

Power Apps

<https://www.youtube.com/watch?v=oB9oYjzOYHE>

The App gap change

The app gap challenge

A growing demand for apps - but not enough developers to build them

500 million

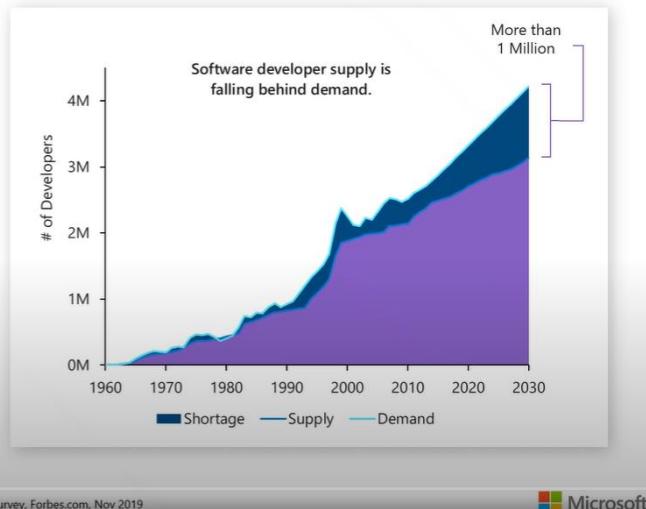
new apps will be built in the next 5 years –
more than all apps built in the last 40 years!¹

5x

Faster demand for mobile apps than IT
departments can deliver²

86%

of organizations struggle to find technical
talent to build applications³



The app gap challenge with Power Apps

The app gap challenge with Power Apps

Some processes are best solved by **off-the-shelf SaaS solutions**

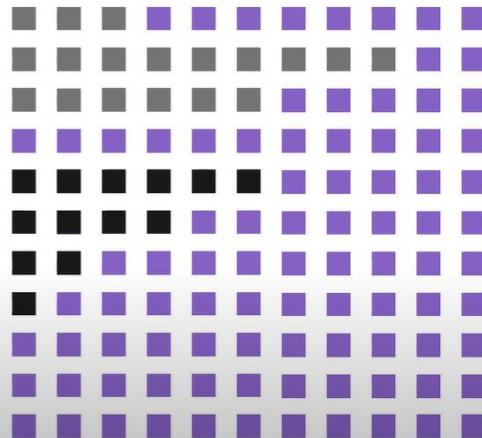
But there isn't always "an app for that"

Some processes are best solved by **traditional custom app development**

But there is only so much traditional custom app development an organization can invest in

Everything else is a missed opportunity to optimize and innovate

The Power Apps low-code development platform solves this for you



 Microsoft

Licensing Power Apps

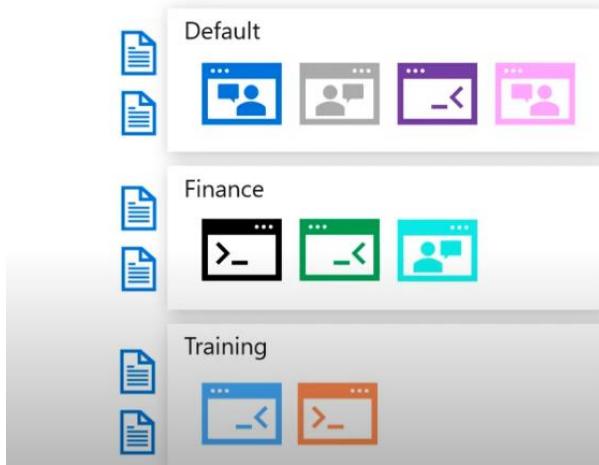
- Organization has bought
 - 6 per user licenses
 - 6 per apps licenses
- In this user case we have 3 environments
 - Default environment
 - Finance environment
 - Training environment
- **Jessica got Power App premium.** she needs access to **Default, Finance** as well as to **Training** environment.
- She can access **any environment**

Licensing Power Apps

Per User licenses



Per App licenses



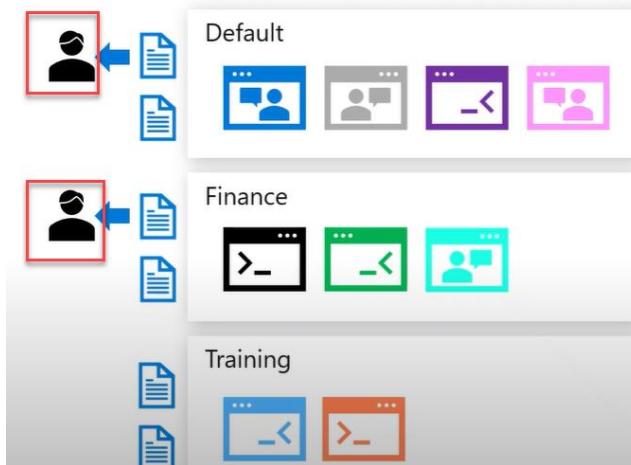
- Tom has for **Per app plan**.
- **Per App License** is tied to Environment and not users.

Licensing Power Apps

Premium licenses



Per App licenses



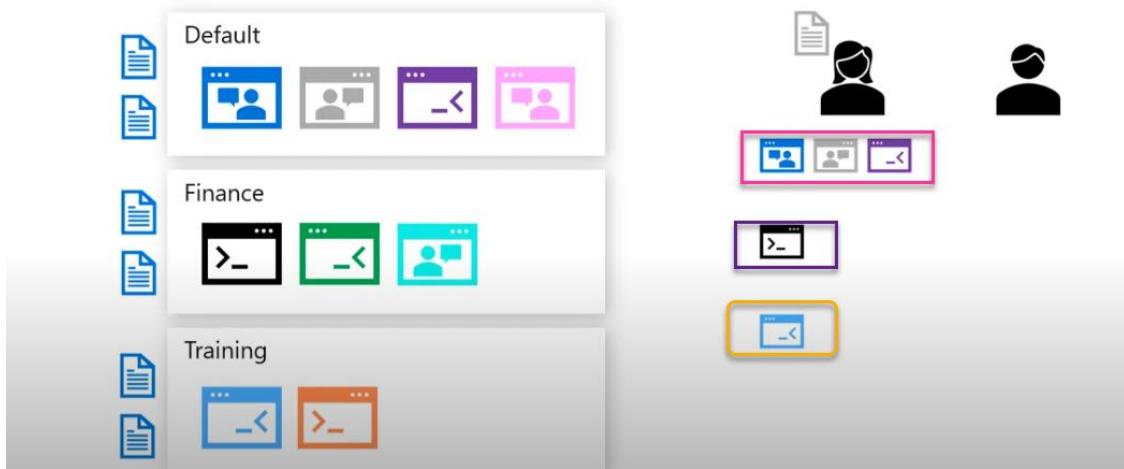
- User have shared their app with **Jessica**

Licensing Power Apps

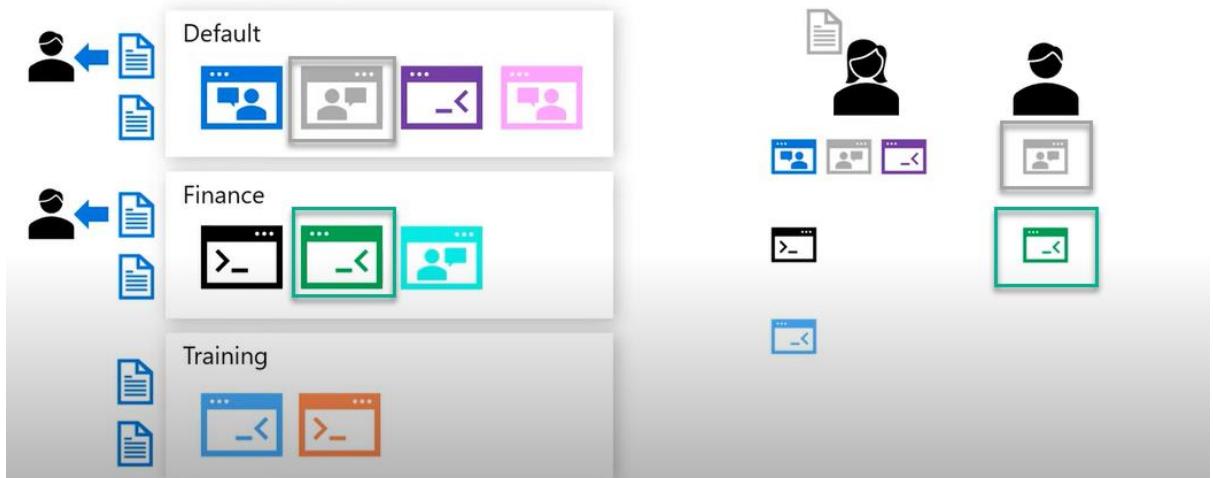
Per User licenses



Per App licenses



- **Charlotte** has **per user license**. She can access any app in any environment. She needs to license for what she needs to do.
- **Ryan** has **per app license**. Users can share app with Ryan.



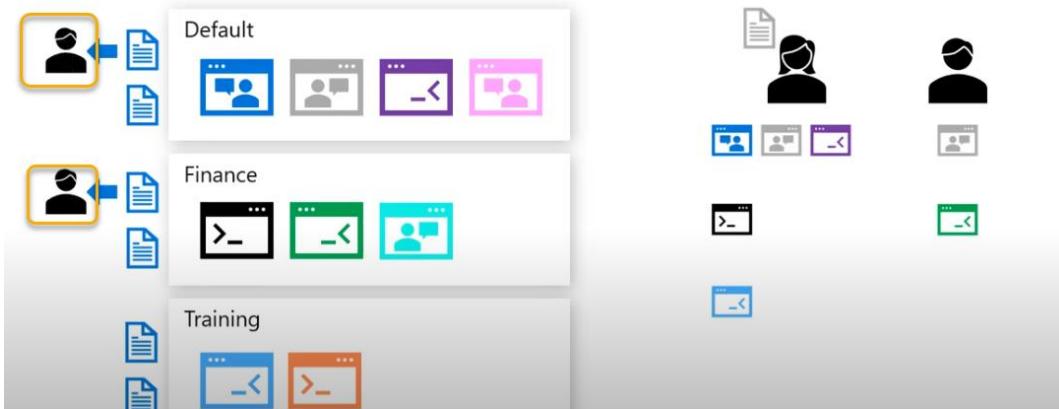
- Tom can access **2 Apps** for this per app license for **Default** and **Finance** environment.

Licensing Power Apps

Per User licenses



Per App licenses



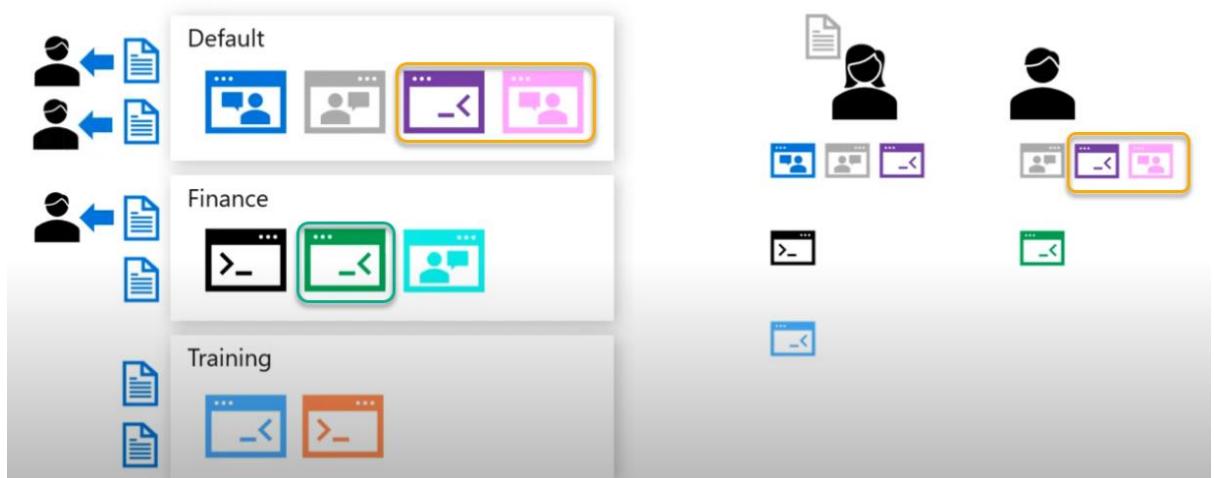
- If 3rd and 4th app is shared then additional license is required.

Licensing Power Apps

Per User licenses



Per App licenses



Power Apps Licensing options

- a) Jessica has Premium (any no of apps and portals across any environment)

Power Apps Premium



\$20 per user per month

- A single license enables a user to access **any number of apps and websites across any environments**
- Licenses are assigned to users via the **Microsoft 365 Admin Center**

Best for businesses that want **one license for **each user**, regardless of the number of apps they need to run**

- b) Tom can use 1 **apps** OR **1 portal**. License are assigned to 1 one environment.

