Power BI FAQ

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Power BI Portfolio

Overview

1. What is Power BI?

<u>Microsoft Power BI</u> is a unified self-service and enterprise BI platform that enables you to see all your data through a single pane of glass. Live Power BI dashboards and reports include visualizations and KPIs from data residing both on-premises and in the cloud, offering a consolidated view across your business, regardless of where your data lives.

2. How does Power BI fit into Microsoft's overall data platform strategy?

Our data platform strategy is to empower customers to maximize the value derived from each byte of data they store and process. Power BI delivers on that strategy by connecting our customers' data to Microsoft's full data platform, enabling them to easily use other Microsoft data solutions -- including the predictive analytics capabilities of Azure Machine Learning and Excel -- to achieve business value faster. All of this while offering enterprise grade flexibility, compliance, security, and connectivity to both, on-premises and cloud data sources.

3. How does Power BI fit into Microsoft 365 strategy?

Analytics capabilities, specifically Power BI, in Microsoft 365 enable a culture of data with democratized access to data and insights, ensuring decision makers across the organization have the right data at the right time, helping to improve decision making and identify opportunities for cost savings, process optimization, and revenue enhancement. Power BI connects to data in the cloud, on-premises, or both; and lets users access insights anywhere via desktop, web, or mobile device, with live dashboards that provide a 360-degree real-time view of their business. Custom visuals deliver insights from users' data in the context of their business, and natural language query enables them to simply ask questions of their data in an intuitive way. Furthermore, Power BI integrates with Microsoft business apps to deliver insights through Excel, Visio, SharePoint, Teams, Dynamics 365, PowerApps, and Flow.

4. What market momentum are we seeing for Power BI?

We continue to see the total addressable market for BI grow. According to IDC, worldwide big data and analytics revenue will be \$274.3 billion by 2022. Power BI is rapidly staked its claim as the de facto leader in the Gartner Magic Quadrant for BI and Analytics. Power BI is used by 95% of the Fortune 500 as of November 2019.



5. What data services does Microsoft offer in the cloud?

Microsoft offers a comprehensive set of data services for customers -- including Azure Machine Learning, Data Warehouse, Data Explorer, Data Lake, and other Azure data services -- to managed data services from our partners. Microsoft is committed to supporting the broadest data platform so customers get data benefits, in the cloud, on their terms.

In addition, Power BI is an end-to-end cloud-based solution for deriving insights on data. It reduces barriers to deploying a business intelligence environment for sharing and collaborating on data and analytics from anywhere.

With Microsoft's big data and cloud solutions, customers have more options to enable new scenarios for modern data warehousing, information services and business intelligence to gain deeper insight from their data and improve the way they deliver services and products to their customers.

6. In what languages and regions is Power BI available?

Power BI is available in all countries where Office 365 is supported and in multiple languages.

Q&A feature is currently Spanish and English only and we are working on providing additional language support over time.

RTL languages are supported in the Power BI UI in the service only. As of March 2020, there are some issues with the layout of report content when viewing with an RTL language. These are planned to be addressed in the coming months, so reports will always show with the same layout regardless of language (visuals etc. will not be automatically changed to an RTL layout). Power BI Desktop does not support RTL languages.

7. What is the Power BI portfolio?

Power BI is a suite of business analytics tools to analyze data and share insights. The Power BI portfolio includes:

- **Power BI Desktop** is free the report authoring and ad-hoc data exploration tool.
- **Power BI Pro** is licensed by user and is intended for quick, easy-to-use self-service analytics for users requiring collaboration, dashboard sharing, ad hoc analysis, and reporting publishing.
- **Power BI Mobile:** is included in the price of Power BI Pro and Premium and allows users to stay connected to their data from anywhere, anytime with the Power BI app for Windows, iOS, and Android giving them a 360° view of their business data on the go
- **Power BI Premium** is licensed by consumption and is an add-on to Power BI Pro for projects requiring heightened performance and the ability to publish reports and dashboards to consumers.
 - **Power BI Report Server** is available as part of Power BI Premium and through SQL Server Enterprise Edition with Software Assurance, allowing the deployment and distribution of interactive Power BI reports and traditional paginated reports on-premises within the boundaries of an organization's firewall. Organizations can choose Power BI in the cloud (only via a Power BI Premium purchase, not a SQL Server Enterprise Edition with Software Assurance purchase), or elect to keep reports on-premises with Power BI Report Server and move to the cloud at their pace (can be done via both purchase methods).
- Power BI Embedded: Power BI Embedded is the Power BI white label offer and is an Azure service that allows
 application developers to give their users world-class analytics without having to build them from scratch by
 embedding them through APIs.

