

October 2019

Table of Contents

How to buy	1
Licensing Programs.....	1
Multiplexing	2
PowerApps Subscriptions.....	2
PowerApps	2
PowerApps Portals.....	5
Flow Subscriptions	7
Subscription Capacity	11
PowerApps and Flow Capacity Add-ons	12
Common Data Service Capacity Add-ons.....	12
AI Builder capacity add-on	12
PowerApps and Flow capacity add-on.....	14
Trial and Implementation.....	14
Pricing	14
Additional Resources	15
Appendix A: Terminology and Custom Entities	16
Appendix B: Standard Connectors moved to premium category	18
Appendix C: Licensing Channel / Segment Availability.....	19
Appendix D: Dynamics 365 and Office 365 licenses that include PowerApps and Flow capabilities	20
Appendix E: Change Log	21

Using This Guide

Use this guide to improve your understanding of how to license Microsoft PowerApps and Microsoft Flow.

This guide is not intended to influence the choice of Microsoft products and services. The examples presented in this guide are illustrative. Microsoft reserves the right to review or update this document at any time without notice.

This document applies for users with PowerApps and Microsoft Flow licenses.

To facilitate understanding of licensing requirements this guide is structured as follows:

- 1) Brief description of the product
- 2) Channel Licensing (how to buy)
- 3) Licensing
- 4) Use rights
- 5) Add-ons
- 6) Notes: Changes
- 7) Scenarios

For help determining the right technology solution for any given organization, including the license requirements for a specific product or scenario, consult with your Microsoft account team or your Microsoft Certified Partner. This guide does not supersede or replace any of the legal documentation covering use rights.

What's new in this licensing guide

This licensing guide was updated to reflect licensing updates as of October 2019.

What is changing October?	Description
PowerApps per app plan	New per user, per app license
PowerApps per user plan	New per user license for PowerApps
Flow per user plan	New per user license for Flow
Flow per business process plan	New per Flow license
PowerApps portals	New capacity add-ons that enable external/anonymous user licensing
AI Builder (PowerApps and Flow)	New capacity add-on to infuse apps and workflows with AI
PowerApps and Flow capacity	New capacity add-on to increase the daily usage limits

How to buy

Licensing Programs

Licensing programs are channels where you can buy PowerApps and Flow. You can license PowerApps and Flow through Microsoft Volume Licensing (VL), Cloud Solution Provider program (CSP), and/or Web Direct (MOSP) programs. In Volume Licensing, PowerApps and Flow are available through:

- Enterprise Agreement (EA)
- Enterprise Agreement Subscription (EAS)
- Service and Cloud Enrollment (SCE)
- Enrollment for Education Solutions (under the Campus and School Agreement) (EES)

Additional channels:

- Microsoft Online Government
- Microsoft Products and Services Agreement (MPSA). More information on MPSA is available [here](#).
- Microsoft Online Subscription Program (Web Direct/MOSP)

Participating in a Volume Licensing program typically involves signing an agreement and/or enrollment, meeting a minimum purchase requirement, and ordering licenses through a Microsoft Reseller. Visit the

[Microsoft Volume Licensing website](#) to learn more about how to buy through Volume Licensing, find a reseller partner, and more helpful information.

Multiplexing

Multiplexing refers to the use of hardware or software that a customer uses to pool connections, reroute information, or reduce the number of users that directly access or use the PowerApps and Flow service. Multiplexing does NOT reduce the number of SLs of any type required to access the PowerApps and Flow apps. Any user or device that accesses the PowerApps and Flow app—whether directly or indirectly—must be properly licensed.

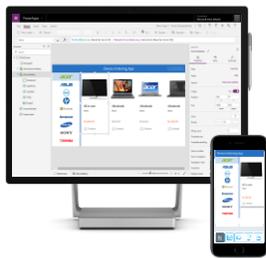
PowerApps and Flow service can only be accessed if you have a PowerApps or Flow license. Similarly, PowerApps and Flow licenses are required for users that input data into, query, or view data from the PowerApps and Flow apps through a pooling device. Pooled connections use a non-interactive user account in PowerApps and Flow that can access the system but only via the web service layer. Internal users accessing PowerApps and Flow service indirectly through a portal or via an API to a separate service such Microsoft Outlook must also be properly licensed, regardless of if they are set up as a PowerApps and Flow user in the app, for example:

- Internal users that access the PowerApps and Flow service must still be properly licensed for PowerApps and Flow.
- Any user that accesses PowerApps and Flow service that is made available through an automated process requires a PowerApps and Flow license
- The number of tiers of hardware or software between the PowerApps and Flow apps and the user or devices that ultimately use PowerApps and Flow service indirectly does not affect the number of SLs required.

For additional information about multiplexing refer to the Microsoft Volume Licensing Brief [Multiplexing—Client Access License \(CAL\) Requirements](#).

PowerApps Subscriptions

PowerApps



Service Overview

PowerApps is a low code/no code application platform that allows enterprises to digitize business operations by easily building line of business applications and customizing existing Office 365 and Dynamics 365 applications, For more details, please visit <https://powerapps.microsoft.com>

Licensing overview

General purpose, full PowerApps capabilities are licensed on a standalone basis. Additionally, limited PowerApps capabilities are included within various Office 365 and Dynamics 365 licenses. High level overview of the licensing structure is provided below.

	Per user, per app	Per user	Seeded PowerApps
Licensing scheme	Per user, per app	Per user	Through Office 365 and Dynamics 365 user licenses
Description	Allow individual users to run applications ¹ for a specific business scenario based on the full capabilities of PowerApps	Equip users to run unlimited applications based on the full capabilities of PowerApps	Customize and extend Office 365 & Dynamics 365 applications

¹ Each license allows end user to run 2 custom apps and access 1 custom portal

Standalone PowerApps licensing

Customers that need general purpose and full capabilities of the platform should license PowerApps on a standalone basis. Licensing is supported on both a “per user” basis as well as a “per user, per app” basis. Both standalone licenses are fully featured. Details follow.