Power Apps per App



\$5 per user per month

- A single license enables a user to access **1 app or 1 website within an environment**
- Licenses are assigned to one environment via the **Power Platform Admin Center**
- Licenses are allocated to users when an app in an environment is shared with a user

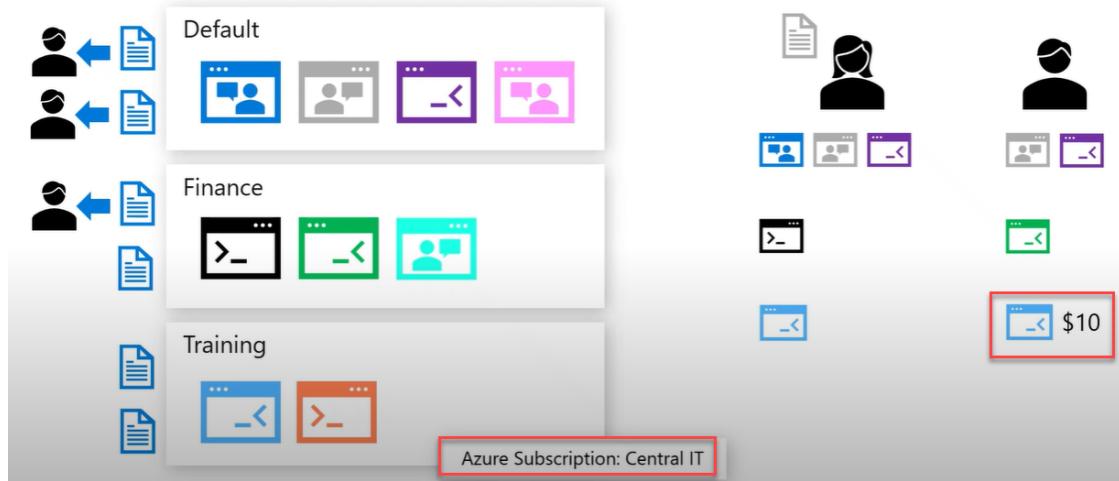
Best for businesses that want to license each user for a single app, with the flexibility to stack licenses for additional apps

- c) PAYG
- PAYG configured for Training environment.
 - Both **Jessica** and **Tom** are assigned to this environment.
 - No Problem to **Jessica** as she has premium license
 - But **Tom** will be charged if he uses this environment
 - Charge for Tom will be \$10.

Licensing Power Apps: PAYG

Premium licenses

Per App licenses



d) Dataverse

Dataverse

Dataverse lets you store and manage data that is used by Power Pages, Power Apps, Power Automate and Power Virtual Agents. Apps, flows or websites utilizing Dataverse will consume varying quantities of Dataverse Database, File, and Log capacity.

Power Apps Premium licenses

	Default entitlement	Accrued entitlement
Dataverse Database capacity	10 GB	250 MB
Dataverse File capacity	20 GB	2 GB
Dataverse Log capacity	2 GB	-

Further Dataverse capacity Add-ons are available in increments of 1 GB

Power Apps per App licenses

	Default entitlement	Accrued entitlement
Dataverse Database capacity	5 GB	50 MB
Dataverse File capacity	20 GB	400 MB
Dataverse Log capacity	2 GB	-

PAGY

Dataverse

Dataverse lets you store and manage data that is used by Power Pages, Power Apps, Power Automate and Power Virtual Agents. Apps, flows or websites utilizing Dataverse will consume varying quantities of Dataverse Database, File, and Log capacity.

PAYG environments



The screenshot shows the Microsoft Azure portal interface. In the top right corner, there's a white box labeled "Training" containing two icons: a blue one with a left arrow and an orange one with a right arrow. Below this, a grey box contains the text "Azure Subscription: Central IT".

Included entitlements:

- 1 GB Database capacity per environment
- 1 GB File capacity per environment

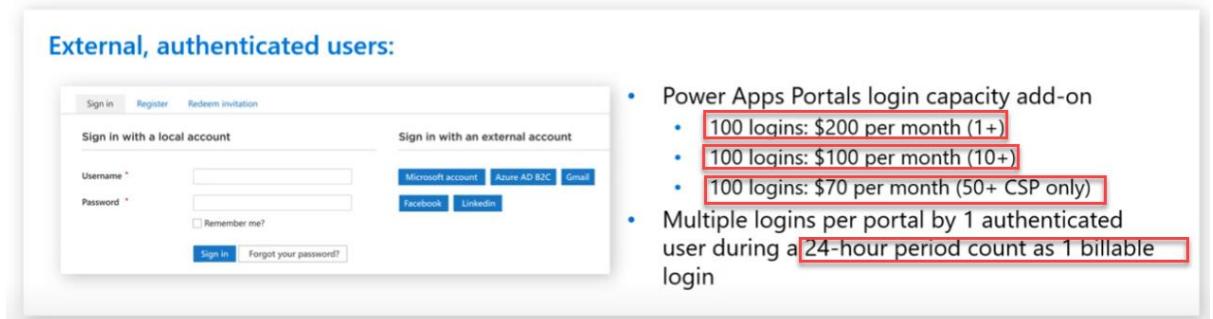
Add-on capacity meters:

- Dataverse Database capacity – \$48 per GB/month
- Dataverse File capacity – \$2.40 per GB/month
- Dataverse Log capacity – \$12 per GB/month

- e) External users
Self service

Licensing Power Apps portals

Power Apps portals are provisioned without requiring a specific license; user access is licensed



The screenshot shows a sign-in page for a Power Apps portal. It has two main sections: "Sign in with a local account" and "Sign in with an external account". The "Sign in with an external account" section includes links for Microsoft account, Azure AD B2C, Gmail, Facebook, and LinkedIn. Below the sign-in fields are "Remember me?" checkboxes and "Sign in" and "Forgot your password?" buttons.

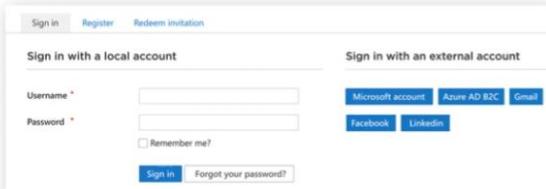
External, authenticated users:

- Power Apps Portals login capacity add-on
 - 100 logins: \$200 per month (1+)
 - 100 logins: \$100 per month (10+)
 - 100 logins: \$70 per month (50+ CSP only)
- Multiple logins per portal by 1 authenticated user during a 24-hour period count as 1 billable login

Licensing Power Apps portals

Power Apps portals are provisioned without requiring a specific license; user access is licensed

External, authenticated users:



The screenshot shows a sign-in interface for a Power Apps portal. It has two main sections: 'Sign in with a local account' and 'Sign in with an external account'. The local account section includes fields for 'Username' and 'Password', a 'Remember me?' checkbox, and 'Sign in!' and 'Forgot your password?' buttons. The external account section includes 'Microsoft account', 'Azure AD B2C', 'Gmail', 'Facebook', and 'LinkedIn' buttons.

- Power Apps Portals login capacity add-on
 - 100 logins: \$200 per month (1+)
 - 100 logins: \$100 per month (10+)
 - 100 logins: \$70 per month (50+ CSP only)
- Multiple logins per portal by 1 authenticated user during a 24-hour period count as 1 billable login

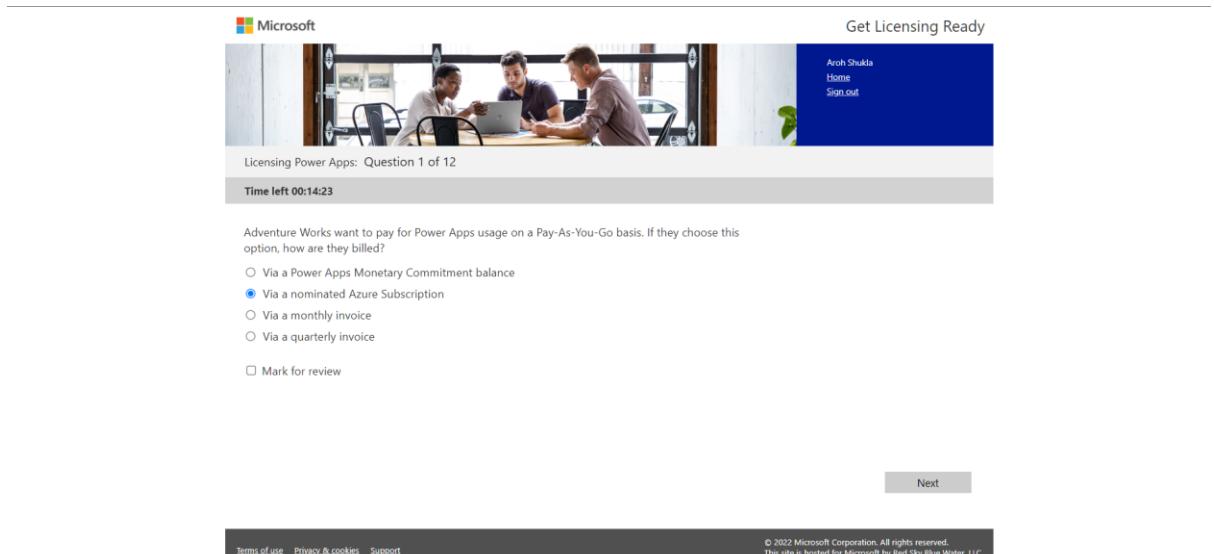
Internal, authenticated users:

- Power Apps per User: unlimited portals
- Power Apps per App: 1 portal per environment

Anonymous users:

- Power Apps Portals page view capacity add-on
- 100,000 page views: \$100 per month

Unused capacity does not carry forward to next month.



The screenshot shows a Microsoft quiz interface. At the top, there's a Microsoft logo and a 'Get Licensing Ready' button. Below that is a photo of three people working at a table. The main area is titled 'Licensing Power Apps: Question 1 of 12'. It shows a timer at 'Time left 00:14:23'. The question asks: 'Adventure Works want to pay for Power Apps usage on a Pay-As-You-Go basis. If they choose this option, how are they billed?'. The options are:

- Via a Power Apps Monetary Commitment balance
- Via a nominated Azure Subscription
- Via a monthly invoice
- Via a quarterly invoice

Below the options is a 'Mark for review' checkbox. At the bottom right is a 'Next' button. The footer contains links for 'Terms of use', 'Privacy & cookies', and 'Support', along with copyright information: '© 2022 Microsoft Corporation. All rights reserved. This site is hosted for Microsoft by Red Sky Blue Water, LLC.'

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Licensing Power Apps: Question 2 of 12

Time left 00:13:33

Users at Northwind Traders need to access 6 apps across 3 environments. Which is likely to be the most cost-effective licensing solution for them?

Power Apps per App licenses

Power Apps per User licenses

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Licensing Power Apps: Question 3 of 12

Time left 00:13:06

Users at Humongous Insurance need to access 2 apps across 2 environments. Which is likely to be the most cost-effective licensing solution for them?

Power Apps per User licenses

Power Apps per App licenses

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Licensing Power Apps: Question 4 of 12

Time left 00:12:31

Is this statement true or false: "Power Apps portals are provisioned without requiring a specific license; user access is licensed."

True

False

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Licensing Power Apps: Question 5 of 12

Time left 00:11:41

Users at Trey Research need to access 3 apps and 2 portals across 2 environments. Which is likely to be the most cost-effective licensing solution for them?

Power Apps per App licenses

Power Apps per User licenses

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Licensing Power Apps: Question 7 of 12

Time left 00:09:26

How many times **may a user access a single portal as an external, authenticated user when the relevant Power Apps Portals licenses have been purchased?**

Up to 100 times in a 10-hour period

As many times as required in a 24-hour period

As many times as required in a calendar month

As many times as required in an 8-hour period

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Licensing Power Apps: Question 8 of 12

Time left 00:08:20

Southridge Video **have 5 users** who need to be able to access any of **the 75 Power Apps apps across the organization. Which licenses would you recommend that Southridge Video acquire?**

A Power Apps Portals license

A Power Apps per Tenant license

Power Apps per User licenses for the 5 users

Power Apps per App licenses for the 75 apps

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Licensing Power Apps: Question 9 of 12

Time left 00:07:08

The Phone Company have purchased Power Apps per App licenses. What should the IT administrator do with these licenses?

- Assign them to an environment in the Power Platform Admin Center
- Assign them to a tenant in the Power Platform Admin Center
- Assign them to a user in the Power Platform Admin Center
- Assign them to an app in the Power Platform Admin Center

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Licensing Power Apps: Question 10 of 12

Time left 00:06:28

What do Power Apps per User licenses allow access to?