8. Is Power BI available on-premises?

No. Power BI is only available as a Microsoft hosted cloud service. Power BI Report Server, as part of Power BI Premium and compatible with SSRS reports, allows the deployment and distribution of interactive Power BI reports—and traditional paginated reports—on-premises within the boundaries of an organization's firewall. Organizations can choose Power BI in the cloud or elect to keep reports on-premises with Power BI Report Server and move to the cloud at their pace.

9. Do I need any other products to use Power BI?

Power BI is a standalone service, but it integrates completely with Office 365, and other Microsoft products and services such as Azure, PowerApps and Microsoft Flow.

10. What certifications does Power BI offer? Does Power BI offer the same level of certification as Office 365?

Learn more about Power BI compliance <u>here</u>.

11. How does security work with Power BI?

Users of Power BI are authenticated using Azure Active Directory, typically with the same username and password they use for Office 365 and their PCs. With Conditional Access, advanced rules can be enforced, such as requiring two-factor authentication or restricting use of Power BI when not using a domain-joined device. Content within Power BI can be secured to individual users or groups of users. With Row-level Security, dataset owners can restrict what data is seen by different groups of users inside reports. All communication with Power BI is encrypted. Additionally, data at rest is encrypted when stored in Power BI, with the option for customers to control the encryption key used with Bring Your Own Key. With Sensitivity labels, administrators and BI professionals can label their sensitive data and protect it upon export. You can learn more about Power BI security in this article.

12. What is Power BI paired with Microsoft Information Protection and Microsoft Cloud App Security?

Data protection capabilities in Power BI light up when Microsoft's leading security solutions for Information Protection and Threat Protection are also in use to provide you with greater control and visibility over sensitive data in Power BI.

When pairing Power BI with Microsoft Information Protection and Microsoft Cloud App Security BI professionals and administrators can:

- Classify and label Power BI dashboards, reports, datasets, and dataflows in the Power BI service.
- Set label-specific permissions on exported files (Excel, PowerPoint, and PDF) from Power BI.
- Provide oversight to administrators on sensitive data being used in Power BI.
- Leverage Microsoft Cloud App Security to monitor user access and activity, protect data based on real-time risk analysis, and set label-specific controls.

The most convenient licensing option is Microsoft 365 E5, because it includes both Power BI Pro and Azure Information Protection

Capability	Detail	If not buying M365 E5, these SKUs can be used:
Apply data sensitivity labels familiar from other Office apps	Ability to label Power BI artifacts (Dataflows, Datasets, Reports, Dashboards) with sensitivity labels similar to Office apps like Word, PowerPoint, and Outlook to Power BI	Power BI Pro as a Standalone or via O365 E5 or M365 E5 AND Azure Information Protection (AIP): Standalone AIP P1 or P2 Or via one of the below SKUs:

	Note: labeling in Power BI – without an AIP license – will not provide protection	EMS E3 (for AIP P1) or EMS E5 (for AIP P2), M365 Business, M365 E3 and E5, M365 E5 Compliance (add-on that req. EMS E3 or M365 E3)
Real Time, Automated Risk remediation	Microsoft Cloud App Security monitors user activity and blocks activity in real time based on admin defined policies including viewing content	Power BI Pro via Standalone or via O365 E5 or M365 E5 or access via Power BI Premium (P SKUs) AND Microsoft Cloud App Security (MCAS):
		 unmanaged device and off-network download protection): As Standalone P1 or P2 Or via one of the following bundles: M365 Business F1, E3, or E5 or M365 A3 or A5
Security Admin Capabilities – Log Review & Alerts	Security admins can review what sensitive data has been accessed, by whom and when, plus review alerts on suspicious activity.	Power BI Pro via Standalone or via O365 E5 or M365 E5 or access via Power BI Premium (P SKUs) AND MCAS: • As Standalone Microsoft Cloud App Security • Or via any of these SKUs: M365 E5, M365 E5 Security (Identity & Threat Protection, add-on that req. M365 E3), M365 Education A5, EMS E3 or EMS E5
Persistent and flexible data protection on export	 Ability to export Power BI artifacts while maintaining classification and protection sensitivity label and protection setting persist with the file Note: an AIP license is required to view what labels are on a Power BI artifact 	Export while maintaining existing labels, either: • Power BI Pro as a Standalone or via O365 E5 or M365 E5 or access via Power BI Premium (P SKUs) To view what labels have been applied, a user needs

