Feature details**

We are making the following improvements across UI flow setup, creation, and configuring a UI flow as part of a flow:

• When creating new UI flows, makers will be notified if there is a new version of the UI flow app so they can take advantage of the new features.

- Users can cancel or resubmit a UI flow, see the screenshots of a failed run, and know the connection status of a flow run.
- When adding a UI flow as part of a flow, users can see the gateways that have the UI flow app so they can be confident about the configuration.

# New and improved management and monitoring for UI flows

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

## **Feature details**

Makers need a consolidated view to see how their UI flows are doing. It is necessary to see an overview of your UI flow runs, flows using the UI flows, and most common errors. This will help to understand the bot utilization, identify error patterns, and troubleshoot issues.

## Scale unattended UI flows

<b>Enabled for</b>	Public preview	Early access	General availability
Admins, makers, or analysts, automatically	Sep 2020	-	Oct 2020

### **Feature details**

We will make it easier for organizations to scale unattended UI flows with improved reliability and remediation.

# Power Virtual Agents

# Overview of Power Virtual Agents 2020 release wave 2

Power Virtual Agents enables anyone in your organization to create Al-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 2 brings expanded capabilities in the authoring experience from deeper Microsoft Teams integration, tools to create richer content, Adaptive Cards capabilities, authentication improvements, improved Power Automate integration, 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 October 2020 through March 2021. 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 (V) shows which features have been released for public preview or early access and for general availability.

71 **Power Virtual Agents** 

# **Bot configuration**

Configure the bot to suit business needs.

Feature	Enabled for	Public preview	General availability
Auto trigger an introductory topic at the beginning of a conversation (welcome message)	End users by admins, makers, or analysts	-	Oct 2020
Basic bot theming	End users by admins, makers, or analysts	-	Oct 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
Adaptive Cards	End users by admins, makers, or analysts	-	Oct 2020
Add images and videos to topics	End users by admins, makers, or analysts	-	Oct 2020
Understand and handle Power Automate flow integration	Admins, makers, or analysts, automatically	-	Oct 2020
<u>Use list variables</u>	End users by admins, makers, or analysts	-	Oct 2020

# **Enable voice interactions**

Enable bots to use voice interactions for your users.

Feature	Enabled for	Public preview	General availability
Deploy Power Virtual Agents as Alexa Skills	End users by admins, makers, or analysts	Oct 2020	-

# **Enhanced natural language capabilities**

Enhanced natural language capabilities.

Feature	Enabled for	Public preview	General availability
Multi-turn topic suggestions from a webpage	End users by admins, makers, or analysts	-	Oct 2020
Topic suggestions from files (CSV, DOCX, PDF) hosted on a webpage	End users by admins, makers, or analysts	-	Oct 2020

Description of **Enabled for** column values:

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# **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.

# Auto trigger an introductory topic at the beginning of a conversation (welcome message)

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

#### **Feature details**

Bot authors can configure their bot to automatically trigger a welcome message at the start of a conversation. This can be used to express the business voice and suggest some starter trigger phrases to help customers interact with the bot.

# **Basic bot theming**

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

#### **Feature details**

Bot authors will be able to customize the look and feel of their bot to match their brand colors and style as well as change the bot icon with bot theming.

# **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.

# **Adaptive Cards**

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

#### **Feature details**

Easily author rich content without needing to write code by using Microsoft Adaptive Cards directly from within the authoring experience. Adaptive Cards will be displayed consistently wherever your customers are and tailored to their screen size and device capability.

# Add images and videos to topics

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

#### **Feature details**

Enhance bot conversations by adding the URLs to online-hosted images and videos in your topics. By including an image or video in a bot's response (instead of using a long textual description), you can handle complex scenarios while keeping messages concise.

# **Understand and handle Power Automate flow integration**

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2020

#### **Feature details**

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

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



#### **Use list variables**

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

#### **Feature details**

Bot authors can use a list variable to take array outputs from Power Automate and Bot Framework Skills and present them as a list of choices in a bot question.