- An unlimited number of apps and portals within a single environment
- An unlimited number of apps and portals across any environments
- 2 apps and 1 portal within a single environment
- Up to 10 apps and portals across any environments

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Licensing Power Apps

Get Licensing Ready

Licensing Power Apps: Question 11 of 12

Time left 00:05:13

All of the users at Proseware, Inc are licensed with Power Apps per User licenses. Are they also entitled to access the 5 Power Apps portals that Proseware, Inc have developed?

Yes

No

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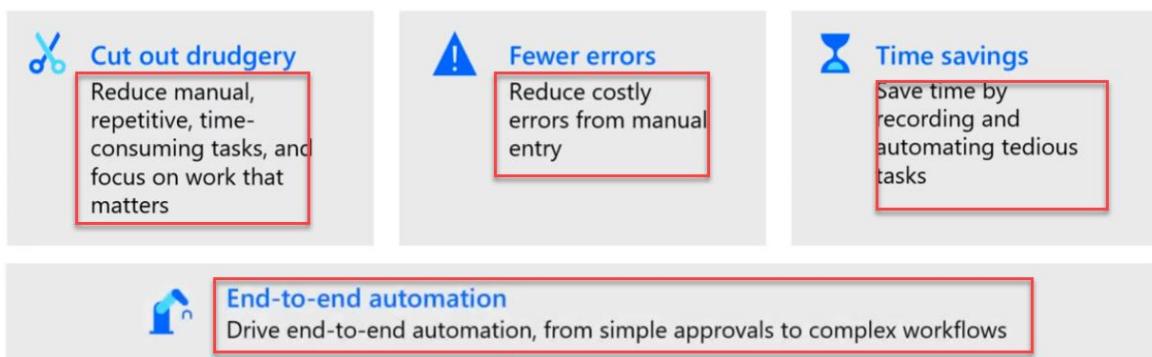
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Power Automate

<https://www.youtube.com/watch?v=qGom-zaD8YQ&t=3s>

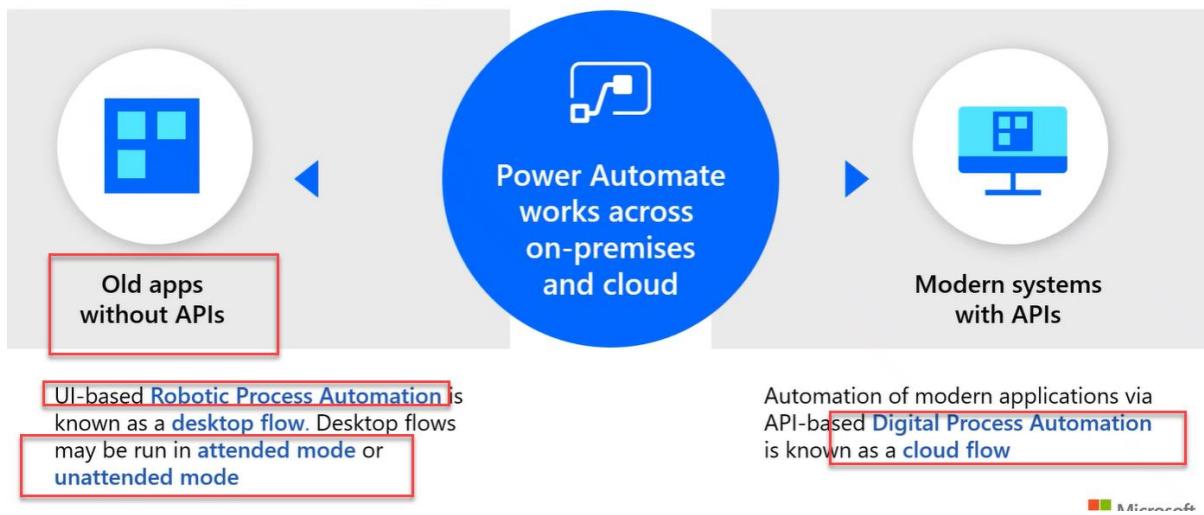
Case of process automation

The case for process automation



Automation for modern world

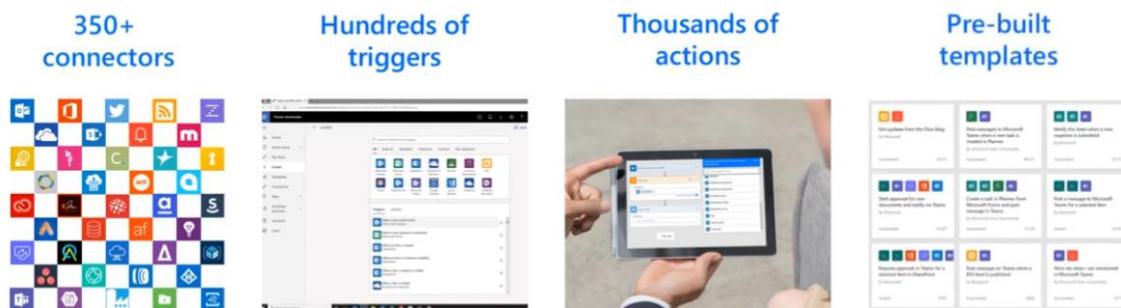
Automation for a modern world



Automating modern systems with APIs

Automating modern systems with APIs

Putting the power of automation into the hands of all users

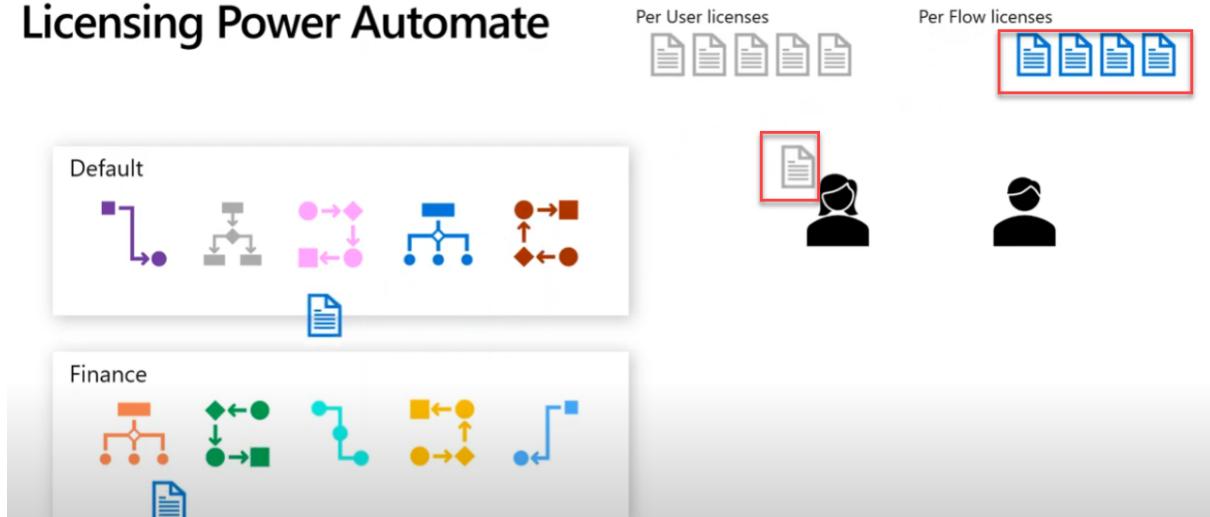


Licensing Power Automate

- In this user case we have **2 environments**
 - Default environment
 - Finance environment
- **Charlotte got premium license**
- Users share flows with **Charlotte**.

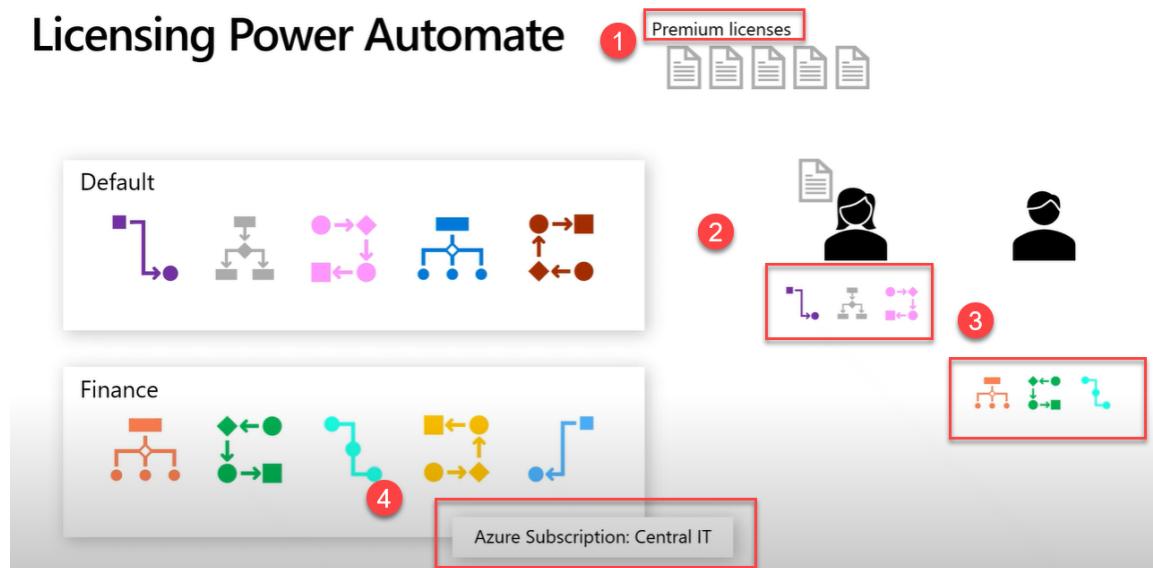
- **Per flow** is NOT assigned to users but to flow.

Licensing Power Automate



- Charlotte got **per user license**
 - She is allowed to **any flow in any environment**.
 - She is **FULLY licensed** for what she need to do.
- Ryan uses with **PAGY**
 - If he uses a flow, then it will be charged.
 - But he does not use the flow, he **WILL NOT** be charged.

Licensing Power Automate



Power Automate Licensing choices

- Charlotte got **Premium license (\$15 per user per month)**

- Power Automate per User
 - A single license enables a user to create and access **any number of flows** across **any environments**
 - Licenses are assigned to users via the Microsoft 365 Admin Center
- Best for businesses that want one license for **each user**, regardless of **the number of flows** they need to run
- Ryan uses Per PAGY
- Pay-As-You-Go meters
 - Per unique flow run
 - Cloud flows: \$0.60
 - Attended desktop flows: \$0.60
 - Unattended desktop flows: \$3.00
- Consumption is billed monthly against a nominated Azure Subscription
- Best for businesses that want the agility to pay only when a user runs a flow during a monthly period

- Power Automate Process

Power Automate Process



\$150 per bot per month

Licenses a single automation bot that can be used for:

- Unattended desktop flows
- A single cloud flow that can be accessed by unlimited users in an organization



- Power Automate Hosted RPA add-on

Power Automate Hosted RPA add-on



\$215 per bot per month

An Add-on to a Power Automate Premium license that allows users to run desktop flows as a service with hosted machine options



Power Automate Process Mining

Power Automate Process Mining

Overview

Power Automate Process Mining is a tool which can help customers to understand what is happening across their business and to reduce the complexity of their processes



Licensing

Power Automate Premium

- Each Power Automate Premium license accrues 50 MB of Process Mining data storage up to a cap of 100 GB per tenant

Process Mining Add-on

- A Process Mining Add-on to a Power Automate Premium license may also be purchased for an additional 100 GB of data storage, costing \$5,000 per tenant per month

Dataverse

Dataverse

Dataverse lets you store and manage data that is used by Power Pages, Power Apps, Power Automate and Power Virtual Agents. Apps, flows or websites utilizing Dataverse will consume varying quantities of Dataverse Database, File, and Log capacity.

Power Automate Premium licenses

	Default entitlement	Accrued entitlement
Dataverse Database capacity	10 GB	250 MB
Dataverse File capacity	20 GB	2 GB
Dataverse Log capacity	2 GB	-

Further Dataverse capacity Add-ons are available in increments of 1 GB

Power Automate Process licenses

	Default entitlement	Accrued entitlement
Dataverse Database capacity	5 GB	50 MB
Dataverse File capacity	2 GB	200 MB
Dataverse Log capacity	200 MB	-

Dataverse

Dataverse lets you store and manage data that is used by Power Pages, Power Apps, Power Automate and Power Virtual Agents. Apps, flows or websites utilizing Dataverse will consume varying quantities of Dataverse Database, File, and Log capacity.

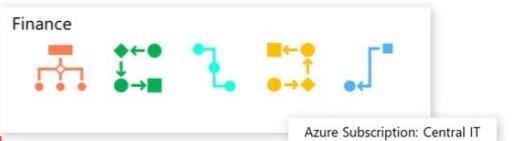
PAYG environments

Included entitlements:

- None

Add-on capacity meters:

- Dataverse Database capacity – \$48 per GB/month
- Dataverse File capacity – \$2.40 per GB/month
- Dataverse Log capacity – \$12 per GB/month



Azure Subscription: Central IT

Quiz

1.