Power BI Pro as a Standalone or via O365 E5 or M365 E5 or access via **Power BI Premium** (P SKUs) AND AIP: Standalone AIP P1 or P2 Or via one of the below SKUs: EMS E3 (for AIP P1) or EMS E5 (for AIP P2), M365 Business, M365 E3 and E5, M365 E5 Compliance (add-on that req. EMS E3 or M365 E3) To add or modify labels before export, user needs: Power BI Pro as a Standalone or via O365 E5 or M365 E5 AND AIP: Standalone AIP P1 or P2 Or via one of the below SKUs: EMS E3 (for AIP P1) or EMS E5 (for AIP P2), M365 Business, M365 E3 and E5, M365 E5 Compliance (add-on that req. EMS E3 or M365 E3

13. How does Power BI support hybrid data?

Power BI supports hybrid data. Power BI connects to data in the cloud, on-premises, or both. Organizations can leave their databases and warehouses on their on-premises networks, yet securely use subsets of that data to create compelling reports and dashboards in Power BI through the use of gateways. For more information, see Getting started with Power BI gateways.

14. Does the Power BI Data Gateway add security risk by opening a port on the firewall?

Service Bus (which is the underlying transport/relay service used in this scenario) only uses an outbound port, it does not require an inbound port to be opened on the on-premises firewall. It uses a shared secret mechanism to create a secure channel between cloud and on-prem. You can learn more about Power BI security in this <u>article</u>.

15. Does the Gateway work in laaS as well?

Yes, as long as the laaS VM is domain-joined and Azure Active Directory DirSync is set up.

16. When will Power BI offer support for SQL Server Reporting Services?

Power BI Premium supports both interactive reports as well as Paginated Reports, familiar to users of SQL Server Reporting Services.

17. My customer wants to disable the ability for end users to enable Power BI in their Office 365 tenant, how can this be done?

As part of the Power BI experience, end users now can preview Power BI within their existing US based corporate tenant without involving the O365 Tenant Administrator. Tenant Administrators have been notified of this capability and have been provided instructions on how to disable this features if desired. More information can be found here.

18. How is cross-tenant sharing supported?

The user that is sharing needs to have a Pro license. The user receiving the sharing (consuming the content) either:

- 1) needs to have a Pro license (on their end or within the host AAD), or
- 2) the workspace has to be backed by Premium capacity.

19. What is data lineage in Power BI?

professionals use Power BI today to build advanced analytical projects spanning numerous data sources, artifacts, and dependencies. Providing insights about the data lineage in these projects is key for shaping efficient work processes and for empowering users to better manage existing dependencies, derive the potential impact of planned changes in a project, and determine data lineage for important business KPIs. Data lineage insights also help BI professionals understand exactly where their data comes from and assess usage on various artifacts, such as popular data sets.

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

Licensing

20. How is Power BI licensed?

Power BI Desktop is free and licensed by user. **Power BI Pro** is licensed as a subscription and priced per-user permonth billed on an annual basis. It is also part of the E5 Office 365 and E5 Microsoft 365 suite. **Power BI Premium** is licensed by capacity and is an add-on to Power BI Pro for projects requiring heightened performance and the ability to publish reports and dashboards to consumers. See chart below. For licensing information on **Power BI Report Server**, click here. For licensing information on **Power BI Embedded**, click here.

Power BI Desktop	Power BI Pro	Power BI Premium
Free	\$9.99 per user per month	Capacity pricing per node, per month
Authoring and exploration	Self-service and collaborate	Add-on for scale large deployments
 Connect to hundreds of data sources Clean and prepare data using visual tools Analyze and build stunning reports with custom visualizations Publish to the Power Bl service 	 Build dashboards that deliver a 360-degree, realtime view of the business Keep data up-to-date automatically, including onpremises sources Collaborate on shared data Audit and govern how data is accessed and used 	 Gain dedicated capacity you allocate, scale, and control Distribute and embed content without purchasing per-user licenses Offers support for paginated reports

- Embed content in other applications
- Connect to Power Bl apps from AppSource.
- Publish reports on-premises with Power BI Report Server
- Unlock more capacity and higher limits for your Pro users
- Licensing information for <u>Power BI</u> <u>Report Server</u>

21. How do I buy Power BI?

Power BI is available in the O365 portal, Web Direct, and through <u>ecommerce</u>. Additionally, end users and departments have the option of purchasing through a self-service motion (https://docs.microsoft.com/en-us/microsoft-365/commerce/subscriptions/self-service-purchase-faq?view=o365-worldwide)

22. Can Power BI be licensed on a month-to-month basis?

Power BI Pro and Power BI Premium are annual subscriptions; however, Power BI Premium's P1 and EM3 SKUs are available monthly via Web Direct.