PowerApps per app plan

PowerApps per app plan allows organizations to **get started** with the platform at a lower entry point. Customers on the per app plan typically start with 1-2 leading use case scenarios before adopting the platform more broadly. PowerApps per app plan is also an attractive licensing option to license end users that run only a few apps.

PowerApps per app plan allows individual users to run 2 custom applications (be it canvas or model or both) and access 1 custom portal based on the full capabilities of PowerApps.

Per user, per app offer summary	
SKU Name	PowerApps per app plan
License type	Tenant wide capacity license
License assignment	In product
Are licenses stackable?	Yes

Entitlement Summary for PowerApps per app license

Plans and capabilities		PowerApps per app plan
Run custom apps / portals	Run custom apps (both canvas and model driven)	2 apps
	Access custom portals	1 custom portal
Connect to your data	Standard connectors	●
	Premium connectors	●
	On premises data gateway	●
	Custom connectors	●
Store and manage data	Utilize Common Data Service	●
	Create and access custom entities	●
	Dynamics 365 restricted entities access ¹	Read only
Execute workflows	Microsoft Flow use rights	Within app context
	(Classic CDS) Non real-time and real-time workflows	●
Per license capacity ²	Common Data Service Database Capacity ³	50 MB
	Common Data Service File Capacity ³	400 MB
	Daily API request limit ²	1,000
Infuse AI	AI Builder capacity add-on	\$

¹ An entity within CDS becomes restricted only if the Dynamics 365 application is installed on a given environment

² Service limits are published at <http://aka.ms/platformlimits> – PowerApps and Flow capacity add-on can be purchased to increase daily service limits

³ Common Data Service database and file capacity entitlements are pooled at the tenant level

Note:

- Embedded canvas apps within a model-driven app will not count towards the two-app limit.
- A single user might be covered by multiple ‘per app’ licenses to allow the user to use multiple solutions targeted at various business scenarios, without requiring a per-user license
- Once a pool of PowerApps per app licenses are purchased, individual licenses need to be assigned to specific environments and to individual users

PowerApps per user plan

PowerApps per user plan allows licensed users to run **unlimited** custom applications based on the full capabilities of PowerApps.

Per user offer summary	
SKU Name	PowerApps per user plan
License type	User license

Entitlement Summary for PowerApps per user license

Plans and capabilities		PowerApps per user plan
Run custom apps / portals	Run custom apps (both canvas and model driven)	Unlimited
	Access custom portals	Unlimited
Connect to your data	Standard connectors	•
	Premium connectors	•
	On premise data gateway	•
	Custom connectors	•
Store and manage data	Utilize Common Data Service	•
	Create and access custom entities (includes complex entities)	•
	Dynamics 365 restricted entities access ¹	Read only
Execute workflows	Microsoft Flow use rights	Within app context
	(Classic CDS) Non real-time and real-time workflows	•
Per license capacity ²	Common Data Service Database Capacity ³	250 MB
	Common Data Service File Capacity ³	2 GB
	Daily API request limit ²	5,000
Infuse AI	AI Builder capacity add-on	\$

¹ An entity within CDS becomes restricted only if the Dynamics 365 application is installed on a given environment

² Service limits are published at <http://aka.ms/platformlimits> – PowerApps and Flow capacity add-on can be purchased to increase daily service limits

³ Common Data Service database and file capacity entitlements are pooled at the tenant level

PowerApps use rights included with Dynamics 365 licenses

Limited PowerApps use rights are included with Dynamics 365 licenses to allow users to customize & extend Dynamics 365 applications. Use of PowerApps capabilities included with Dynamics 365 licenses must be only within the context of the licensed Dynamics 365 application. Further, the specific use rights vary by Dynamics 365 license type.

PowerApps use rights with Dynamics 365 applications

Capabilities		Dynamics 365 Applications ¹	Dynamics 365 Enterprise Applications ²
Run custom apps ³	Run standalone apps (canvas/standalone)	-	Custom apps within the same environment(s) as the licensed Dynamics 365 application(s)
Connect to your data	Standard connectors	•	•
	Premium connectors	•	•
	On premise data gateway	•	•
	Custom connectors	•	•
Store and manage data	Utilize Common Data Service	•	•
	Create and access custom entities	15 per application	•
	Dynamics 365 restricted entities use rights	Create, read, update and delete	Create, read, update and delete
Execute workflows	Microsoft Flow user rights	Within app context	Within app context
	(Classic CDS) Non real-time and real-time workflows	•	•
Infuse AI	AI Builder capacity add-on	\$	\$
PowerApps Portal use rights	Access standalone PowerApps Portals	-	Custom portals within the same environment(s) as the licensed Dynamics 365 application(s)

¹ Dynamics 365 Sales Professional, Dynamics 365 Customer Service Professional, Dynamics 365 Talent: Onboard, Dynamics 365 Team Members, Dynamics 365 Operations – Activity, Dynamics 365 Business Central Team Members

² Dynamics 365 Sales Enterprise, Dynamics 365 Customer Service Enterprise, Dynamics 365 Field Service, Dynamics 365 Project Service Automation, Dynamics 365 Finance, Dynamics 365 Supply Chain Management, Dynamics 365 Retail, Dynamics 365 Talent, Dynamics 365 Business Central

³ PowerApps and Flow usage will count against the API request limits provided by the Dynamics 365 license Service limits are published at <http://aka.ms/platformlimits> – PowerApps and Flow capacity add-on can be purchased to increase daily service limits

PowerApps use rights included with Office 365 licenses

Limited PowerApps use rights are included with select Office 365 licenses to allow users to customize & extend Office 365 for productivity scenarios. For a complete list of Office 365 licenses that include PowerApps use rights, please refer to [Appendix D](#).