Licensing Power Automate: Question 1 of 10

Time left 00:08:50

Margie's Travel need their users to access unlimited cloud flows and to initiate desktop flows. Which licenses should they acquire for these users?

- Power Automate Premium licenses
- Power Automate Premium + Power Automate Attended RPA add-on licenses
- Power Automate Premium + Power Automate Unattended RPA add-on licenses
- Power Automate Process licenses

Mark for review

Question 1

Margie's Travel need their users to access unlimited cloud flows and to initiate desktop flows. Which licenses should they acquire for these users?

✓ **Correct**

- Power Automate Premium licenses
- Power Automate Premium + Power Automate Attended RPA add-on licenses
- Power Automate Premium + Power Automate Unattended RPA add-on licenses
- Power Automate Process licenses

Score

2.

Licensing Power Automate: Question 2 of 10

Time left 00:08:14

The Phone Company are interested in paying for their desktop flow usage on a Pay-As-You-Go basis. How will they be charged for consumption of their flows?

- Via an annual invoice
 - Via a quarterly invoice
 - Via the pre-purchase of Power Automate Flow Credits
 - Via a nominated Azure Subscription
- Mark for review

Licensing Power Automate: Question 3 of 10

Time left 00:07:02

Wingtip Toys have a cloud flow that may be used by anyone in the business. How would you recommend that they license this flow?

- With a Power Automate Process license
- With a Power Automate Tenant license
- With a Power Automate Premium license
- With a Power Automate Hosted RPA license

Mark for review

3.

Question 3

Score: 0

Wingtip Toys have a cloud flow that may be used by anyone in the business. How would you recommend that they license this flow?

-  **Correct** With a Power Automate Process license
 **Incorrect** With a Power Automate Premium license
 With a Power Automate Tenant license
 With a Power Automate Hosted RPA license

Licensing Power Automate: Question 4 of 10

Time left 00:06:28

Is this statement true or false: "A desktop flow running in attended mode is initiated by a user."

- True
 - False
- Mark for review



Licensing Power Automate: Question 5 of 10

Time left 00:05:17

The Power Automate Hosted RPA license is an add-on license. What are the qualifying base licenses?

- Power Automate Premium licenses
 - Power Automate Process OR Power Automate Bot licenses
 - Power Automate Process OR Power Automate Process Mining licenses
 - Power Automate Premium OR Power Automate Process licenses
- Mark for review



Licensing Power Automate: Question 6 of 10

Time left 00:04:42

Northwind Traders have 10 users who may use any of 5 cloud flows in the organization each month.
How would you recommend that they license access to these flows?

- Using a Power Automate Hosted RPA license
 - Using a Power Automate Process license
 - Using Power Automate Premium licenses for the users
 - Using Pay-As-You-Go meters
- Mark for review



Licensing Power Automate: Question 7 of 10

Time left 00:03:06

Lucerne Publishing use Power Automate Process Mining. They have 10 Power Automate Premium licenses. In total, how much Process Mining data storage is included with their existing licenses?

- 50 MB
- 100 MB
- 250 MB
- 500 MB

Mark for review



Licensing Power Automate: Question 8 of 10

Time left 00:01:33

Tailspin Toys have purchased Power Automate Premium licenses. Where should the go to assign those licenses to the relevant users?

- This is done automatically as flows are shared with users
 - The Volume Licensing Service Center
 - The Microsoft 365 Admin Center
 - The Power Platform Admin Center
- Mark for review



Licensing Power Automate: Question 9 of 10

Time left 00:01:20

Woodgrove Bank will be purchasing Power Automate Premium licenses for their users. Will they receive any Dataverse capacity for their tenant with these licenses?

- Yes
- No

Mark for review



Licensing Power Automate: Question 10 of 10

Time left 00:00:17

How many cloud flows do Power Automate Premium licenses allow access to?

- An unlimited number of flows across any environments
- 2 flows within a single environment
- An unlimited number of flows within a single environment
- Up to 10 flows across any environments

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=====

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Licensing Power Automate: Question 1 of 10

Time left 00:11:34

Tailspin Toys have purchased Power Automate per User licenses. Where should the IT administrator go to assign those licenses to the relevant users?

The Volume Licensing Service Center

This is done automatically as flows are shared with users

The Power Platform Admin Center

The Microsoft 365 Admin Center

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Licensing Power Automate: Question 2 of 10

Time left 00:10:47

What do Power Automate per User licenses allow access to?

An unlimited number of flows within a single environment

2 flows within a single environment

An unlimited number of flows across any environments

Up to 10 flows across any environments

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Licensing Power Automate: Question 3 of 10

Time left 00:09:27

Southridge Video have 5 users who need to be able to access any of the 35 Power Automate flows across the organization. Which licenses would you recommend that Southridge Video acquire?

A Power Automate Portals license

Power Automate per Flow licenses for the 35 flows

A Power Automate per Tenant license

Power Automate per User licenses for the 5 users

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Licensing Power Automate: Question 4 of 10

Time left 00:07:07

Users at Trey Research need to automate processes in their legacy apps and to run those processes on their PCs. Which licenses should Trey Research acquire for these users?

Power Automate per User + Power Automate per User with Attended RPA licenses

Power Automate per User with Attended RPA licenses

Power Automate per User licenses

Power Automate per User + Power Automate Unattended RPA add-on licenses

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Licensing Power Automate: Question 5 of 10

Time left 00:05:27

Margie's Travel need their users to access Power Apps flows and to initiate desktop flows. Which licenses should they acquire for these users?

Power Automate per User + Power Automate Unattended RPA add-on licenses

Power Automate per User + Power Automate per User with Attended RPA licenses

Power Automate per User with Attended RPA licenses

Power Automate per User licenses

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Licensing Power Automate: Question 6 of 10

Time left 00:03:51

Fourth Coffee have assigned Power Automate per Flow licenses to their 7 flows. How many users in the organization may now use those flows?

Up to 100

Up to 500

Up to 1,000

An unlimited number

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Licensing Power Automate: Question 7 of 10

Time left 00:03:01

Is this statement true or false: "A desktop flow running in attended mode must run on the licensed user's desktop."

True

False

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Licensing Power Automate: Question 8 of 10

Time left 00:02:11

The Phone Company have purchased **Power Automate per Flow licenses**. What should the IT administrator do with these licenses?

Assign them to a tenant in the Power Platform Admin Center

Assign them to a flow in the Power Platform Admin Center

Assign them to a tenant in the Microsoft 365 Admin Center

Assign them to a flow in the Microsoft 365 Admin Center

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Licensing Power Automate: Question 9 of 10

Time left 00:01:42

Is this statement true or false: "A desktop flow running in unattended mode is triggered automatically in the background."

True

False

Mark for review

Get Licensing Ready

Aroh Shukla
Home
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Licensing Power Automate: Question 10 of 10

Time left 00:01:21

What is the **minimum purchase** for Power Automate per Flow licenses?

1

2

5

10

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Get Licensing Ready

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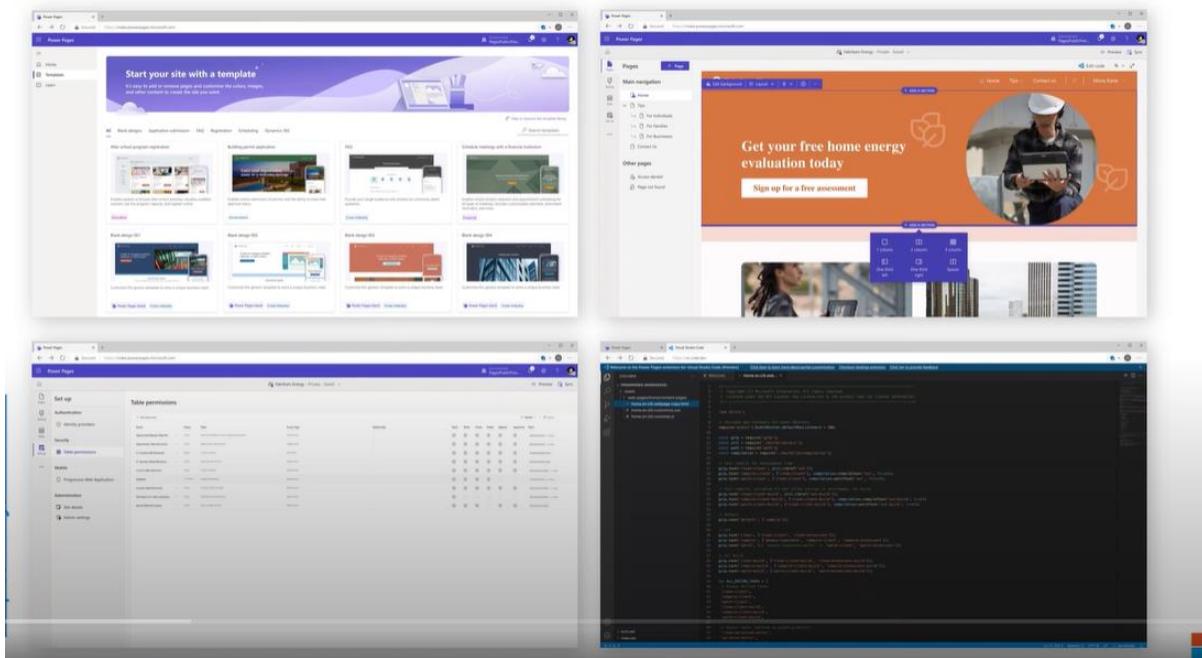
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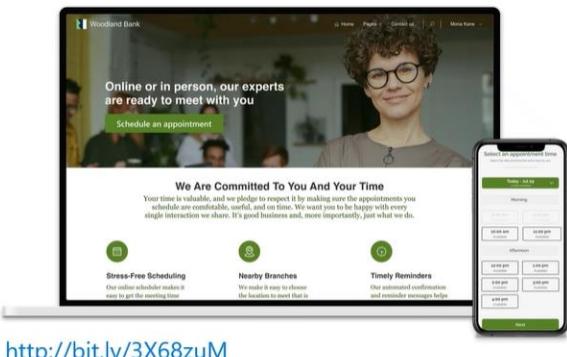
Power Pages

- Templates
- Development

Low code, No code



Microsoft Power Pages



- Any user can build Power Pages without writing any code.
- Developers can use code-first approach for more complex scenarios
- Data in Dataverse and use all Power Platform apps.

Licensing

Users

Users

- **Authenticated**

- Users who obtain access to a website by logging in through an authentication provider

- **Anonymous**

- Users who browse a website and don't log in



Authenticated users

- They can access to logging through **authentication providers** such as (Microsoft Entra ID, Azure AD B2C, Microsoft, LinkedIn, Facebook, Google, Twitter etc)

Reference: [Overview of authentication in Power Pages | Microsoft Learn](#)

Anonymous users

- Browse website without logging.

Commitment type: Authenticated users

Commitment type

- **Capacity licenses**

- Best for businesses that want predictable costs with volume-based plans that scale

- **PAYG**

- Best for businesses seeking the option to pay only when a user accesses a website

- Capacity licensing – Customers can choose to COMMIT to a 12-month term via capacity licensing.
 - Gives them predictable costs.
- PAYG –
 - Best for businesses seeking the option to pay ONLY when users access the website

Capacity licenses: authenticated users

Purchase user capacity licenses for the anticipated number of unique, authenticated users (internal or external) accessing a website during a month. A user logging in multiple times to one website in a calendar month is counted as one user

Tiers	Minimum requirement	Users/capacity pack	Price/capacity pack
Tier 1	100 users	100	\$200
Tier 2	10,000 users	100	\$75
Tier 3	100,000 users	100	\$50

Trey Research expect 5,000 unique authenticated users each month, what should they buy?

- $50 \times \text{Tier 1 capacity licenses} = 50 \times 200 = \$10,000$, OR
- $100 \times \text{Tier 2 capacity licenses} = 100 \times 75 = \$7,500$

- Unique Users (internal OR external): user who logs multiple times in calendar month is counted as 1 user.
- Uniqueness is determined by using the ID of the contact record that is in Microsoft Dataverse.

Tiers	Minimum requirement	Users / Capacity pack	Price / Capacity pack
Tier 1	100 users	100	\$200
Tier 2	10,000 users	100	\$75
Tier 3	100,000 user	100	\$50

Scenario 1

- Trey Research expects 5,000 unique authenticated users each month, what should they buy (Volume Licensing)?
- $50 * \text{Tier 1 capacity pack} = 50 * 200 = \$10,000$
- $100 * \text{Tier 2 capacity pack} = 100 * 75 = \$7,500$

Commitment type: Anonymous users

Capacity licenses: anonymous users

Purchase user capacity licenses for the anticipated number of unique, anonymous users accessing a website during a month. A user accessing one or more anonymous pages of one website in a calendar month is counted as one user

Tiers	Minimum requirement	Users/capacity pack	Price/capacity pack
Tier 1	500 users	500	\$75
Tier 2	10,000 users	500	\$37.50
Tier 3	100,000 users	500	\$25

Trey Research expect 40,000 unique anonymous users each month, what should they buy?