23. Is there a restriction on the number of Power BI licenses that can be purchased?

No. Any number of Power BI licenses can be purchased.

24. Which licensing programs is Power BI available through?

Channel	Power BI Pro	Power BI Premium	Power BI Embedded
EA, EAS, EES	√	P1, P2, P3, EM1, EM2, EM3	✓
CSP	✓	P1, P2, P3	✓
Web Direct	√	P1, P2, P3, EM3	✓
MPSA	√	P1, P2, P3, EM1, EM2, EM3	
Open	✓		

25. Is Government, Academic and Non-Profit pricing available for Power BI?

Yes. Government and Academic pricing is offered through the EA, EAS, EES, MPSA, Web Direct, and Open licensing programs. Government pricing is also available in Syndication. Non-Profit pricing is only available in Web Direct. Power BI is available for the US Government Community Cloud (GCC) and as part of the Germany and China National Clouds offerings.

26. Where is Power BI offered?

Power BI is available in all countries in which Office 365 is offered (https://products.office.com/en-US/business/international-availability). Note: Pricing and licensing program availability vary by country, please contact your local Microsoft Representative for more details.

27. Is Power BI available as a Microsoft Services Provider License Agreement (SPLA)?

No. Power BI is not available as a Microsoft Services Provider License Agreement, it is only available as a Microsoft hosted service. Power BI is available in other partner reseller programs, such as the Open licensing program.

28. Is Power BI covered by a Service Level Agreement (SLA)?

Power BI Pro and Premium are covered by the Online Services Consolidated SLA. The unpaid version of Power BI is not covered by an SLA. Learn more reading the <u>Power BI Service Agreement</u>.

29. Does Power BI meet Office 365 Compliance Guidelines?

Specific Power BI compliance information can be found in the Microsoft Trust Center.

Compete

30. What are the Power BI key differentiators against the competitive set?

Power BI is recognized as a market leader by analysts like Gartner. If you want to learn how to position Power BI versus a specific competitor, please check the <u>compete materials</u>.

Power BI Desktop

1. What is Power BI Desktop and how is it licensed?

The Power BI Desktop is a dedicated report authoring tool for Power BI service. It is available as a free download on https://powerbi.microsoft.com. A Power BI subscription is not required to download and use Desktop. https://powerbi.microsoft.com/en-us/desktop/

2. What data sources are supported in Power BI Desktop?

With Power BI Desktop, users can connect to multiple on-premises and cloud data sources such as Excel files, CSV/Text files, a variety of Azure services, enterprise databases such as Oracle and SAP, and many more. As of today, we support hundreds of data sources and growing. You can find a full list of data sources in this article.

3. Why do I need Power BI Desktop if I can author reports in the web service?

Power BI Desktop provides a streamlined experience for business analysts to connect, mash up, model and visualize data. This experience provides more flexibility and access to the data journey at every stage including modifying queries, creating relationships between tables, defining row level security and creating measures using the DAX language.

4. Can I author reports for mobile devices?

Power BI Desktop provides users with full flexibility on the layout, size and composition of their reports but it also provides a specific authoring experience for mobile devices allowing them to define a mobile-friendly layout their reports when consumed with the Power BI mobile apps.

5. Can I run R and Python scripts in Power BI Desktop?

Power BI Desktop supports scripts on both the data connection and visualization layers. This means that users can connect to data and mash it up using R or Python scripts and can also use R or Python visuals in their reports. One particular use case of this integration is the availability of R-powered custom visuals where users can leverage R visualizations without having to write a single line of R script. Python-powered custom visuals are now available in Power BI Desktop as well.

6. What if I have already created my queries and models in Excel using Get and Transform and PowerPivot?

Since Power BI Desktop and Excel share the same engine for data connection and data modeling, assets created in Excel can be easily published directly to the Power BI service or imported into Power BI Desktop without losing any query steps, relationships or measures created in the models.

7. Can I edit my reports with Power BI Desktop once I have published them to the Power BI service?

The answer is yes. Reports usually have 3 components: data connections, data model, and visual pages. All of them can be edited and pushed to the service again with the updates made. Users also can download the report directly from the service, edit it, and publish it back with the updates.