#### **Enable voice interactions**

#### **Overview**

Use Power Virtual Agents voice capabilities to connect your bot to a phone line and enable voice interactions for your users. Expand your bot's conversational capabilities with Microsoft Cognitive Services.

# **Deploy Power Virtual Agents as Alexa Skills**

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

#### **Feature details**

Bot authors can use the new Alexa channel to deploy Power Virtual Agents bots as Alexa skills. This means users can have voice interactions with bots in the Amazon Alexa app and on Alexacompatible devices.

# **Enhanced natural language capabilities**

## **Overview**

Power Virtual Agents is powered by conversational AI and natural language capabilities, which enable the system to understand complex language, parse it for the appropriate information, and ask for clarification when needed.

# Multi-turn topic suggestions from a webpage

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

#### **Feature details**

Today, you can point Power Virtual Agents at an FAQ webpage, and it will crawl the site and extract question and answer pairs to bring suggestions into the bot to help "seed" it with content quickly. So far, those suggestions have been single turn as a question and answer.

In 2020 release wave 2, Power Virtual Agents will add the ability to extract multi-turn topic suggestions, automatically generating more elaborate dialogs that are valuable for troubleshooting and other scenarios.

# Topic suggestions from files (CSV, DOCX, PDF) hosted on a webpage

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

#### **Feature details**

Today, you can point Power Virtual Agents at an FAQ webpage, and it will crawl the site and extract question and answer pairs to bring suggestions into the bot to help "seed" it with content quickly.

In 2020 release wave 2, Power Virtual Agents will add the ability to extract suggestions from CSV, DOCX, and PDF files hosted on a webpage.

# Al Builder

# Overview of Al Builder 2020 release wave 2

Al Builder is a Power Platform capability for teams with the business expertise to easily automate processes and predict outcomes to improve business performance. Al Builder is a turnkey solution that brings the power of Microsoft Al through a point-and-click experience. You can now build Al without knowing programming or data science. Using Al is made even easier with integration directly into Power Apps and Power Automate. 2020 release wave 2 will introduce new Al scenarios in preview as well as improvements to existing ones to help improve business process performance. Improvements in Al Builder focus not only on introducing Al Models but also on integrating deeper with Power Platform.

# What's new and planned for AI Builder

This topic lists features that are planned to release from October 2020 through March 2021. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see <u>Microsoft policy</u>).

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

# Al scenarios improvements

Improvements to make AI scenarios more accurate and easier to use.

Feature	Enabled for	Public preview	General availability
Connect to remote training data	Admins, makers, or analysts, automatically	-	Oct 2020
Explicitly tag fields in form processing	Admins, makers, or analysts, automatically	-	Oct 2020

Feature	Enabled for		General availability
Form processing models can support multiple document layouts	Admins, makers, or analysts, automatically	-	Oct 2020

# **Better integration with Power Automate**

Better integration with Power Automate.

Feature			General availability
Invoice processing starter kit	Admins, makers, or analysts, automatically	-	Oct 2020

#### **New AI scenario**

New AI scenarios coming to AI Builder.

Feature	Enabled for	Public preview	General availability
Receipt scanning	Admins, makers, or analysts, automatically	-	Oct 2020
Translation	Admins, makers, or analysts, automatically	-	Oct 2020
Text entity extraction - prebuilt and customization	End users by admins, makers, or analysts	<b>✓</b> Apr 24, 2020	Oct 2020

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Al Builder 79

• **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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# Al scenarios improvements

#### **Overview**

Al Builder home page and models details page are updated to improve discoverability and integration with Power Apps and Power Automate. The abilities to combine several models together and manually train tables allow form processing models to address more business use cases.

# **Connect to remote training data**

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2020

#### **Feature details**

When building AI solutions, you can use connectors to connect to your training data. With this update, connectors won't copy the training data selected to Common Data Service to train your AI model. Instead, it will leave data where it is and connect to it to train your AI model when needed.