- 80 x Tier 2 capacity licenses

Tiers	Minimum requirement	Users / Capacity pack	Price / Capacity pack
Tier 1	500 users	500	\$75
Tier 2	10,000 users	500	\$37.50
Tier 3	100,000 user	500	\$25

Scenario 2

- Trey Research expects 40,000 unique anonymous users each month, what should they buy (Volume Licensing)?
- $40,000 / \text{divided by } 500 = 80 * \text{Tier 2 Capacity license}$
- Single Power Page license can support both authenticated and anonymous users

Pay as you go option

An Azure Subscription is used to pay only for the number of unique users who **authenticate** on a website each month:

\$4

per user/site/month



An Azure Subscription is used to pay only for the number of unique users who browse a website **anonymously** each month:

\$0.30

per user/site/month



- Measures by the number of **unique users** accessing website is TRACKED and charged to a chosen Azure subscription.

- There is Meter for **authenticated** user \$4 per/site/month
- There is Meter for **anonymous** user \$0.30 per/site/month

Capacity licenses OR PAGY



Capacity licenses or PAYG?

Fabrikam, Inc. have two Power Pages websites. They are evaluating how they should license these sites:



Customer services site

- Some pages require authentication
- Expected users: 500 authenticated users, 5,000 anonymous
- Capacity licenses: $5 \times \$200 + 10 \times \$75 = \$1,750$
- PAYG: $500 \times \$4 + 5,000 \times \$0.30 = \$3,500$



Partner onboarding site

- All pages require authentication
- Expected users: 25 authenticated users
- Subscription licenses: $1 \times \$200 = \200

Fabrikam has 2 Power Pages websites.

1. Customer Service Site
 - Some pages require authentication
 - Expected users: 500 Authenticated users, 5000 anonymous users.
 - Option 1 (Cost Effective): Capacity licensing $5 * \$200$ ([Price / Capacity pack](#)) $+ 10 * \$75$ ([Anonymous licensing](#)) $= \$1,750$
 - Option 2 (PAYG): $500 * \$4$ ([PAYG](#)) $+ 5,000 * \$0.3$ ([PAYG](#)) $= \$3,500$
2. Partner onboarding site
 - All pages require authentication.
 - Expected users = 25 authenticated users
 - Subscription licenses: $1 * \$200$ ([Price / Capacity pack](#)) $= \$200$
 - PAYG: $25 * \$4$ ([PAYG](#)) $= \$100$

Environment: capacity-based OR PAYG

- Environment need to be assigned to an environment.
- Licensing type and capacity license or PAYG is controlled at environment level

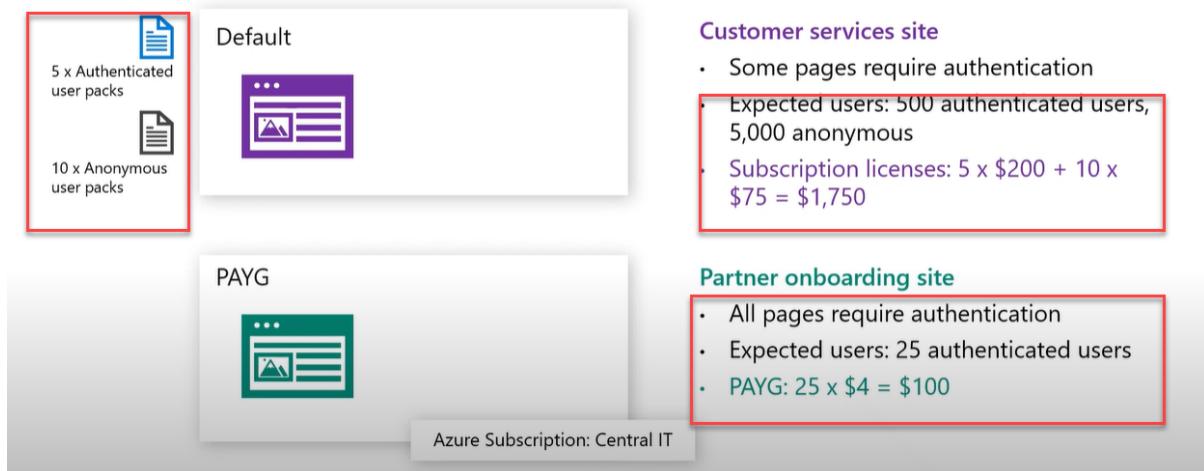
Customer Service site (Capacity)

- Some pages require authentication
- Expected users : 500 authenticated users, 5,000 anonymous users
- **Subscription licence:** Capacity licensing $5 * \$200$ ([Price / Capacity pack](#)) + $10 * \$75$ ([Anonymous licensing](#)) = \$1,750

Partner onboarding site (PAYG)

- All [pages require authentication](#).
- Expected users = 25 authenticated users
- PAYG: $25 * \$4$ ([PAYG](#)) = \$100

Environments: capacity-based or PAYG



Dataverse (Capacity)

Dataverse

Dataverse lets you store and manage data that is used by Power Pages, Power Apps, Power Automate and Power Virtual Agents. Apps, flows or websites utilizing Dataverse will consume varying quantities of Dataverse Database, File, and Log capacity.

Authenticated User Capacity licenses

	Default entitlement	Accrued entitlement
Dataverse Database capacity	5 GB	2 GB
Dataverse File capacity	-	16 GB
Dataverse Log capacity	-	-

Further Dataverse capacity Add-ons are available in increments of 1 GB

Anonymous User Capacity licenses

	Default entitlement	Accrued entitlement
Dataverse Database capacity	5 GB	500 MB
Dataverse File capacity	-	4 GB
Dataverse Log capacity	-	-

Subtitles/closed captions

Dataverse (PAYG)

Dataverse

Dataverse lets you store and manage data that is used by Power Pages, Power Apps, Power Automate and Power Virtual Agents. Apps, flows or websites utilizing Dataverse will consume varying quantities of Dataverse Database, File, and Log capacity.

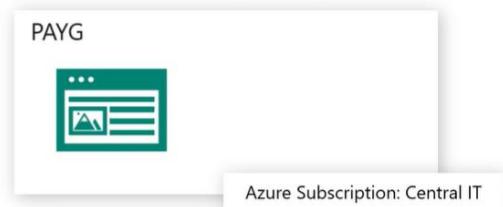
PAYG environments

Included entitlements:

- 1 GB Database capacity per environment
- 1 GB File capacity per environment

Add-on capacity meters:

- Dataverse Database capacity – \$48 per GB/month
- Dataverse File capacity – \$2.40 per GB/month
- Dataverse Log capacity – \$12 per GB/month



References – Power Pages

1. [Overview of authentication in Power Pages | Microsoft Learn](#)

Dataverse

Dataverse lets you store and manage data that is used by Power Pages, Power Apps, Power Automate and Power Virtual Agents. Apps, flows or websites utilizing Dataverse will consume varying quantities of Dataverse Database, File, and Log capacity.

Authenticated User Capacity licenses

	Default entitlement	Accrued entitlement
Dataverse Database capacity	5 GB	2 GB
Dataverse File capacity	-	16 GB
Dataverse Log capacity	-	-

Further Dataverse capacity Add-ons are available in increments of 1 GB

Anonymous User Capacity licenses

	Default entitlement	Accrued entitlement
Dataverse Database capacity	5 GB	500 MB
Dataverse File capacity	-	4 GB
Dataverse Log capacity	-	-



Dataverse

Dataverse lets you store and manage data that is used by Power Pages, Power Apps, Power Automate and Power Virtual Agents. Apps, flows or websites utilizing Dataverse will consume varying quantities of Dataverse Database, File, and Log capacity.

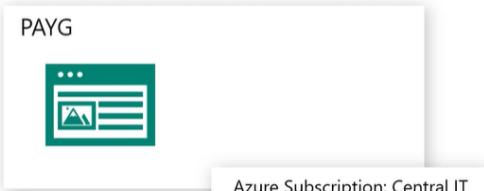
PAYG environments

Included entitlements:

- 1 GB Database capacity per environment
- 1 GB File capacity per environment

Add-on capacity meters:

- Dataverse Database capacity – \$48 per GB/month
- Dataverse File capacity – \$2.40 per GB/month
- Dataverse Log capacity – \$12 per GB/month



QUIZ

1. How does Power Pages Pay-As-You-Go charging work?

Time left 00:08:26

How does Power Pages Pay-As-You-Go charging work?

- Organizations are charged for the number of pages users visit
- Organizations are charged for the amount of minutes users spend on their sites
- Organizations are charged for the data consumed by visiting users
- Organizations are charged for the number of unique users who visit their sites

Mark for review

Next

2. Trey Research purchased capacity licenses for 300 users but only 125 unique users visited their site in the first month. Does unused capacity roll over to the next month?

Time left 00:08:05

Trey Research purchased capacity licenses for 300 users but only 125 unique users visited their site in the first month. Does unused capacity roll over to the next month?

- Yes
- No

Mark for review

Previous

Next

3. Northwind Traders have a Power Pages site which has visits from three categories of users: 100 users visit it once in the month, a different 150 users visit it twice in the month, and a further 200 users visit it three times in the month. How many users do Northwind Traders need to license?



Licensing Power Pages: Question 3 of 8

Time left 00:05:10

Northwind Traders have a Power Pages site which has visits from three categories of users: 100 users visit it once in the month, a different 150 users visit it twice in the month, and a further 200 users visit it three times in the month. How many users do Northwind Traders need to license?

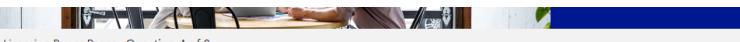
- 200
- 450
- 1,000
- 1,350

Mark for review

[Previous](#)

[Next](#)

4. What is Power Pages used to create?



Licensing Power Pages: Question 4 of 8

Time left 00:04:34

What is Power Pages used to create?

- Websites
- Business applications for mobile devices
- Dashboards and reports
- Workflow-driven apps

Mark for review

[Previous](#)

[Next](#)

5. Can one environment support both capacity licenses and Pay-As-You-Go billing for a Power Pages site?

Time left 00:03:48

Can one environment support both capacity licenses and Pay-As-You-Go billing for a Power Pages site?

- Yes
- No

Mark for review

[Previous](#)

[Next](#)

6. Fourth Coffee are interested in purchasing capacity licenses for Power Pages. What is the minimum duration commitment they must make?

Licensing Power Pages: Question 6 of 8

Time left 00:03:11

Fourth Coffee are interested in purchasing capacity licenses for Power Pages. What is the minimum duration commitment they must make?

1 month
 3 months
 12 months
 There is no minimum duration commitment

Mark for review

[Previous](#) [Next](#)

7. Can one Power Pages site support both anonymous and authenticated users?

Licensing Power Pages: Question 7 of 8

Time left 00:02:37

Can one Power Pages site support both anonymous and authenticated users?

Yes
 No

Mark for review

[Previous](#) [Next](#)

8. Volume pricing is offered for Power Pages capacity licenses. How many pricing tiers are there?

Licensing Power Pages: Question 8 of 8

Time left 00:01:55

Volume pricing is offered for Power Pages capacity licenses. How many pricing tiers are there?

2
 3
 4
 5

Mark for review

[Previous](#) [Next](#)

Power BI

https://www.youtube.com/watch?v=_FMsNCFPa1Y

What is Power BI?

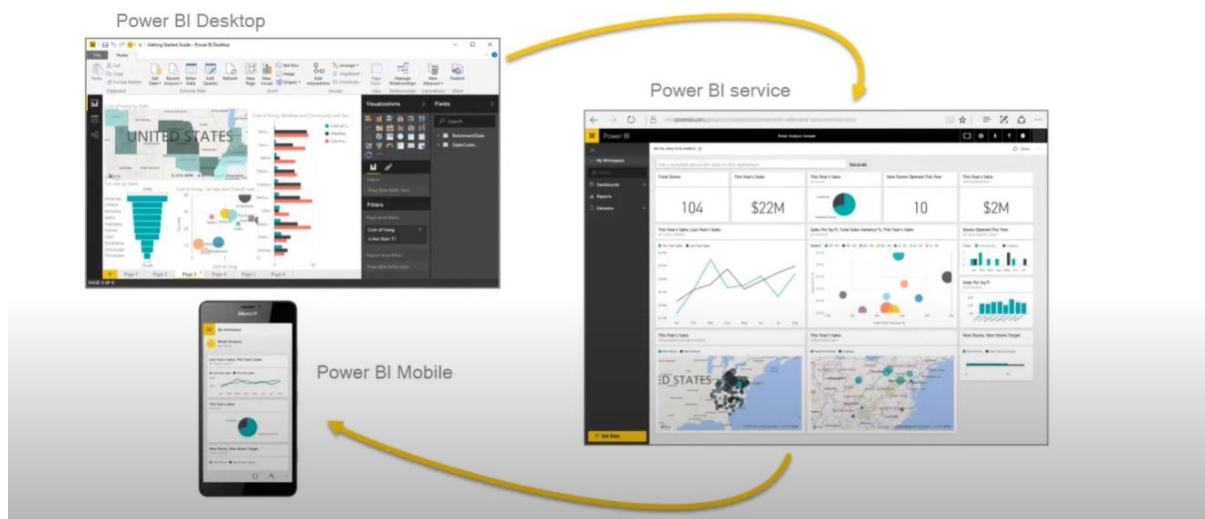
What is Power BI?