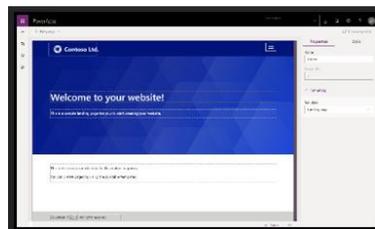
PowerApps use rights with Office 365 licenses

Capabilities		Office 365
Run custom apps/portals	Run custom apps (canvas apps)	Unlimited
	Run custom apps (model driven apps)	-
	Access custom portals	-
Connect to your data	Standard connectors (see Appendix B)	●
	Premium connectors	-
	On premise data gateway	-
	Custom connectors	-
Store and manage data	Utilize Common Data Service	-
	Create and access custom entities (includes complex entities)	-
Execute workflows	Microsoft Flow use rights (See Flow with Office 365 section)	●
Per license capacity ² (shared capacity across all PowerApps and Flow usage)	Common Data Service Database Capacity ¹	-
	Common Data Service File Capacity ¹	-
	Daily API request limit ²	2,000
Infuse AI	AI Builder capacity add-on	\$

¹Common Data Service database and file capacity entitlements are pooled at the tenant level

² Reference <http://aka.ms/platformlimits> for more details on usage limits; “PowerApps and Flow capacity add-on” can be purchased to increase daily service limits.

PowerApps Portals



Service Overview

PowerApps Portals deliver the capability to build standalone, external-facing portals over the Common Data Service. For more information on PowerApps Portals, please visit <https://powerapps.microsoft.com/en-us/powerapps-portals/>

Licensing overview

Provisioning a PowerApps Portals instance

PowerApps Portals instances can be provisioned by customers on-demand. Provisioning a portals instance draws 1GB from available (unused) Common data service database capacity. Thus, provisioning additional portals instances is only capped by available Common data service database capacity.

Usage of a PowerApps Portals instance

Each end user that accesses a PowerApps Portals instance needs to be licensed appropriately. The table below outlines the end user types.

End user type	Description	Use case examples
External user (authenticated)	Obtains secure access to personalized data by utilizing authentication mechanisms such as Azure AD, LinkedIn, Okta, etc.	<ul style="list-style-type: none"> ● B2B - Partner management (Dealer, Supplier, Franchise etc.) ● B2C – Account management etc.
Anonymous user	Access publicly viewable web pages powered by the portal	Knowledge management sites
Internal user	A user licensed with PowerApps or Dynamics 365	Employee self-serve

The licensing scheme varies based on end user type.

End user type	Licensing model	Description
External user (authenticated)	Per login	A login provides the authenticated user with access to a single portal for up to 24 hours . Multiple logins during the 24-hour period count as 1 billable login Think of a login as a day pass to a single PowerApps Portal
Anonymous user	Per page view	
Internal user	<ul style="list-style-type: none"> License fee pays for access to PowerApps Portals No additional monetization 	Custom portal use rights are aligned with custom app use rights

Per login model

For PowerApps Portals instances that implement authenticated external user scenarios, appropriate login capacity, based on anticipated usage volumes, should be purchased. Customers should purchase necessary capacity of logins across all Portals instances that cater to authenticated external user scenarios.

SKU Names	Unit Capacity	Min Purchase	Monthly Volume	Launch	Channel
PowerApps Portals login capacity add-on	100 logins /month	1	100 logins	Oct-19	All
PowerApps Portals login capacity add-on tier-2		10	1,000 logins	Dec-19	All
PowerApps Portals login capacity add-on tier-3		50	5,000 logins	Dec-19	CSP only

Each unit provides 100 logins/month. Volume tiers and corresponding SKUs differ based on minimum purchase requirements. For each of the tiers, once the minimum purchase requirement is met, additional units can be purchased in units of 1.

For example, a customer requiring 5,500 logins/month can purchase 55 units of "PowerApps Portals login capacity add-on tier-3"

Capacity enforcement

For PowerApps Portals login capacity add-on SKUs, purchased capacity is enforced monthly. Unused logins do NOT carry over from one month to another. Customers should purchase appropriate capacity aligned with peak monthly anticipated usage.

Overage handling

While occasional and reasonable overages will be tolerated, customers exceeding purchased capacity should adjust their purchase quantity per standard Microsoft terms to remain in compliance.

Assignment of purchased capacity

The minimum assignment capacity per PowerApps Portal instance is 100 logins/month. Once the minimum capacity of 100 logins/month is assigned, additional logins can be added in terms of 1 login.

Per page view model

For PowerApps Portals instances that implement anonymous access scenarios, appropriate capacity of page views, based on anticipated usage, should be purchased. Customers should purchase necessary page views capacity across all Portals instances that cater to anonymous access scenarios.

SKU Name	Unit Capacity	Channels
PowerApps Portals page view capacity add-on	100,000 page views/month	All

Each unit provides 100,000-page views per month. For example, a customer requiring 570,000-page views per month, should purchase 6 units of "PowerApps Portals page view capacity add-on"

Capacity enforcement

For PowerApps Portals pageview capacity add-on SKUs, purchased capacity is enforced monthly. Unused page views do NOT carry over from one month to another. Customers should purchase appropriate capacity aligned with peak monthly anticipated usage.

Overage handling

While occasional and reasonable overages will be tolerated, customers exceeding purchased capacity should adjust their purchase quantity per standard Microsoft terms to remain in compliance.