# **Explicitly tag fields in form processing**

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2020

#### **Feature details**

In some more complex documents, fields might not be automatically detected by Al Builder. With the latest update to form processing, you can explicitly tag fields and tables that are not automatically detected by Al Builder. You can help improve the accuracy of detecting those fields by providing more training documents.

#### See also

<u>Train and publish your form-processing model</u> (docs)

# Form processing models can support multiple document layouts

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2020

#### **Feature details**

Processing documents like invoices can often involve multiple document layouts. They may come from different sources or simply be different versions. Previously, you had to build a model for each document layout and then route documents to the correct model. Form processing will support building models that support multiple layouts.

# **Better integration with Power Automate**

#### **Overview**

New native AI Builder actions in Power Automate make it easy to discover AI Builder when building a flow in Power Automate. Starter kits provide a packaged solution that includes prebuilt applications, flows, and AI models to solve specific business problems.

# Invoice processing starter kit

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2020

#### **Feature details**

Starter kits help your business to start using Al Builder on the Power Platform by providing a reference implementation for a specific business case. Dealing with invoices can be a manual and tedious process. Automating this process smoothly and without deeply changing business routines is often a challenge. To help with this problem, we created a starter kit using Power Platform capabilities:

- An app that guides the user through configuration of invoices providers
- A set of dynamic Power Automate flows that manages the backend pipeline
- Al Builder form processing models that provide the intelligence for the invoice data extraction

#### New Al scenario

#### **Overview**

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

# **Receipt scanning**

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2020

#### **Feature details**

Receipt scanning is a new Al Builder feature that processes receipts to identify and extract information. The Al model identifies receipt data, merchant information, total price, and taxes from receipts. You can process receipts using the receipt scanning model in Power Automate and Power Apps.

#### **Translation**

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	-	Oct 2020

#### **Feature details**

Al Builder allows you to add translation to your apps and flows to create multi-language business processes in more than 60 languages.

# Text entity extraction - prebuilt and customization

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

#### **Feature details**

Entity extraction can be used to detect all named entities in the text, such as organizations, people, or locations. Entity extraction prebuilt models can be used to detect common entities. To detect entities unique to your business, you can customize the solution with your own list of entities.

# Power Platform governance and administration

# Overview of Power Platform governance and administration 2020 release wave 2

Power Platform admin center provides an architecture, a functional, and a user experience model that spans across Power Apps, Power Automate, and Common Data Service to enable all components related to an environment to participate in environment lifecycle operations, such as create, reset, and copy. With this capability, you can move your complete solutions, apps, and flows between development, test, user acceptance, and production environments more seamlessly.

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

This topic lists features that are planned to release from October 2020 through March 2021. 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  $(\checkmark)$  shows which features have been released for public preview or early access and for general availability.

## An enhanced, unified Power Platform admin center

The Power Platform admin center is a unified admin experience for the Power Platform product offerings as well as customer engagement apps.

Feature	Enabled for	Public preview	General availability
Common Data Service errors, performance data, and diagnostics data in customer's own Azure Application Insights	Admins, makers, or analysts, automatically	Oct 2020	

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# An enhanced, unified Power Platform admin center

#### **Overview**

The Power Platform admin center is a unified admin experience for the Power Platform product offerings as well as customer engagement apps. It is offering a unified experience to manage environments, deployments, users, capacity, and usage. Powerful analytics empower 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.

# Common Data Service errors, performance data, and diagnostics data in customer's own Azure Application Insights

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Oct 2020	-

#### **Business value**

By making it possible to gain insights into errors and performance issues with Common Data Service and model-driven apps, your business can improve the user experience through better monitoring and resolution of production issues as well as proactive maintenance. In addition, since the platform logged data is itself available, in many cases it will reduce the need for you to write custom code for errors and performance.

#### **Feature details**

You can opt-in to export production environments platform logged error and performance data for Unified Interface form-loads, plug-ins, and platform API's through the Power Platform admin center. This data in Application Insights will allow your team to gain deeper insights, through both out-of-box and custom reports. The key is that this enables self-serve and improved outcomes for both reactive and proactive scenarios.