Microsoft Power BI is a collection of software services, apps, and connectors that work together to turn your unrelated sources of data into coherent, visually immersive, and interactive insights. Whether your data is a simple Microsoft Excel workbook, or a collection of cloud-based and on-premises hybrid data warehouses, **Power BI** lets you easily connect to your data sources, visualize (or discover) what's important, and share that with anyone or everyone you want.



An overview of Power BI

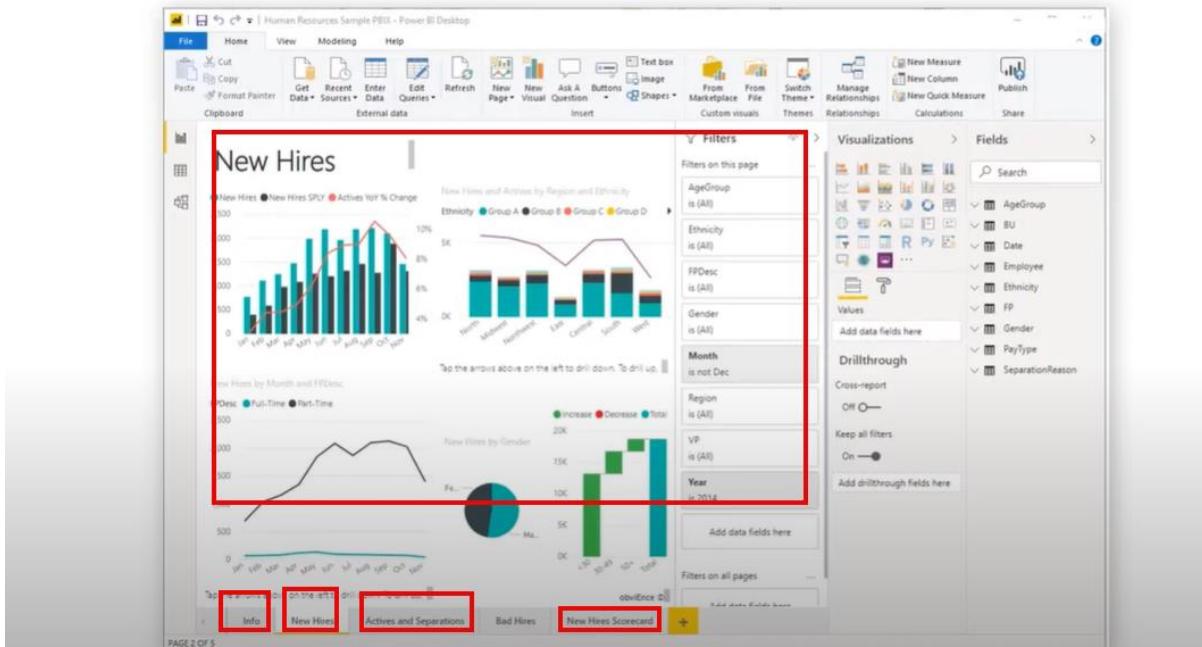
An overview of Power BI



- PBI Desktop – Free , PBI Content Created by users
- PBI Service - Paid – Publish to other
- PBI Mobile – Paid – Publish via app

Power BI Report

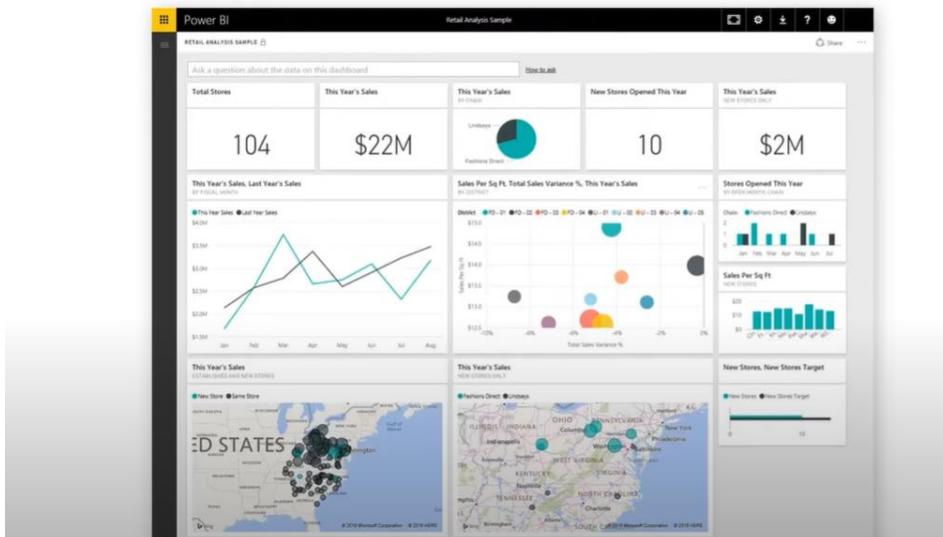
Power BI reports



- What is a report? Collection of visualizations that appear on one or more pages.

PBI Dashboards

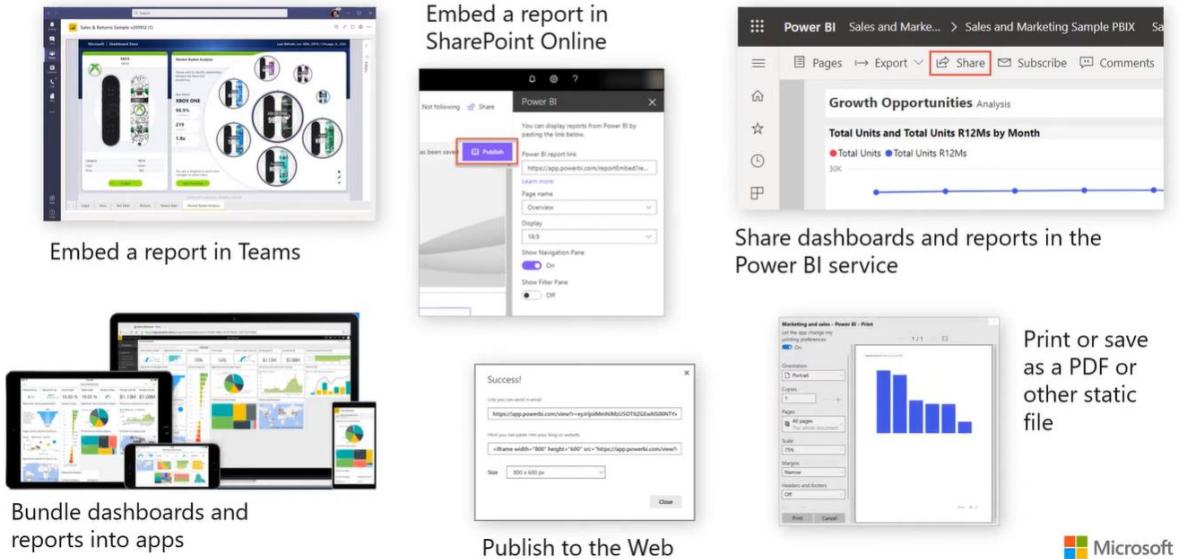
Power BI dashboards



- Collection of visualizations on SAME page,

Ways to share information in PBI

Ways to share information in Power BI



- Publish to the web – publicly open to all the world.

Licensing Power BI

Licensing Power BI

Power BI Desktop

- Free download to create Power BI content

Power BI (free)

- Use of Power BI service to connect to data and create reports and dashboard
- **Can't share content with other people**

Power BI Pro

- \$9.99 per user per month
- Included in Office 365 E5 / Microsoft 365 E5
- Use of Power BI service
- **Required for all users who share content**
- **Required for all users who consume shared content, apart from content published to the web, or printed content**

Power BI Mobile

- Free apps for iOS and Android
- **Power BI Pro license required**
- Reports can be annotated and shared with anyone via email
- If a recipient has a Power BI Pro license, they can go to the actual report on the Power BI service



Scenario



Lucerne
Publishing

Licensing scenario

Customer profile

- Lucerne Publishing have a total of 5,000 users
- Of these users, 70 will create Power BI content and the rest will consume it

Required licenses

- 5,000 x Power BI Pro licenses = $5,000 \times \$9.99 = \$49,950$ per month

Alternative solution

- License the content creators with Power BI Pro licenses
- License the rest of the organization on a capacity-basis via Power BI Premium
- $70 \times \$9.99 + ?$

Power BI Premium

Power BI Premium

Availability

Node	Virtual cores
Power BI Premium P1	8
Power BI Premium P2	16
Power BI Premium P3	32
Power BI Premium P4	64
Power BI Premium P5	128

- Available through EA, CSP, or Web Direct

Benefits

- Enables widespread distribution of reports without the need to purchase user licenses for consumers
- Dedicated Power BI service resources supporting more dependable performance and larger data volumes

Microsoft

Microsoft Power BI Premium

White Paper

By Amir Netz, Technical Fellow, Microsoft Corp.

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Microsoft Power BI Premium White Paper
October 2017

<https://bit.ly/32RnbEB>

EM series

Power BI Premium

Availability

Node	Virtual cores
Power BI Premium P1	8
Power BI Premium P2	16
Power BI Premium P3	32
Power BI Premium P4	64
Power BI Premium P5	128

- Available through EA, CSP, or Web Direct

Rights

- Embed a report in Teams
- Embed a report in SharePoint Online
- Share dashboards and reports in the Power BI service
- Bundle dashboards and reports into apps

Availability

Node	Virtual cores
Power BI Premium EM1	1
Power BI Premium EM2	2
Power BI Premium EM3	4

- Available through EA, or Web Direct (EM3 only)

Rights

- Embed a report in Teams
- Embed a report in SharePoint Online

Reporting Server

Rights to Power BI Report Server

- Purchase Power BI Premium P SKUs
- Customers with active SA on SQL Server Enterprise Core licenses

Deployment options

Power BI Report Server deployment options			
Power BI Report Server license acquired through	Dedicated hardware	Azure VM	Other cloud providers
1. Power BI Premium	✓	✓	
2. SQL Server EE + SA benefit	✓	✓	

- Deploy across a number of cores equivalent to the number of qualifying licenses

Licensing

- Power BI Pro licenses required for content publishers
- No additional licenses required for content consumers

Power BI Premium per User

Power BI Premium per User

A new option to access Power BI Premium features on a user-licensed basis

Power BI Premium per User

- \$20 per user per month
- Standalone license
- Includes all Power BI Pro features and access to Premium features

Power BI Premium per User Add-on

- \$10 per user per month
- Add-on license for users already licensed with Power BI Pro, Office 365 E5 or Microsoft 365 F5
- Access to Premium features

Available through EA, CSP, or Web Direct



Power BI Embedded Apps

Power BI Embedded apps

The screenshot shows a desktop application window titled "C2B ProprepPay". The main area displays a "Submit Claims for Analytics and Retrieve Results" section with instructions and a "Drag and Drop Claims File Here" input field. Below this is a "File Status" section with a "Browse to Claims File" button. At the bottom, there's a table with columns: File Name, Date Submitted, Submitted By, Status, Analysis, Not Analyzed, WIP Requests, and ProprepPay Requests. Three rows are listed:

File Name	Date Submitted	Submitted By	Status	Analysis	Not Analyzed	WIP Requests	ProprepPay Requests
1234567890Claims.xlsx	Jan 29, 2017	Vera Hobson	Completed	262	0	000 Requests	0 Requests
1234567890Claims.xlsx	Jan 29, 2017	Samantha Carlson	Completed	262	0	000 Requests	0 Requests
1234567890Claims.xlsx	Jan 29, 2017	Maria Rodriguez	Completed	000	0	000 Requests	0 Requests

The screenshot shows a desktop application window titled "C2B ProprepPay Dashboard". The main area displays several analytical visualizations: a circular gauge chart labeled "File Summary" with a value of 272.92K, a bar chart titled "ProprepPay Data Type", a treemap chart titled "Claim Amount by Footer Name", a bar chart titled "Claim Recovery Rate", and a line chart titled "Number of Pending Requests".