Assignment of purchased capacity

The minimum assignment capacity per PowerApps Portal instance is 50,000-page views/month. Once the minimum capacity is assigned, additional page views can be added in terms of 1-page view

PowerApps Portals – Use rights for Internal users

For internal users i.e. users licensed with PowerApps or Dynamics 365 licenses, the use rights for PowerApps Portals which are essentially custom portals aligns with use rights to custom PowerApps.

License	Custom PowerApps Portals use rights
Dynamics 365 Team Members	None
Dynamics 365 Operations - Activity	None
Dynamics 365 Professional license ¹	None
Dynamics 365 Enterprise license ²	<ul style="list-style-type: none">• PowerApps Portals that map to licensed Dynamics 365 application context• PowerApps Portals that map to the same environment as the licensed Dynamics 365 application
PowerApps per app	1 PowerApps portal
PowerApps per user	Unlimited PowerApps portals
Office 365	None

¹Dynamics 365 Sales Professional, Dynamics 365 Customer Service Professional, Dynamics 365 Talent: Onboard

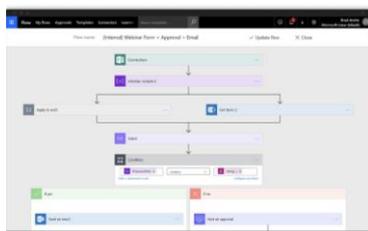
²Dynamics 365 Sales Enterprise, Dynamics 365 Customer Service Enterprise, Dynamics 365 Field Service, Dynamics 365 Project Service Automation, Dynamics 365 Finance, Dynamics 365 Supply Chain Management, Dynamics 365 Retail, Dynamics 365 Talent, Dynamics 365 Business Central

API limits for PowerApps portals

Each login provides a daily limit entitlement of 200 API calls per 24-hour period per user. Anonymous page views, which rarely interact with backend system functionality, are afforded up to 3 API calls per page view.

These API calls are pooled at portal level depending on number of logins/page views assigned to portal.

Flow Subscriptions



Service Overview

Microsoft Flow allows enterprises to implement automated workflows and business processes and achieve operational efficiencies. For more details, please visit <https://flow.microsoft.com>.

Licensing overview

General purpose Flow capabilities are licensed on a standalone basis. Limited Flow capabilities are also included within PowerApps, Office 365 and Dynamics 365 licenses. High level overview of the licensing structure is provided below.

Flow	Per user	Per flow	Seeded Flow
Licensing scheme	Per user	Per flow Minimum purchase of 5 flows	Through Office 365, Dynamics 365, and PowerApps
Description	Allow individual users to create unlimited flows based on their unique needs.	Implement flows with reserved capacity that serve unlimited users across an organization.	Automate business processes and workflows for Office 365, Dynamics 365, and PowerApps

Standalone Flow licensing

Customers that need full-fledged, general purpose workflow/business process automation capabilities, should consider purchasing standalone Flow licenses. Licensing is supported on both a “per user” basis as well as a “per flow” basis. Both standalone licenses include the full capabilities on Flow. Details follow.

Flow per user plan

Flow per user plan equips individual users to create and run **unlimited** workflows and business processes based on their unique needs. The per user plan is intended to support the broad adoption of an automation culture in an organization. Should the entire organization be licensed with the Flow per user plan, admins will have minimal overhead with tracking how many Flows are being activated/used within the organization.

Per user offer details	
SKU Name	Flow per user plan
Enabled Flows	Unlimited
Usage limit	5,000 daily API requests

“PowerApps and Flow capacity add-on” can be purchased to increase daily service limits.

Flow per business process plan

Flow per business process plan is licensed by flow and allows customers to implement critical business processes with capacity that serves teams, departments, or the entire organization without individually licensing each end user that triggers the licensed flow.

Flow per business process plan is great for departmental scenarios where typically, one power user sets up a flow and shares the same with the broader group. This plan alleviates the need to license each end user that knowingly/unknowingly triggers execution of the licensed flow.

Per flow offer details	
SKU Name	Flow per business process plan
Minimum Purchase	5 units
Usage limit	15,000 daily API requests per licensed flow

Note:

- All types of **enabled top level flows** need to be licensed (Scheduled flows, automated flows, instant flows and business process flows). Flows that are only used as “child” flows (triggered by another Flow) do not need to be additionally licensed
- Should customers wish to license more top-level Flows, they should purchase more units of the “Flow per business process plan”

Should customers only wish to license more usage capacity for currently licensed flows, they may purchase “PowerApps and Flow capacity add-on”.

Plan and Capabilities		Flow per user plan	Flow per flow plan
Basics	Minimum purchase	NA	5 units
	User license required?	Yes	-
Execute Flows	Workflows	●	●
	Business process flows	●	●
Connect to your data	Standard connectors	●	●
	Premium connectors	●	●
	On premises data gateway	●	●
	Custom connectors	●	●
Store and manage data	Common data service use rights	●	●
Per license capacity	Common Data Service Database Capacity ¹	50MB	50MB
	Common Data Service File Capacity ¹	200MB	200MB
	Daily API request limit ²	5,000	15,000

¹ Reference <http://aka.ms/platformlimits> for more details on usage limits; "PowerApps and Flow capacity add-on" can be purchased to increase daily service limits.

² Additional Common Data Service Database/File/Log capacity can be purchased in increments of 1GB. Common Data Service Database and File capacity are pooled tenant wide.

Note, scheduled flows may be configured to trigger every minute, irrespective of license type. There are no limits on the frequency of flow runs beyond what the connector supports.

Flow use rights included with PowerApps licenses

PowerApps licenses (both "PowerApps per app plan" and "PowerApps per user plan") include Flow use rights for the purpose of automating workflows associated with the PowerApps application(s).