Reactive scenario: when an incident is raised by users, your support team can leverage Application Insights to quickly view metrics based off the user ID and gain insights into details like:

- Was the issue specific to a single user or applicable to all users?
- Has a particular API call from the Unified Interface form been failing in a certain region causing poor form performance?
- How was the API performing prior to a reported issue based on the time of day and location? Was API degradation gradual or sudden?

Support can now triage issues to understand if the issue was caused by custom code or platform code. If custom code, the issue can be redirected to the internal engineering team. If platform code is the issue, raise a support ticket with Microsoft.

Proactive scenario: alerts based off performance thresholds for form-loads, APIs, and plug-ins can be set up in Application Insights. When these thresholds are reached, the alerts will allow proactive maintenance. For example, when a custom form load performance drops below a predefined value, your own devops team can be alerted, to allow for triage and proactive resolution.

The data available in your Application Insights will also light up out-of-box reports for user activity with specific forms and will allow admins to understand adoption blockers and drivers.

# Common Data Model and data integration

# Overview of Common Data Model and data integration 2020 release wave 2

Citizen 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 allow other Microsoft products to leverage this data.

We are investing in a few key pillars:

- 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 Power Platform.
- 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 ML algorithms.
- Enhanced data integration by enabling analytics on Common Data Service data through Export to Data Lake in Common Data Model form, Office data integration to enable new insights, new and enhanced connectors, improvements in connectivity platform, extending dual-write for more entities, improving Data Export Service, and enhancing Gateway for enterprises and Robotics Process Automation (RPA).
- Gateway and Azure Virtual Network (VNet) Connectivity in Power Platform will allow enterprises to scale out their cloud to cloud integrations without leveraging the Gateway, removing complexity and administration effort in building a true, democratized data platform.

# What's new and planned for Common Data Model and data integration

This topic lists features that are planned to release from October 2020 through March 2021. Because this topic lists features that may not have released yet, **delivery timelines may change and projected functionality may not be released** (see <u>Microsoft policy</u>).

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  $(\checkmark)$  shows which features have been released for public preview or early access and for general availability.

#### **Dual-write**

Dual-write provides a tightly coupled near real time and bi-directional integration between Dynamics 365 Finance and Supply Chain Management and Common Data Service.

Feature	Enabled for	Public preview	General availability
Common Data Model authoring experience	Admins, makers, or analysts, automatically	Nov 2020	Mar 2021
Ability to sequence writes	Admins, makers, or analysts, automatically	-	Mar 2021

## **Export to Data Lake**

The Export to Data Lake service enables continuous replication of Common Data Service entity data to Azure Data Lake Storage Gen2, which can then be used to run analytics like Power BI reporting and machine learning (ML).

Feature	Enabled for	Public preview	General availability
Ability to link Export to Data Lake to Azure Synapse	Admins, makers, or analysts, automatically	-	Mar 2021
Configurable snapshot intervals	Admins, makers, or analysts, automatically	-	Mar 2021
Cross-tenant support	Admins, makers, or analysts, automatically	-	Mar 2021
Dashboard showing count and trend of records	Admins, makers, or analysts, automatically	-	Mar 2021

Feature	Enabled for	Public preview	General availability
Export to Data Lake support for GCC- L4	Admins, makers, or analysts, automatically	-	Mar 2021
Parquet format	Admins, makers, or analysts, automatically	-	Mar 2021
Smart partitioning	Admins, makers, or analysts, automatically	-	Mar 2021
Support exporting audit data to Azure Data Lake	Admins, makers, or analysts, automatically	-	Mar 2021
Support for entities with attachments	Admins, makers, or analysts, automatically	-	Mar 2021
Support for soft delete	Admins, makers, or analysts, automatically	-	Mar 2021
<u>Time series data</u>	Admins, makers, or analysts, automatically	-	Mar 2021
Update to the latest version of Common Data Model	Admins, makers, or analysts, automatically	-	Mar 2021