Power BI Embedded

Intended for ISVs or application developers who are building applications and want to embed visuals into those applications and web-portals without building an analytics solution from the ground up

Availability

Node	Virtual cores
A1	1
A2	2
A3	4
A4	8
A5	16
A6	32

Purchasing

- Acquired as an Azure consumption service
- Billing is hourly, based on minutes the capacity is running, and there is no commitment
- The service can be paused while it is not in use
- Capacity can be scaled up and down as needed, based on demand, in order to optimize cost
- Available through EA, CSP, or Web Direct

Licensing

- Power BI Pro license required for content publisher
- No additional licenses required for content consumers

Power BI for embedding

	A SKU (Power BI Embedded)	EM SKU (Power BI Premium)	P SKU (Power BI Premium)
Availability	EA, CSP, Web Direct	EA, Web Direct	EA, CSP, Web Direct
Use cases	1. Embed content in your own application	1. Embed content in your own application 2. Share content by embedding in SharePoint and Teams	1. Embed content in your own application 2. Share content by embedding in SharePoint and Teams 3. Share content and apps through the Power BI service
Pricing	Hourly	Monthly	Monthly
Commitment	Consumption-based	12 months	12 months

Quiz

- Northwind Traders have 15 users who will create Power BI content and 45 users who will consume that content. What licenses should they acquire?

Licensing Power BI: Question 1 of 12

Time left 00:14:14

Northwind Traders have 15 users who will create Power BI content and 45 users who will consume that content. What licenses should they acquire?

- 15 Power BI Pro licenses and 45 Power BI (free) licenses
- 15 Power BI Pro licenses and 45 Power BI Mobile licenses
- 60 Power BI Pro licenses
- 60 Power BI service licenses

Mark for review

Question 1

Northwind Traders have 15 users who will create Power BI content and 45 users who will consume that content. What licenses should they acquire?

- 15 Power BI Pro licenses and 45 Power BI (free) licenses
- 15 Power BI Pro licenses and 45 Power BI Mobile licenses
- 60 Power BI Pro licenses
- 60 Power BI service licenses

2. **Consolidated Messenger** can see that they can purchase EM or P SKUs for Power BI Premium. Which of the following will they NOT be able to do if they acquire the EM SKUs? Choose two answers.

Consolidated Messenger can see that they can purchase EM or P SKUs for Power BI Premium. Which of the following will they NOT be able to do if they acquire the EM SKUs? Choose two answers.

- Embed a report in SharePoint Online
 - Embed a report in Teams
 - Share dashboards and reports in the Power BI service
 - Bundle dashboards and reports into apps
- Mark for review

3. Margie's Travel have 20 users who will create Power BI content. They will create reports which will be printed and made available to the other 120 users in the organization. What licenses should Margie's Travel acquire?

Margie's Travel have 20 users who will create Power BI content. They will create reports which will be printed and made available to the other 120 users in the organization. What licenses should Margie's Travel acquire?

- 140 Power BI Pro licenses
- 20 Power BI Pro licenses and 120 Power BI (free) licenses
- 20 Power BI Pro licenses
- 140 Power BI service licenses

Mark for review

4. How are customers eligible for the rights to use Power BI Report Server? Choose two answers.

How are customers eligible for the rights to use Power BI Report Server? Choose two answers.

- By purchasing Software Assurance on SQL Server Standard or Enterprise Core licenses
 - By purchasing Software Assurance on SQL Server Enterprise Core licenses
 - By purchasing Power BI Premium P SKUs
 - By purchasing Power BI Premium P or EM SKUs
- Mark for review

5. Wide World Importers are interested in Power BI Premium. What options do they have for licensing this service? Choose two answers.

Licensing Power BI: Question 5 of 12

Time left 00:06:29

Wide World Importers are interested in Power BI Premium. What options do they have for licensing this service? Choose two answers.

- By server
- By capacity
- By user
- By data center
- By tenant

Mark for review

6. Fourth Coffee have created a Power BI dashboard that they would like to share with a small number of external users via publishing to the web. Are they able to do this?

Licensing Power BI: Question 6 of 12

Time left 00:05:53

Fourth Coffee have created a Power BI dashboard that they would like to share with a small number of external users via publishing to the web. Are they able to do this?

- Yes
- No

Mark for review

7. Which tool do users use to create Power BI content?

Which tool do users use to create Power BI content?

- Excel
- Teams
- Power BI Mobile
- Power BI Desktop

Mark for review

8. Fabrikam, Inc are an ISV who build applications with embedded Power BI visuals. How should they license the users publishing content and the users consuming the content through an app?

Time left 00:04:11

Fabrikam, Inc are an ISV who build applications with embedded Power BI visuals. How should they license the users publishing content and the users consuming the content through an app?

- Power BI Pro for publishers only
 - Power BI Embedded for all users
 - Power BI Pro for publishers, and Power BI (free) for consumers
 - Power BI Embedded for publishers, and Power BI Pro for consumers
 - Power BI Pro for all users
- Mark for review

9. Lucerne Publishing have 50 users who will consume Power BI content via the Power BI app on their iPhones. What licenses should Lucerne Publishing acquire?

Lucerne Publishing have 50 users who will consume Power BI content via the Power BI app on their iPhones. What licenses should Lucerne Publishing acquire?

- 50 Power BI Mobile licenses
- 50 Power BI (free) licenses
- 50 Power BI Pro licenses
- 50 Power BI service licenses

Mark for review

10. Fabrikam, Inc are an ISV who build applications and want to include Power BI visuals into those applications. What should they use to achieve this?

Fabrikam, Inc are an ISV who build applications and want to include Power BI visuals into those applications. What should they use to achieve this?

- Power BI Premium
- Power BI Embedded
- Power BI Pro
- Power BI Mobile

Mark for review

11. Fabrikam, Inc are an ISV who build applications and want to include Power BI visuals into those applications. What should they use to achieve this?

Blue Yonder Airlines have the rights to use Power BI Report Server to share reports in their organization. What licenses should they acquire for users who will consume these reports?

- There are no licensing requirements for users who consume the reports
- Power BI Pro licenses
- Power BI (free) licenses
- Power BI Report Server CALs

Mark for review

Question 11 Score: 0
Blue Yonder Airlines have the rights to use Power BI Report Server to share reports in their organization. What licenses should they acquire for users who will consume these reports?
 Correct There are no licensing requirements for users who consume the reports
 Incorrect Power BI Pro licenses
 Power BI (free) licenses
 Power BI Report Server CALs

12.

Trey Research has licensed all of its users with Microsoft 365 E5 licenses. Are these users licensed to use Power BI Pro?

Licensing Power BI: Question 12 of 12
Time left 00:00:02

Trey Research has licensed all of its users with Microsoft 365 E5 licenses. Are these users licensed to use Power BI Pro?
 Yes
 No
 Mark for review

13.

Microsoft Licensing Power BI: Question 1 of 12 Get Licensing Ready
Time left 00:14:40

Fourth Coffee have created a Power BI dashboard that they would like to share with a small number of external users via publishing to the web. Are they able to do this?
 Yes
 No
 Mark for review

Question 1 Score: 0
Fourth Coffee have created a Power BI dashboard that they would like to share with a small number of external users via publishing to the web. Are they able to do this?
 Incorrect Yes
 Correct No



Licensing Power BI: Question 2 of 12

Time left 00:13:57

Which tool do users use to create Power BI content?

Power BI Desktop

Power BI Mobile

Excel

Teams

Mark for review

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Licensing Power BI: Question 3 of 12

Time left 00:13:16

Northwind Traders have 15 users who will create Power BI content and 45 users who will consume that content. What licenses should they acquire?

15 Power BI Pro licenses and 45 Power BI Mobile licenses

60 Power BI service licenses

15 Power BI Pro licenses and 45 Power BI (free) licenses

60 Power BI Pro licenses

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Question 3 Score: 0

Northwind Traders have 15 users who will create Power BI content and 45 users who will consume that content. What licenses should they acquire?

15 Power BI Pro licenses and 45 Power BI Mobile licenses

60 Power BI service licenses

15 Power BI Pro licenses and 45 Power BI (free) licenses

✗ Incorrect

✓ Correct

Licensing Power BI: Question 4 of 12

Time left 00:12:45

Wide World Importers are interested in Power BI Premium. What options do they have for licensing **this service?** Choose two answers.

By user
 By capacity
 By tenant
 By data center
 By server

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Licensing Power BI: Question 5 of 12

Time left 00:11:11

Wingtip Toys have licensed all of their users with Power BI Pro licenses and now want those users to **have access to Power BI Premium features. What licenses should they acquire?**

Microsoft 365 E5 licenses
 Power BI Premium per User licenses
 Power BI Pro Add-on licenses
 Power BI Premium per User Add-on licenses

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Licensing Power BI: Question 6 of 12

Time left 00:09:19

Fabrikam, Inc are an ISV who build applications with embedded Power BI visuals. How should they license the users publishing content and the users consuming the content through an app?

- Power BI Pro for publishers only
- Power BI Pro for publishers, and Power BI (free) for consumers
- Power BI Embedded for all users
- Power BI Pro for all users
- Power BI Embedded for publishers, and Power BI Pro for consumers

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Question 6

Score: 0

Fabrikam, Inc are an ISV who build applications with embedded Power BI visuals. How should they license the users publishing content and the users consuming the content through an app?

✓ **Correct** Power BI Pro for publishers only

✗ **Incorrect** Power BI Pro for publishers, and Power BI (free) for consumers



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Licensing Power BI: Question 7 of 12

Time left 00:08:15

Margie's Travel have 20 users will create Power BI content. They will create reports which will be printed and made available to the other 120 users in the organization. What licenses should Margie's travel acquire?

- 20 Power BI Pro licenses
- 20 Power BI Pro licenses and 120 Power BI (free) licenses
- 140 Power BI Pro licenses
- 140 Power BI service licenses

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POWER BI EMBEDDED FOR PUBLISHERS, AND POWER BI PRO FOR CONSUMERS

Question 7

Score: 0

Margie's Travel have 20 users will create Power BI content. They will create reports which will be printed and made available to the other 120 users in the organization. What licenses should Margie's Travel acquire?

✓ **Correct** 20 Power BI Pro licenses

✗ **Incorrect** 20 Power BI Pro licenses and 120 Power BI (free) licenses

140 Power BI Pro licenses

140 Power BI service licenses



Licensing Power BI: Question 8 of 12

Time left 00:07:11

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Lucerne Publishing have 50 users who will consume Power BI content via the Power BI app on their iPhones. What licenses should Lucerne Publishing acquire?

- 50 Power BI (free) licenses
- 50 Power BI service licenses
- 50 Power BI Pro licenses
- 50 Power BI Mobile licenses

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Question 8

Lucerne Publishing have 50 users who will consume Power BI content via the Power BI app on their iPhones. What licenses should Lucerne Publishing acquire?

- X Incorrect** 50 Power BI (free) licenses
- 50 Power BI service licenses
- ✓ Correct** 50 Power BI Pro licenses
- 50 Power BI Mobile licenses



Licensing Power BI: Question 9 of 12

Time left 00:06:37

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Tailspin Toys has acquired Power BI Pro licenses for its users. Can the users share content with each other in the Power BI service?

- Yes
- No

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Licensing Power BI: Question 10 of 12

Time left 00:05:28

How are customers eligible for the rights to use Power BI Report Server? Choose two answers.

- By purchasing Power BI Premium P or EM SKUs
- By purchasing Power BI Premium P SKUs
- By purchasing Software Assurance on SQL Server Standard or Enterprise Core licenses
- By purchasing Software Assurance on SQL Server Enterprise Core licenses

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Licensing Power BI: Question 11 of 12

Time left 00:04:04

Fabrikam, Inc. are an ISV who build applications and want to include Power BI visuals into those applications. What should they use to achieve this?

-
- Power BI Mobile
- Power BI Pro
- Power BI Premium
- Power BI Embedded

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Licensing Power BI: Question 12 of 12

Time left 00:03:16

Trey Research has licensed all of its users with Microsoft 365 E5 licenses. Are these users licensed to use Power BI Pro?

- Yes
- No

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Power Virtual Agents

<https://www.youtube.com/watch?v=7TmugXIWrCQ>

Why create a PVA?

Why create a Power Virtual Agent?

The image shows three cards with icons and text, each with a red box highlighting a specific benefit:

- Cost Reduction:** A piggy bank icon. Text: "You want to **lower your customer support costs by creating** a support chatbot that handles simple, repetitive requests rather than relying on a more expensive human agent."
- 24/7 Access:** A clock icon. Text: "You want to **give employees access to information 24/7** through a chatbot rather than relying on people who are only available during the day."
- Improved User Satisfaction:** A smiley face icon. Text: "You want to **improve user satisfaction by providing** chatbots that shorten what would otherwise be long wait times to talk with a human agent."