Flow use within PowerApps is limited to the context of the PowerApps application. What this means is that for both triggers and actions, Flows included within a PowerApps application can connect to:

- Any data source within the use rights of the PowerApps application
- Directly with the PowerApps application (via built in trigger/action)

If the Flow is isolated and has nothing to do with the PowerApps application, then standalone Flow licenses will need to be purchased.

Example of Flow use within PowerApps application context:

User with a standalone PowerApps license runs an app that uses SQL DB as the data source and includes Flows that:

- Read from OR write to SQL DB
- Use a built-in PowerApps trigger and/or action – e.g., Send a push notification to the app

Example of Flow use outside of PowerApps application context:

The same user (in the example above) now also wants to use a Flow that updates an Oracle database, and:

- Is completely unrelated to the PowerApps app
- Does not interact in any way with the PowerApps app (or its data sources)

This user will then require a standalone Flow license.

Plans and capabilities		Flow use rights within PowerApps licenses
Execute Flows ^{1,2}	Workflows	●
	Business process flows	●
Connect to your data	Standard connectors	●
	Premium connectors	●
	On-premises data gateway	●
	Custom connectors	●
Store and manage data	Common data service use rights	●

¹ Flow use needs to map to the context of the embedding PowerApps applications

² Flow usage counts against the service limits associated with the embedding Office 365 license. Please review <http://aka.ms/platformlimits> for more details on usage limits; "PowerApps and Flow capacity add-on" can be purchased to increase daily service limits

Flow use rights included with Dynamics 365 licenses

Dynamics 365 licenses include Flow use rights for the purpose of customizing and extending Dynamics 365 application(s).

Flow use within Dynamics 365 is limited to the context of the embedding Dynamics 365 application. For both triggers and actions, Flows included within the Dynamics 365 application can connect to:

- Any data source within the use rights of the Dynamics 365 application
- Directly with the Dynamics 365 application (via built in trigger/action)

If the embedded Flow is not within the context of the Dynamics 365 application, then standalone Flow licenses will need to be purchased.

Summary of Flow use rights with Dynamics 365 licenses

Plans and capabilities		Flow use rights within Dynamics 365 licenses
Execute Flows ^{1,2}	Workflows	●
	Business process flows	●
Connect to your data	Standard connectors	●
	Premium connectors	●
	On-premises data gateway	●
	Custom connectors	●
Store and manage data	Common data service use rights	●

¹ Flow use needs to map to the context of the embedding Dynamics 365 applications

² Flow usage counts against the service limits associated with the embedding Dynamics 365 license. Reference <http://aka.ms/platformlimits> for more details on usage limits; "PowerApps and Flow capacity add-on" can be purchased to increase daily service limits

Flow use rights included with Office 365 licenses

Office 365 licenses include Flow use rights for the purpose of customizing and extending Office 365 applications.

Flow use within Office 365 is limited to the context of the embedding Office 365 application. For both triggers and actions, Flows included within the Office 365 application can connect to:

- Any data source within the use rights of the Office 365 application
- Directly with the Office 365 application (via built in trigger/action)

If the embedded Flow is not within the context of the Office 365 application or if the embedded Flow needs to connect to a premium on-premises or custom data source standalone Flow licenses will need to be purchased.

Summary of Flow use rights with Office 365 licenses

Plans and capabilities		Flow use rights within Office 365 licenses
Execute Flows ¹	Workflows	Unlimited ¹
	Business process flows	-
Connect to your data	Standard connectors	●
	Premium connectors	-
	On-premises data gateway	-
	Custom connectors	-
Store and manage data	Common data service use rights	-
Per license capacity	Daily API Requests ¹	2,000

¹ Usage capacity is across both PowerApps and Flow; "PowerApps and Flow capacity add-on" can be purchased to increase daily service limits. More details at <http://aka.ms/platformlimits>

Subscription Capacity

PowerApps and Flow default subscription capacities leverage the same tenant and infrastructure and will accrue across one tenant. Every tenant with a PowerApps or Flow license receives default capacity. In addition, for each PowerApps per user, PowerApps per user, per app, Flow per user, and Flow per flow plan license there is additional capacity added to the tenant.

PowerApps Default Capacity per tenant	Default	Accrued per app	Accrued per user
Common Data Service Database capacity	1GB	+50MB	+250MB
Common Data Service File capacity	20GB	+400MB	+2GB
Common Data Service Log capacity	2GB	0	0

Flow Default Capacity per tenant	Default	Accrued per user	Accrued per flow
Common Data Service Database capacity	1GB	+50MB	+50MB
Common Data Service File capacity	20GB	+200MB	+200MB
Common Data Service Log capacity	2GB	0	0

Note, customers may have as many flows as needed per-flow plan. Each flow will increase capacity limits.

PowerApps, Flow and Dynamics 365 Customer Engagement applications leverage the same tenant and infrastructure. Common Data Service capacity (database, file and log formats) is pooled across the tenant and shared amongst relevant application workloads.

Common Data Service capacity – Capacity types and Purpose

Type	Purpose
Database	Stores and manages entity definitions and data
File	Store attachments to notes or emails in Customer Engagement applications and PowerApps. These include documents, image files, videos, PDF files and other crucial files needed in an organization.
Log	Records entity and attribute data changes over time for use in analysis and reporting purposes. Log capacity is designed to help organizations meet their auditing, compliance, and governance policies

The first subscription of PowerApps OR Flow OR Dynamics 365 Customer Engagement provides the one-time default capacity entitlement for the tenant. For example, if a new customer purchases "PowerApps per user plan", the tenant will receive 10GB of default Common Data Service Database capacity. Additional subscriptions do not add to the tenant's default capacity.