## **Power Platform connectors**

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

Feature	Enabled for	Public preview	General availability
Connection string support for SQL Server	Admins, makers, or analysts, automatically	Mar 2021	
Service principal support for SQL Server	Admins, makers, or analysts, automatically	Mar 2021	
Use the Microsoft Excel Online connector in Power Apps	Admins, makers, or analysts, automatically	Mar 2021	
Better process for handling versions during connector certification	Admins, makers, or analysts, automatically	-	Mar 2021
Feedback for certified connectors	Admins, makers, or analysts, automatically	-	Mar 2021
More certified and custom connectors in our open source repository	Admins, makers, or analysts, automatically	-	Mar 2021
Provide in-product guidance when connectors and operators are deprecated	Admins, makers, or analysts, automatically	-	Mar 2021
Submit connector templates as part of connector certification	Admins, makers, or analysts, automatically	-	Mar 2021
User interface within the Connector Certification Portal to add authors	Admins, makers, or analysts, automatically	-	Mar 2021

#### **Power Platform dataflows**

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
Dataflow output profiling statistics	Admins, makers, or analysts, automatically	Mar 2021	
Dataflows management capabilities for admins	End users, automatically	Mar 2021	-
Power Platform dataflows grow up into Azure Data Factory	Admins, makers, or analysts, automatically	Mar 2021	
Publish a dataflow from Desktop	End users, automatically	Mar 2021	-
Spark-based compute support for Power Platform dataflows	Admins, makers, or analysts, automatically	Mar 2021	

# **Power Platform gateway**

On-premises data gateway.

Feature	Enabled for	Public preview	General availability
Auto-update of gateways	Admins, makers, or analysts, automatically	Mar 2021	
Gateway diagnostics	End users by admins, makers, or analysts	Mar 2021	

# **Power Query Online**

Power Query is the data connectivity and data preparation experience for users across a wide variety of Microsoft products and services, including Power BI, Excel, Customer Insights, and several more.

Feature	Enabled for	Public preview	General availability
Certified connectors in Power Query Online	Admins, makers, or analysts, automatically	Dec 2020	
Custom connectors in Power Query Online	Admins, makers, or analysts, automatically	Dec 2020	
Diagram view for authoring	Admins, makers, or analysts, automatically	Mar 2021	
Import/export custom dataflows templates	Admins, makers, or analysts, automatically	Mar 2021	
Support for streams of data as input sources	Admins, makers, or analysts, automatically	Mar 2021	
Semantic types and transforms (Phase 1)	Admins, makers, or analysts, automatically	Dec 2020	Mar 2021
Semantic types and transforms (Phase 2)	Admins, makers, or analysts, automatically	Mar 2021	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 <u>International availability guide</u>. For more information about geographic areas and data centers (regions), go to the <u>Dynamics 365 and Power Platform availability page</u>.

#### **Dual-write**

#### **Overview**

Customers use and monitor their sales processes with the strength of Common Data Service while all aspects of fulfillment and invoicing take place using the rich functionality of Dynamics 365 Finance and Supply Chain Management. Dual-write allows our customers to not think about these applications as different systems to write to independently; rather, the underlying infrastructure makes it seamless for these apps to write simultaneously. It provides a tightly coupled near real time and bi-directional integration between Dynamics 365 Finance and Supply Chain Management and Common Data Service. Once an entity map (e.g., Account – Customer) is enabled for dual-write, any create or update change in the **Customer** entity in Dynamics 365 Finance and Supply Chain Management results in writes in near real time to the **Account** entity in Common Data Service and vice versa.

# **Common Data Model authoring experience**

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Nov 2020	Mar 2021

#### **Feature details**

Increased focus on growing Common Data Model ecosystem requires enabling users to work with Common Data Model in their native data environments, such as Power Query, Insights Apps, Azure Synapse, and Power Bl. Having a standardized way to author and manage the lifecycle for Common Data Model definitions across relevant products will increase adoption, lower barriers to entry, reduce support cost, and encourage contributions to the growing adoption of Common Data Model.

# **Ability to sequence writes**

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

#### **Feature details**

With this feature, you'll have the ability to sequence writes while writing from 1:Many maps (e.g., Dynamics 365 Finance and Supply Chain Management Worker to Worker and Worker person on Common Data Service).