To the right of the cards is a screenshot of a Microsoft Teams chat window showing a conversation with a bot.

PVA Versions

Microsoft Teams app

- Bot created by members of a team
- Answers common questions posed by teammates
- No-code or low-code bot
- Deployed in Teams
- Licensed via Office 365/Microsoft 365 licenses

Web app

- Bot created by IT staff
- Answers customer questions
- Basic to complex bots
- Deployed in any channel
- Licensed separately

PVA app in Teams

Power Virtual Agents app in Teams

Power Virtual Agents is available as an app within Microsoft Teams, which means you can easily create your own chatbots that answer questions posed by other employees or team members

Eligible licenses:

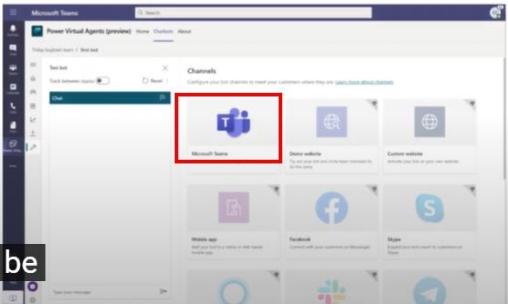
- Office 365 E1, E3, E5, F3
- Microsoft 365 E3, E5, F3
- Microsoft 365 Business Basic, Standard, Premium
- Office 365 A3, A5
- Microsoft 365 A3, A5

will only let you publish the bot to be used in teams here

Upgrading your license

To access the full range of Power Virtual Agents capabilities, you need to upgrade your plan to a standalone Power Virtual Agents subscription.

You can upgrade from within the Power Virtual Agents app for Microsoft Teams when prompted, as in the following example when publishing to additional channels.



- Almost all Office license have to use PVA in Teams except for
 - Office F1, Office A1
- If Office 365 license is used for PVA, it will work only withing Teams

Licensing PVA Standalone

- Northwind Traders Org
- Tenant level license **\$200***
- BOT creators needs to assigned with **\$0** cost as per use licence

Licensing Power Virtual Agents standalone

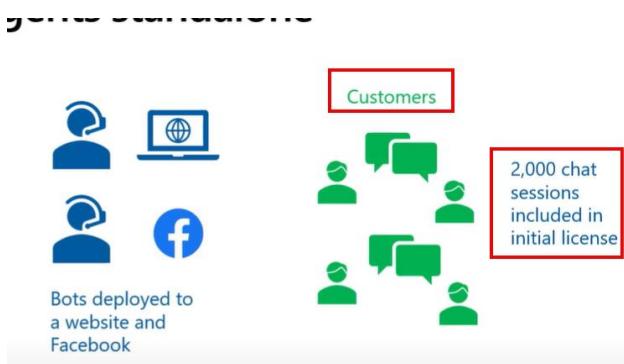


- They create 2 Chatbots, 1 one web and 1 Facebook.

Licensing Power Virtual Agents standalone



- The chatbots are quickly by these user without code as they have **standalone** license.
- 2,000 chat sessions are included in initial license



- Additional add-on license be purchases and 1000 additional chat sessions
-

Licensing Power Virtual Agents standalone



- Its tenant level license and \$200 cost.
- Bot creators and users needs PVA per user plan.

Licensing Power Virtual Agents standalone

Purchase a Power Virtual Agents base license

- \$200 per tenant per month
- 2,000 chat sessions per tenant per month

Acquire Power Virtual Agents per User licenses

- For all users who will create and manage bots
- Assigned in the Microsoft 365 Admin Center
- \$0

Purchase Chat Session for Virtual Agent Add-on licenses

- As required
- \$100 per tenant per month
- 1,000 chat sessions per tenant per month
- Organizations should license for peak capacity

Billed session definition

- A billed session is an interaction between the user and the bot and represents one unit of consumption
- The billed session begins when a user topic is triggered and ends when one of these conditions is met either:
 - The user's questions are answered, or
 - The conversation exceeds 60 minutes or 100 turns*
- There is no end user experience impact when exceeding 60 minutes or 100 turns; this simply counts as another billed session for reporting purposes

*A turn is defined as one exchange between user and the bot (i.e. user sends a message to the bot and bot responds or vice versa). One billed session usually contains multiple turns.



What is a session?

- Interaction between the user and bot.
- Represents **one unit of consumption**.
- Begins: user topic triggered and ends one the conditions are met either
 - User's questions are answered OR
 - Conversations exceeds 60 mins or 100 turns

PVA Versions licence

Power Virtual Agents versions

	Power Virtual Agents for Teams	Power Virtual Agents
Create and maintain chatbots	Deploy in Teams only	Deploy in all channels
Chat sessions	Unlimited (Teams only)	2,000
Create flows in context of Power Virtual Agents chatbots	Automated, instant, and scheduled flows	Automated, instant, scheduled, and business process flows
Connect to data	Via Standard connectors	Via Standard, Premium and custom connectors, and on-premises data gateway
Store and manage data	Dataverse in Teams	Dataverse
Dataverse capacity included	None	Database capacity – 10GB File capacity – 20GB Log capacity – 2GB

Quiz

1. Southridge Video want to create a bot within Teams for their employees. Everyone is licensed with Microsoft 365 Business Basic User SLs. Are they licensed to create and use a bot in Teams?

Southridge Video want to create a bot within Teams for their employees. Everyone is licensed with Microsoft 365 Business Basic User SLs. Are they licensed to create and use a bot in Teams?

- Yes
 No

Mark for review

2. Which users in an organization need to be licensed with the Power Virtual Agents user license?

Which users in an organization need to be licensed with the Power Virtual Agents user license?

- Users who are not already licensed with Microsoft 365 E5 User SLs and want to interact with a bot
 Any user intending to interact with a bot
 Users who will create and manage a bot
 Users who are not already licensed for Teams

3. How many additional chat sessions are included in the Chat Session for Virtual Agents Add-on licenses?

How many additional chat sessions are included in the Chat Session for Virtual Agents Add-on licenses?

- 500
- 1,000
- 2,000
- 5,000

4. Users at the Coho Winery are licensed with Office 365 E5 User SLs. Some users have worked together to create a bot. Where will they be able to deploy this bot?

Licensing Power Virtual Agents: Question 4 of 10

Time left 00:08:46

Users at the Coho Winery are licensed with Office 365 E5 User SLs. Some users have worked together to create a bot. Where will they be able to deploy this bot?

- In Teams or on their website
- They will need to acquire a Power Virtual Agents license to deploy the bot
- In Teams
- In any channel

Mark for review

5. Margie's Travel will be creating a bot to be deployed to help customers on their website. All users are licensed with Microsoft 365 E5 User SLs. Are Margie's Travel licensed to create a bot for deployment on their website?

Margie's Travel will be creating a bot to be deployed to help customers on their website. All users are licensed with Microsoft 365 E5 User SLs. Are Margie's Travel licensed to create a bot for deployment on their website?

- Yes
- No

Mark for review

6. Contoso Pharmaceuticals want to create a Power Virtual Agents bot that connects to data via a Premium connector. All users at Contoso Pharmaceuticals are licensed with Microsoft 365 E3 User SLs. What additional licenses should Contoso Pharmaceuticals acquire?

Contoso Pharmaceuticals want to create a Power Virtual Agents bot that connects to data via a Premium connector. All users at Contoso Pharmaceuticals are licensed with Microsoft 365 E3 User SLs. What additional licenses should Contoso Pharmaceuticals acquire?

- Power Virtual Agents user licenses for the bot creators
- A Power Virtual Agents license and Power Virtual Agents user licenses for the bot creators
- No additional licenses are required in this scenario
- Power Virtual Agent Add-on licenses for all employees who will use the bot

Mark for review

7. Lucerne Publishing want to deploy a Power Virtual Agents bot in Teams. Will they be able to create basic Power Automate flows for their bot to use?

Time left 00:05:48

Lucerne Publishing want to deploy a Power Virtual Agents bot in Teams. Will they be able to create basic Power Automate flows for their bot to use?

Yes
 No
 Mark for review

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8. Tailspin Toys will be creating a Power Virtual Agents bot to be deployed through Facebook. Five users will be involved in creating and managing the bot. These users are licensed with Office 365 E3 User SLs. What additional licenses do Tailspin Toys need to acquire?

Tailspin Toys will be creating a Power Virtual Agents bot to be deployed through Facebook. Five users will be involved in creating and managing the bot. These users are licensed with Office 365 E3 User SLs. What additional licenses do Tailspin Toys need to acquire?

- 1 x Power Virtual Agents base license + 5 x Power Virtual Agents user licenses
 1 x Power Virtual Agents base license
 5 x Power Virtual Agents user licenses
 No further licenses are required for this scenario
 Mark for review

9. Humongous Insurance have deployed a Power Virtual Agents bot to their website. This bot handles 5,000 chat sessions per month. What licenses do Humongous Insurance need for this scenario?

Humongous Insurance have deployed a Power Virtual Agents bot to their website. This bot handles 5,000 chat sessions per month. What licenses do Humongous Insurance need for this scenario?

- 1 x Power Virtual Agents license + 4 x Chat Sessions for Virtual Agents Add-on licenses
 1 x Power Virtual Agents license + 5 x Chat Sessions for Virtual Agents Add-on licenses
 1 x Power Virtual Agents license
 1 x Power Virtual Agents license + 3 x Chat Sessions for Virtual Agents Add-on licenses
 Mark for review

10. Litware Inc. have purchased a Power Virtual Agents license. How many chat sessions does this license include per month?

 Microsoft

Licensing Power Virtual Agents: Question 1 of 10

Time left 00:11:34

Margie's Travel will be creating a bot to be deployed to help customers on their website. All users are licensed with Microsoft 365 E5 User SUs. Are Margie's Travel licensed to create a bot for deployment on their website?

Yes
 No

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Licensing Power Virtual Agents: Question 2 of 10

Time left 00:10:53

Users at the Coho Winery are licensed with Office 365 E5 User SUs. Some users have worked together to create a bot. Where will they be able to deploy this bot?

In Teams
 They will need to acquire a Power Virtual Agents license to deploy the bot
 In Teams or on their website
 In any channel

Mark for review



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Licensing Power Virtual Agents: Question 3 of 10

Time left 00:10:13

Southridge Video want to create a bot within Teams for their employees. Everyone is licensed with Microsoft 365 Business Basic User SUs. Are they licensed to create and use a bot in Teams?

Yes
 No

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Licensing Power Virtual Agents: Question 4 of 10

Time left 00:09:06

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Which users in an organization need **to be licensed with the Power Virtual Agents user license?**

Any user intending to interact with a bot

Users who will create and manage a bot

Users who are not already licensed for Teams

Users who are not already licensed with Microsoft 365 E5 User SUs and want to interact with a bot

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Licensing Power Virtual Agents: Question 5 of 10

Time left 00:08:21

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Trey Research have purchased a Power Virtual Agents license and **some Chat Sessions for Virtual Agents Add-on licenses**. Do the **chat sessions that they are entitled to carry over between months**

Yes

No

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Licensing Power Virtual Agents: Question 6 of 10

Time left 00:07:53

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The users at **Northwind Traders** are all licensed with Office 365 E3 User SUs. Will they be able to create and deploy Power Virtual Agents bots in Teams?

Yes

No

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Licensing Power Virtual Agents: Question 7 of 10

Time left 00:06:43

Contoso Pharmaceuticals want to create a Power Virtual Agents bot that connects to data via a Premium connector. All users at Contoso Pharmaceuticals are licensed with Microsoft 365 E3 User SUs. What additional licenses should Contoso Pharmaceuticals acquire?

No additional licenses are required in this scenario

Power Virtual Agent Add-on licenses for all employees who will use the bot

A Power Virtual Agents license and Power Virtual Agents user licenses for the bot creators

Power Virtual Agents user licenses for the bot creators

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Licensing Power Virtual Agents: Question 8 of 10

Time left 00:05:31

Litware Inc. have purchased a Power Virtual Agents license. How many chat sessions does this license include per month?

500

1,000

2,000

5,000

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Licensing Power Virtual Agents: Question 9 of 10

Time left 00:04:36

Lucerne Publishing want to deploy a Power Virtual Agents bot in Teams. Will they be able to create basic Power Automate flows for their bot to use?

Yes

No

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Licensing Power Virtual Agents: Question 10 of 10

Time left 00:03:13

Humongous Insurance have deployed a Power Virtual Agents bot to their website. This bot handles 5,000 chat sessions per month. What licenses do Humongous Insurance need for this scenario?

- 1 x Power Virtual Agents license + 5 x Chat Sessions for Virtual Agents Add-on licenses
- 1 x Power Virtual Agents license
- 1 x Power Virtual Agents license + 3 x Chat Sessions for Virtual Agents Add-on licenses
- 1 x Power Virtual Agents license + 4 x Chat Sessions for Virtual Agents Add-on licenses
- Mark for review

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