Default Capacity Allocation (Tenant wide)	CDS Database capacity	CDS File Capacity	CDS Log Capacity
PowerApps per user plan	10 GB	20 GB	2 GB
PowerApps per app plan	1 GB	2 GB	200 MB
Flow per user plan	1 GB	2 GB	200 MB
Flow per business process plan	1 GB	2 GB	200 MB

Upon additional subscriptions being added to the tenant, additional Common Data Service capacity might accrue to the tenant. Additional capacity per PowerApps and Flow subscription license is listed below.

Per License Accrued Capacity (Pooled tenant wide)	CDS Database capacity	CDS File Capacity	CDS Log Capacity
PowerApps per user plan	250 MB	2 GB	-
PowerApps per app plan	50 MB	400 MB	-
Flow per user plan	50 MB	200 MB	-
Flow per business process plan	50 MB	200 MB	-

Example:

Let's assumed that a new customer starts by purchasing 10 PowerApps per user licenses and 20 PowerApps per app licenses. In this case, the total tenant wide pooled capacity will be as follows:

Default and Accrued Capacity Allocation	Default/tenant	Accrued/10 Enterprise USL	Total Tenant wide capacity
Common Data Service Database Capacity	10GB	$10 \times 250\text{MB} + 20 \times 50\text{MB} = 3.5\text{GB}$	$10\text{GB} + 3.5\text{GB} = 13.5\text{GB}$
Common Data Service File Capacity	20GB	$10 \times 2\text{GB} + 20 \times 400\text{MB} = 28\text{GB}$	$20\text{GB} + 28\text{GB} = 48\text{GB}$
Common Data Service Log Capacity	2GB	NA	2GB

PowerApps and Flow Capacity Add-ons

If you require additional subscription capacity (such as additional database or file capacity), you can include these optional add-on licenses with your subscription. Subscription add-ons apply across tenant and are not tied to a specific user. Subscription add-ons can be purchased at any time and remain a part of the subscription for the remainder of the subscription term.

Common Data Service Capacity Add-ons

PowerApps apps or flows utilizing the Common Data Service will consume varying quantities of Database Capacity, File Capacity, and Log Capacity and may require different kinds of PowerApps and Flows environments. Apps may utilize flows, or flows may be run separately from apps.

Each type of per user license (Office 365, Dynamics 365 applications, the standalone PowerApps and Flow Plan licenses) include capacities of one or more of these basic resources. These entitlements are pooled, and shared across users, at the customer tenant level.

Subscription Capacity/tenant	Additional Increment
Common Data Service Database capacity	1GB
Common Data Service File capacity	1GB
Common Data Service Log capacity	1GB

AI Builder capacity add-on

Service overview

AI Builder helps empower everyone – regardless of their technical experience to work with Artificial Intelligence (AI). This solution helps easily add AI capabilities to both apps and business processes.

AI Builder supports various scenarios such as predictions, business card, and many more. For more information on AI Builder, please visit <https://powerapps.microsoft.com/ai-builder/>

Licensing overview

AI Builder is licensed as an add-on to PowerApps, Flow and Dynamics 365 licenses.

AI Builder is licensed on a capacity basis. AI Builder capacity is expressed in the form of “service credits”. Service credits serve as the single (common) currency across all the scenarios supported by AI Builder. Available service credits are deducted when AI Builder services are used. Different scenarios (for example, forms processing, prediction, etc.) burn down service credits at different rates.

Customers should purchase the appropriate number of AI Builder capacity add-on units based on anticipated usage across all scenarios.

Offer Details	
SKU name	AI Builder capacity add-on
License type	Tenant wide capacity license
Entitlement	1 million monthly service credits
Qualifying base licenses	PowerApps, Flow and Dynamics 365 licenses

Each unit of “AI Builder capacity add-on” includes 1 million service credits per month. For example, a customer requiring 4.7 million service credits per month (based on anticipated usage), should purchase 5 units of “AI Builder capacity add-on”.

Note:

- Purchased service credits can be used from AI Builder models included within Microsoft Flow, PowerApps and Dynamics 365 applications
- Service credits are deducted / consumed for both training and production usage
- Service credits are pooled across the tenant

Capacity enforcement

For AI Builder capacity add-on SKUs, purchased capacity is enforced monthly and unused service credit do not carry over month to month.

Overage handling

While occasional and reasonable overages will be tolerated, customers exceeding purchased capacity should adjust their purchase quantity per standard Microsoft terms to remain in compliance.

Comprehensive monitoring, reporting and alerting mechanisms will be instituted to assist customers with managing AI Builder capacity. More stringent technical enforcement (including service denial) will result for usage that is significantly over the purchased capacity.

Assignment of purchased capacity

Assignment of purchased capacity to appropriate Flows, PowerApps applications and Dynamics 365 workloads is managed in product. Assignment helps ensure capacity for critical AI models. The minimum capacity to be assigned is 1 service credit.

PowerApps and Flow capacity add-on

PowerApps and Flow capacity add-on increases the daily API request limit for PowerApps, Flow and Dynamics 365 users/workloads that need more usage capacity than their allocation. For more details on service limits and to learn about daily service limits applicable to various licenses, please visit <http://aka.ms/platformlimits>

Offer details	
SKU name	PowerApps and Flow capacity add-on
Base licenses	PowerApps, Flow, Office 365 and Dynamics 365 licenses
Capacity entitlement	Additional 10,000 daily API requests per unit
Capacity assignment	In product

Capacity enforcement

For PowerApps and Flow capacity add-on SKUs, purchased capacity is enforced daily and unused/unassigned API calls do not carry over from day to day. Also, the assigned capacity is specific to a user/flow

Overage handling

While occasional and reasonable overages will be tolerated, customers exceeding licensed capacity should adjust their purchase quantity per standard Microsoft terms to remain in compliance.