# **Export to Data Lake**

#### **Overview**

The **Export to Data Lake** service enables continuous replication of Common Data Service entity data to Azure Data Lake Storage Gen2, which can then be used to run analytics, such as Power BI reporting, machine learning (ML), 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 your Data Lake. Any data or metadata changes (initial and incremental) in Common Data Service is automatically pushed to the Data Lake without any additional actions.

This service also empowers our first party AI apps (Customer Insights, Sales Insights, CCA and AI Builder, and so on) by continuously pushing Common Data Service data to Azure Data Lake Storage Gen2.

### **Ability to link Export to Data Lake to Azure Synapse**

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

#### **Feature details**

Azure Synapse is a limitless analytics service that brings together enterprise data warehousing and big data analytics. It gives you the freedom to query data on your terms using either serverless on-demand or provisioned resources at scale. In 2020 release wave 2, we're doing a basic integration to provide the ability to use Azure Synapse SQL on-demand to explore and query the data in your Data Lake and also serve your data warehousing needs.

# **Configurable snapshot intervals**

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

#### **Feature details**

Up until now, we only provided hourly snapshots for larger analytical workloads. In 2020 release wave 2, you'll be able to configure snapshot intervals based on the needs of your business.

# **Cross-tenant support**

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

#### **Feature details**

Up until now, we required your Common Data Service environment to be in the same tenant as your Azure Data Lake Gen2 storage. This was a problem for customers who maintain their Azure storage in a separate tenant that cannot be moved. With this feature, we're alleviating these requirements and no longer requiring them to be in the same tenant.

# Dashboard showing count and trend of records

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

#### **Feature details**

To help you review the progress of writes, especially for larger data sets from Common Data Service to Azure Data Lake Storage Gen2, we will provide you with a dashboard showing the count and a visual trend of records.

# **Export to Data Lake support for GCC-L4**

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

#### **Feature details**

With 2020 release wave 2, we are making investments in Export to Data Lake to support government cloud GCC (Level 4) and DoD.

# **Parquet format**

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

#### **Feature details**

Until now, we supported exporting Common Data Service entity data to the Azure Data Lake Storage Gen2 in .csv format. In 2020 release wave 2, we'll support exporting data in parquet format to improve efficiency and performance in both storage and large-scale query processing.

# **Smart partitioning**

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

#### **Feature details**

While exporting data to Azure Data Lake Storage Gen2, we partition the data by year to improve efficiency in data consumption. In 2020 release wave 2, based on the amount of data, we'll smartly partition the data, adding more granular level partitions, such as partitioning by month.

# Support exporting audit data to Azure Data Lake

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

#### **Feature details**

Common Data Service supports an auditing capability where entity and attribute data changes within an organization can be recorded over time for use for analysis and reporting purposes. In 2020 release wave 2, we'll support exporting entity audit data to Azure Data Lake Storage Gen2.

# **Support for entities with attachments**

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

#### **Feature details**

This feature supports entities with attachments. For example, we support the **Annotation** entity with *documentbody*, which can be used to attach notes, and the data from notes can be used for analytics.

# **Support for soft delete**

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

#### **Feature details**

In 2020 release wave 2, we will provide an option to soft delete data for situations in which you need to remove data from the source but keep the data in the Data Lake for reporting purposes.

#### Time series data

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

#### **Feature details**

With this feature, you can get historical data for a given entity. You'll get the full history of changes for entity records. This feature enables several AI scenarios that require a lifetime view of the data.

# **Update to the latest version of Common Data Model**

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

#### **Feature details**

Export to Data Lake using Common Data Model to provide semantic meaning alongside the data makes it easier for other systems and applications to understand and use data stored in a Data Lake. Common Data Model is the shared data language used by business and analytical applications. In 2020 release wave 2, we're updating to the latest version of Common Data Model.

#### Power Platform connectors

#### Overview

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

As part of platform investments, we provide a rich set of tools, samples, and documentation to help partners and customers build connectors. We also invest in our certification processes and tools for connectors so that partners can get their connectors certified and make 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.

