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EMBEDDING POWER BI? CHOOSING BETWEEN PBI PREMIUM OR EMBEDDED

dashboards in the Power BI Service, but that is not always the case. Power BI Premium and most tiers of Power BI Embedded deliver *dedicated* capacity in the Power BI service to help with additional embedding scenarios.

In every case, Power BI is very versatile. You may see reports embedded in other Microsoft applications or your own custom application without even knowing you're accessing Power BI!

As you try to navigate different embedding scenarios with Power BI, you're exposed to different capabilities, terms, and license options. It's a confusing landscape, and bringing clarity to everything is difficult. Even terms that appear clear at face value such as *internal* and *external* are not as straightforward as you would think.

Terminology You'll Encounter

There are many variables that could help you decide whether you need Power BI

guests that function as internal users. It's complicated, so read on.

- **Access Scenario**

  Your audience may view content in the **Power BI Service** web application, embedded in a Microsoft application such as **Microsoft Teams** or **SharePoint**, or embedded in a **custom application** that you create (or a combination of any of these).

- **Product Lines**

  Power BI Embedded (A SKUs) is primarily used to embed in custom applications with external users only, and where you do not need to authenticate with Azure Active Directory. **Power BI Premium (P SKUs and EM SKUs)** allows you to embed in custom applications but also in Microsoft Teams and SharePoint. Power BI Premium P SKUs are the only ones (without a Pro license for users) that allow you to use the Power BI Service application for users in your AAD tenant while also embedding anywhere.

- **Licensing**

  You will encounter choices for **Power BI Pro** or **Power BI Free**. Pro gives you publishing rights in addition to viewing rights. Free gives you viewing rights, but only when your content is hosted in a workspace with dedicated capacity through either Power BI Premium or Embedded.

What's the Difference Between "User Owns Data" and "App Owns Data"? What about "Embed for your Organization" and "Embed for your Customers"?

While you'll often see different scenarios labeled as "User owns data" and "App owns data" in documentation, these terms can be confusing. The terms are principally related to authentication, but what is meant by "user" and "app"?

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authentication. You may see this scenario also labeled as **Embed for your Customers**.

Even in an "App owns data" scenario, you would still need at least one Power BI Pro license to publish and embed content from a workspace in the Power BI Service. Embedding could occur with a user or a service principal.

What also makes these terms sometimes misnomers is that they are not one-size-fits-all, universal phrases for all scenarios. Depending on your technology selection, for example, you could have a custom application for internal users or a combination of internal and external users that is documented as "App owns data"/"Embed for your Customers". You could also invite external users into your organization as guests in a "User owns data"/"Embed for your Organization" scenario, where these external users could access a Power BI service app or workspace. Exceptions like these make your individual solution's needs important when it comes to architecture and licensing.

What about Azure B2B?

With Azure B2B, you effectively bring external users into your organization (Azure Active Directory tenant) as guest users. This enables a "User owns data" scenario for these external users. For various embedding scenarios, guest users invited into your tenant through Azure B2B are considered part of your internal organization.

Power BI Embedded – A SKUs

Power BI Embedded is the only family of SKUs used for embedding that you purchase through Azure instead of Microsoft 365. While many of same capabilities are unlocked from a technology standpoint as Power BI Premium, you are limited to "App owns

Power BI Embedded A

Power BI Premium – EM SKUs

With EM SKUs, you typically embed in organizational scenarios such as Microsoft Teams or SharePoint. Organizational users *do not* get access to the Power BI Service web application. EM SKUs are not as frequently considered in conversations about Premium versus Embedded due to that limitation. The situation has to be *just right* to consider EM SKUs for embedding in "User owns data" scenarios without jumping to full access to the Power BI Service with P SKUs.

Power BI Premium EM

Power BI Premium – P SKUs

With P SKUs, you cover all use cases. From an audience perspective, your internal users could use the Power BI service web application at www.powerbi.com, you could embed in Microsoft Teams or SharePoint in a "User owns data" scenario, and you could embed in a custom application in an "App owns data" scenario. Your external users could be invited into your tenant with Azure B2B for "User owns data" development, or they could remain external for "App owns data" development.

Power BI Premium P

Quick Decision Summary

If you consider general scenarios before digging too deeply into your own nuances, here's a quick summary that may help in most situations. Your particular requirements may affect the final decision-making process though. While the details

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Internal users only	View in Microsoft Teams or SharePoint	P EM
Internal users only	View in custom app	P EM
External users only	View in custom app	A
Mix of internal and external	View in custom app	P A
Mix of internal and external	View in Microsoft Teams or SharePoint	P (with external users as guests through Azure B2B) EM (with external users as guests through Azure B2B)
Mix of internal and external	View in Power BI Service	P (with external users as guests through Azure B2B)
Mix of internal and external (Option A – single SKU)	Internal view in Power BI Service while External view in custom app	P
Mix of internal and external (Option B – multiple SKUs)	Internal view in Power BI Service while External view in custom app	P (for internal) A (for external)

Still Perplexed?

There are many variables in this discussion, and we've only touched on
licensing considerations. BlueGranite can help you plot a course that's consistent with
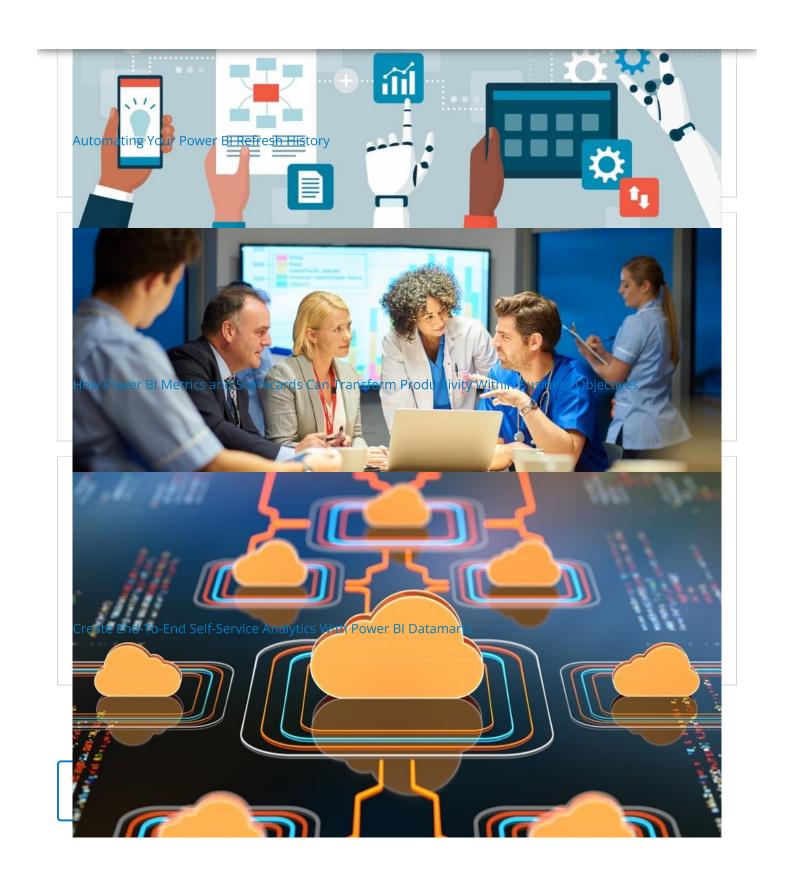
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