Assignment of purchased capacity

Upon purchase of the add-on subscription, the tenant admin will need to assign the purchased capacity to specific users and/or flows. Minimum capacity that needs to be assigned is 1,000 daily API requests

Trial and Implementation

Free Trials

You can sign-up for a free trial of PowerApps or Flow for details:

- PowerApps [here](#)
- Microsoft Flow [here](#)

Development and Testing with PowerApps and Flow

The free Community Plan is intended for individual use allowing developers to learn and build skills on PowerApps, Microsoft Flow and Common Data Service. To learn more, click [here](#).

Pricing

You can find PowerApps price lists here:

- PowerApps: <https://powerapps.microsoft.com/pricing>
- Flow: <https://flow.microsoft.com/pricing>

Additional Resources

Resource	Link
PowerApps and Flow Licensing Deck	https://go.microsoft.com/fwlink/?LinkId=2085130&clcid=0x409
PowerApps Service	https://powerapps.microsoft.com/
Flow Service	https://flow.microsoft.com/
Dynamics 365 Licensing Guide	https://go.microsoft.com/fwlink/?LinkId=866544&clcid=0x409
Dynamics 365 Business Central Licensing Guide	https://go.microsoft.com/fwlink/?LinkId=871590&clcid=0x409
Dynamics 365 Mixed Reality Licensing Guide	https://go.microsoft.com/fwlink/?LinkId=2090495&clcid=0x409

Appendix A: Terminology and Custom Entities

Administration: Administration is critical in order to establish boundaries and policies around the use of PowerApps in organizations

- Manage environments – space to store, and manage, and share data, apps, and flows
- Data policies – create and enforce policies that define how data can be shared

App (definition of PowerApps per app): An “app” is a combination of Power Platform assets that solves a specific business scenario

- Each “per app” license provides use rights to 1 Portal and 2 custom apps (model driven and/or canvas)
- No limits on other components (e.g., forms, dashboards, etc.)

Application Program Interface (API): Any form of application programming interface that provides access to a Microsoft service and any associated tools, including sample code that enables interactions with Microsoft's services, and documentation that Microsoft makes available under these TOU, and includes all elements, components, and executables of such API.

Application Types:

- **Canvas Apps:** Design and build a business application from a canvas in Microsoft PowerApps without writing code in a traditional programming language. Design the application by dragging and dropping elements onto a canvas, the designer has complete control over app layout.
- **Model-driven Apps:** Design is a component-focused approach to app development based on data model and business processes. Unlike canvas app development where the designer has complete control over application layout, with model-driven apps much of the layout is determined for you and largely designated by the components you add to the application.

Common Data Service: Common Data Service lets you store and manage data that's used by business applications.

Connector: It provides a way for users to connect their business data and leverage a set of pre-built actions and triggers to build their applications and workflows. Examples of connections: Common Data Service, SharePoint, SQL, OneDrive, Excel, Dynamics 365.

- **Standard Connector:** Data sources within the Microsoft 365 ecosystem. Examples: Excel, Outlook, SharePoint, LinkedIn. A list of standard connectors [here](#).
- **Premium Connector:** Business systems beyond Microsoft 365, require PowerApps Plan 1 or Plan 2. Examples: DocuSign, Zendesk, Jira Software.
- **Custom Connector:** To support more tailored scenarios, you can build custom connectors with their own triggers and actions. These connectors are function-based - data is returned based on calling specific functions in the underlying service. **Example:** Services that are not available as prebuilt connectors.
- **On-premises Connector:** Access on-premises data using a gateway. **Example:** Microsoft SQL Server.

CRUD: Create, read, update, and delete operations.

Entities: A set of records used to store data, similar to how a table stores data within a database. Entities let you model your business data for use within your organization business applications. Examples of entities: Account, Contact, Lead, Opportunity.

- **Standard entities:** Common Data Service provides set of business entities, out of the box, that represent most commonly used entities across business applications. **Examples:** Account, Appointment, Contact, Email, etc.
- **Custom entities:** Entities that are created by the customer/partner for a specific business need. For example, type of machine is not a standard entity, so you can create it as a custom entity.
- **Restricted entities:** Entities that requires a Dynamics 365 license for full access. Examples: Case, SAL, Knowledge Articles. For list of restricted entities click [here](#).

- **Complex entities:** These are entities that use complex server-side business logic. Any entity (whether standard or custom) becomes complex once the customer/partner associates the entity with the custom business logic. Example: any entity that uses a real-time workflow or code plug-in.

Flow (definition of Flow within app context): For both triggers and actions, Flows included within an embedding application can connect

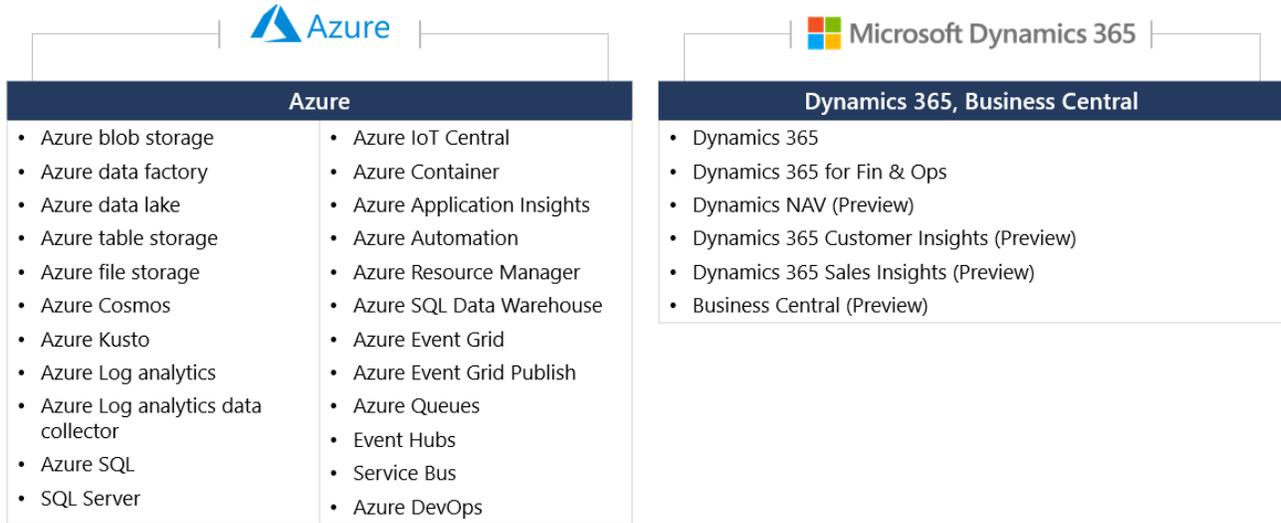
- To any data source within the use rights of the embedding application
- Directly with the embedding application (via built in trigger/action)