# **Connection string support for SQL Server**

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

#### **Feature details**

In 2020 release wave 2, the SQL Server connector accepts a connection string to be used. This provides additional flexibility to users where they can specify many native SQL connection properties.

# **Service principal support for SQL Server**

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

#### **Feature details**

With support for Azure AD based authentication in the SQL Server, users can now also connect to the SQL Server using a service principal.

# **Use the Microsoft Excel Online connector in Power Apps**

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

#### **Feature details**

Although Excel Online documents can be accessed from Power Automate, it hasn't been possible to use the Excel Online connector in Power Apps until recently. In 2020 release wave 2, we will include support for the Excel Online connector in Power Apps; therefore, we now provide a capable, reliable, quick-start approach to building apps over data in Excel spreadsheets. This will unlock the vast set of unstructured data that we have in Excel today and benefit users who are familiar with Excel, allowing them to take advantage the low-code, no-code app building experience that we provide through Power Apps.

# Better process for handling versions during connector certification

E	nabled for	Public preview	General availability
А	dmins, makers, or analysts, automatically	-	Mar 2021

#### **Feature details**

Currently, partners are only able to submit one version of a connector at a time for certification. We're looking to provide a process that will make this a friendlier experience. This feature will define a better experience for partners who are looking to certify versions of a connector simultaneously.

#### **Feedback for certified connectors**

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

#### **Feature details**

We often receive requests from partners regarding feedback of their certified connectors. Currently, we provide this information only after a partner asks. With this new feature, we'll have a process to proactively provide feedback to owners through the connector certification portal.

# More certified and custom connectors in our open source repository

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

#### **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.

# Provide in-product guidance when connectors and operators are deprecated

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

#### **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'll provide an in-product experience that clearly warns users that the connector or operation is deprecated. Additionally, we'll recommend a supported connector or operation to replace the deprecated features.

# Submit connector templates as part of connector certification

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

#### **Feature details**

Partners will be able to submit connector templates for certification after their connector has been certified in a unified certification experience.

#### User interface within the Connector Certification Portal to add authors

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

#### **Feature details**

Previously, partners would have to request changes to authorship permissions of their connector submissions in the certification portal. With this feature, partners will be able to manage authors themselves within the portal experience.

## **Power Platform dataflows**

#### **Overview**

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 Al insights to its users, such as the analytics and insights provided by Al Builder or Dynamics 365 Customer Insights, making them a huge differentiator for the company's Dynamics 365 offerings.

# **Dataflow output profiling statistics**

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

#### **Feature details**

Data profiling is one of the most acclaimed features by Power Query customers. Now, we're continuing to expand data profiling capabilities into Power Platform analytical dataflows to enable both storage and consumption of data profiling statistics for dataflow output entities.

# **Dataflows management capabilities for admins**

Enabled for	Public preview	General availability
End users, automatically	Mar 2021	-

#### **Feature details**

We are introducing administration capabilities to Power Platform dataflows to enable environment administrators to view all dataflows created in environments, reassign dataflows to new owners, and certify dataflows that are the authoritative source for critical information in the organization.

# Power Platform dataflows grow up into Azure Data Factory

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

#### **Feature details**

Ability to further extend or optimize a dataflow created within the Power Platform by a citizen user into Azure Data Factory data flows managed by an ETL Pro developer.

# **Publish a dataflow from Desktop**

Enabled for	Public preview	General availability
End users, automatically	Mar 2021	-

#### **Feature details**

Power Platform dataflows are familiar and simple to author. Their authoring experience is based on Power Query, which several customers use in several Microsoft products, including Power Bl and Microsoft Excel.

With the introduction of this **Publish** feature, Excel and Power BI customers will be able to publish their Power Query work from existing artifacts (e.g., Excel workbooks, Power BI reports) to the cloud as a dataflow. Their existing Power BI and Excel artifacts will point to the latest snapshot/output of those dataflows, thus making sure their data is kept refreshed on a schedule.

# **Spark-based compute support for Power Platform dataflows**

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

#### **Feature details**

This feature will allow enhanced compute capabilities powered by Spark to unlock very large scale data transformations in Power Platform dataflows.

# **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, like Power BI, Power Apps, Power Automate, Logic Apps, and others. Based on enterprise requests, we plan to continue to focus 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.

# **Auto-update of gateways**

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

#### **Feature details**

Today, gateway admins must manually update gateways on every machine when a new version of the gateway is available (monthly). This manual process takes significant effort in large organizations with many gateways and causes delays in enterprises using the latest gateway features. To address this, we're adding a new feature that allows automation of updating gateways.

# **Gateway diagnostics**

Enabled for	Public preview	General availability
End users by admins, makers, or analysts	Mar 2021	

#### **Feature details**

We released a performance monitoring feature in May 2019 that provided insights to gateway admins on gateway utilization; however, this information is saved in log files. In 2020 release wave 2, we plan to improve on this feature by centralizing gateway diagnostics on the admin center and stream this data online to a cloud storage for long term analysis.

# **Power Query Online**

#### **Overview**

Power Query is the data connectivity and data preparation experience for users across a wide variety of Microsoft products and services, including Power BI, Excel, Customer Insights, and several more. You can read more about Power Query.

# **Certified connectors in Power Query Online**

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Dec 2020	-

#### **Feature details**

Our large library of certified connectors (45+ connectors) will be coming to Power Query Online. These connectors are developed and maintained by partners and bring a great variety of new capabilities and sources to the platform.

You can find out more about these certified connectors by looking at the <u>Power Query connectors page</u> (all items built by others besides Microsoft).

# **Custom connectors in Power Query Online**

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Dec 2020	-

#### **Feature details**

We'll bring the ability to use custom connectors to Power Query Online. This will allow users and developers to create connectors that connect to any data source they want in line with the current capabilities in Power Query Desktop (e.g., within Power BI). To get started with custom connectors, start <a href="here">here</a>.

# Diagram view for authoring

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

#### **Feature details**

A new diagram view will be added to the Power Query editor as an alternative view to author queries. This view allows users to very easily understand dependencies between queries and data sources. This view will be fully interactive and will allow users to add/remove queries and steps within these queries, reference and combine existing queries, and so on, much like they can do today through other surfaces in the Power Query editor.

# Import/export custom dataflows templates

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

#### **Feature details**

Power Platform dataflows authors will be able to easily reuse dataflow definitions to create multiple dataflows in different environments, tenants, and products. This includes the ability to define parameters in dataflow templates that can drive different output results based on userspecific values for those parameters.

Query parameters and templates are very successful features that have been available within Power Query (Desktop) for the last few years. In 2020 release wave 2, we're expanding this feature to Power Platform dataflows.

# Support for streams of data as input sources

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

#### **Feature details**

Streaming data (e.g., Azure Stream Analytics) will be added as sources of data within Power Query. This will allow citizen users to seamlessly connect to a data stream in order to transform and filter incoming data or combine it with data from any other sources through the no-code Power Query experiences that they're already familiar with.

# **Semantic types and transforms (Phase 1)**

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Dec 2020	Mar 2021

#### **Feature details**

As customers combine data from different sources, they want the data to be structured in a standard, consistent format and often want to augment/enrich with additional data to provide more meaning and gather insights.

As part of Phase 1, we are providing enterprise data enrichment where we are leveraging dataflows as a knowledge base to augment your data with additional columns from a dataflow entity.

# Semantic types and transforms (Phase 2)

Enabled for	Public preview	General availability
Admins, makers, or analysts, automatically	Mar 2021	To be announced

#### **Feature details**

As customers combine data from different sources, they want the data to be structured in a standard, consistent format and often want to augment/enrich with additional data to provide more meaning and gather insights.

As part of Semantic transforms Phase 2, we are providing data enrichments from data sources, such as Azure Maps, to augment your data with smart transforms like address geocoding, reverse geocoding, address standardization, and more.