Workflows:

- **Background Workflows:** Task automation across systems and services. Runs in the background.
- **Real-time Workflows:** Task automation across systems and services. Runs in a real time manner.
- **Business Process Flows:** Structured stateful human interactive workflows which are composed of multiple steps, allows branching/stage gating, and includes process KPIs and reporting.

Appendix B: Standard Connectors moved to premium category

PowerApps and Flow rely on a common set of pre-built connectors to provide access to business data. These pre-built connectors are divided into two categories (Standard and Premium) which align to the use rights across the various service editions. For a complete list of the available data connectors click [here](#).



Appendix C: Licensing Channel / Segment Availability

License	Channel						Segment						
	EA	EAS	EES	CSP	MPSA	MOSP	CORP	FAC	STU	EDU	GOV	GCC	NFP
PowerApps per app plan	•	•	•	•	•	•	•	•	•	•	•	•	•
PowerApps per user plan	•	•	•	•	•	•	•	•	•	•	•	•	•
Flow per user plan	•	•	•	•	•	•	•	•	•	•	•	•	•
Flow per business process plan	•	•	•	•	•	•	•	•	•	•	•	•	•
PowerApps Portals login capacity add-on	•	•	•	•	•	•	•	•	•	•	•	•	•
PowerApps Portals login capacity add-on tier-2 ¹	•	•	•	•	•	•	•	•	•	•	•	•	•
PowerApps Portals login capacity add-on tier-3 ¹				•			•	•	•	•	•	•	•
PowerApps Portals page view capacity add-on	•	•	•	•	•	•	•	•	•	•	•	•	•
AI Builder capacity add-on	•	•	•	•	•	•	•	•	•	•	•	•	•
PowerApps and Flow capacity add-on	•	•	•	•	•	•	•	•	•	•	•	•	•
Common Data Service Database Capacity	•	•	•	•	•	•	•	•	•	•	•	•	•
Common Data Service File Capacity	•	•	•	•	•	•	•	•	•	•	•	•	•
Common Data Service Log Capacity	•	•	•	•	•	•	•	•	•	•	•	•	•

¹PowerApps Portals login capacity add-on tier 2 and tier 3 SKUs will be available December 1, 2019
 All other SKUs are available October 1, 2019

Appendix D: Dynamics 365 and Office 365 licenses that include PowerApps and Flow capabilities

Dynamics 365

Qualifying Licenses	
Dynamics 365 Sales Enterprise	Dynamics 365 Supply Chain Management
Dynamics 365 Sales Professional	Dynamics 365 Retail
Dynamics 365 Customer Service Enterprise	Dynamics 365 for Talent
Dynamics 365 Customer Service Professional	Dynamics 365 for Talent: Onboard
Dynamics 365 Field Service	Dynamics 365 Unified Operations – Activity
Dynamics 365 Project Service Automation	Dynamics 365 Business Central
Dynamics 365 Team Members	Dynamics 365 Business Central Team Members
Dynamics 365 Finance	

Office 365

Qualifying Licenses	
Office 365 Business Essentials	Office 365 A5 for Students
Office 365 Business Premium	Office 365 Education E3 for Faculty
Office 365 A1 for Faculty	Office 365 Education E3 for Students
Office 365 A1 for Students	Office 365 Education for Homeschool for Faculty
Office 365 A1 Plus for Faculty	Office 365 Education for Homeschool for Students
Office 365 A1 Plus for Students	Office 365 Enterprise E1
Office 365 A3 for Faculty	Office 365 Enterprise E2
Office 365 A3 for Students	Office 365 Enterprise E3
Office 365 A3 for Student Use Benefit	Office 365 Enterprise E3 Developer
Office 365 A5 for Student Use Benefit	Office 365 Enterprise E3 without ProPlus
Office 365 A5	Office 365 Enterprise E5
Office 365 A5 for Faculty	Office 365 Enterprise F1

Appendix E: Change Log

Page	Topic	Change	Action	Date
4-7	PowerApps plans	New	Capability	October 2019
7-9	PowerApps Portal	New	Capability	October 2019
9-13	Flow plans	New	Capability	October 2019
14	AI Builder Capacity	New	Capacity add-on	October 2019
15	PowerApps and Flow Capacity	New	Capacity add-on	October 2019

© 2019 Microsoft Corporation. All rights reserved.

This document is for informational purposes only. MICROSOFT MAKES NO WARRANTIES, EXPRESS OR IMPLIED, IN THIS DOCUMENT. This information is provided to help guide your authorized use of products you license; it is not your agreement. Your use of products licensed under your license agreement is governed by the terms and conditions of that agreement. In the case of any conflict between this information and your agreement, the terms and conditions of your agreement control. Prices for licenses acquired through Microsoft resellers are determined by the reseller.