8. What options do I have to connect to data with Power BI Desktop? What is DirectQuery? There are 2 different ways to connect to data with Power BI Desktop. The first is to import the data to Power BI Desktop. This is the most common way to get data which means the data is contained in your Power BI report.

Import takes advantage of the high-performance query engine of Power BI, and provides a highly interactive and fully featured experience over your data.

You can also connect directly to data in its original source repository, which is known as DirectQuery. If the data is changing frequently and reports must reflect the latest data, DirectQuery may be best. Not all data sources support a DirectQuery connection. For more information on DirectQuery and the supported data sources, read our documentation.

9. What AI capabilities are supported in Power BI Desktop?

Power BI Desktop supports a number of AI features. Users can add a Q&A visualization that can be used to ask natural language questions of their data or author new visuals. Quick Insights allows report authors to explain increases or decreases in the form of visuals that can also be added to the report. AI visualizations such as Key influencers and Decomposition tree can be used to explore data and conduct key driver and root cause analysis. Users can also enrich their existing visualizations with forecasts, clustering and trend lines.

10. Will there be a Power BI Desktop for Mac?

Mac users can author Power BI content in the web browser. There is no version available for Mac.

11. Can I programmatically edit Power BI Desktop models or files?

No. While the data model within Power BI Desktop is accessible through XMLA commands, this is unsupported. Similarly, programmatically reading or editing a PBIX file is not supported; the file format is not documented, and we make no guarantees that format will not change in future.

12. What other options are there for data prep in Power BI?

Self-service data prep in Power BI helps business analysts extract insights from big data. Using the Power Query experience familiar to millions of Power BI Desktop and Excel users, business analysts can ingest, transform, integrate and enrich big data directly in the Power BI web service – including data from a large and growing set of supported on-premises and cloud-based data sources, such as Dynamics 365, Salesforce, Azure SQL Data Warehouse, Excel and SharePoint. The ingested data can now be shared across multiple Power BI models, reports and dashboards enabling easy data reuse.

Power BI Pro

1. What is Power BI Pro?

Power BI Pro is a user-based license intended for quick, easy-to-use self-service analytics for users requiring collaboration, dashboard sharing, ad hoc analysis, and report publishing – such as the ability to:

- Edit and save customized views
- Create personal dashboards (pin to new dashboard)
- Export and analyze data in Excel or Power BI Desktop

- Share and view Excel workbooks with Excel Web App support
- Export to PowerPoint
- Share dashboards and collaborate with Office 365 Groups
- Integrate content with Microsoft Teams
- Connect to services and out-of-the-box apps from <u>AppSource</u>.

2. How do I buy Power BI Pro?

Power BI is available in the O365 portal, Web Direct, and through ecommerce.

3. Can Power BI content be shared with external users?

Power BI integrates with Azure Active Directory Business-to-business (Azure AD B2B) to allow secure distribution of Power BI content to guest users outside the organization, while still maintaining control over the internal data. The guest user will need to have the proper licensing in place to view the app that was shared. There are three options to accomplish this: 1) Use Power BI Premium, 2) Assign Power BI Pro license to guest user, 3) Guest user brings their own Power BI Pro license. For more details on these options, please visit Power BI documentation. Anonymous public embedding is available with Power BI Publish to web.

4. Are there different Power BI licenses and pricing for content authors vs content consumers?

Power BI Desktop is the streamlined experience for Power BI content creation and it is available as a free download. Excel, which is sold separately, also delivers some authoring capabilities for Power BI such as queries, data models and full Excel files that can be published and consumed in the Power BI service with Excel online. The Power BI service also has some authoring capabilities for reports and dashboards, including pinning Excel components and visuals created using Q&A as well as connecting to Power BI apps from AppSource.

To share and consume content created by others, users will need a Power BI Pro license.

Power BI Premium offers the flexibility to license by capacity, helping organizations empower a broader set of people with access to critical intelligence without requiring per user licensing. This means that a Power BI registered account user assigned to a Power BI Premium instance can consume content shared by a Power BI Pro user.

5. How are external recipients authenticated?

Recipients are able to securely sign into the Power BI service using their own organization's security credentials or personal email address, while the content owner is able to maintain control over the internal data.

Read more <u>here</u>.

For product marketing questions relating to Power BI Pro, please contact Rebar Niemi; for Engineering related questions, please contact Kim Manis

Power BI Premium

1. What is Power BI Premium?

Power BI Premium is a capacity-based offering that includes:

- Flexibility to publish reports broadly across an enterprise, without requiring recipients to be licensed individually per user.
- Greater scale and performance from dedicated capacity in the Power BI service.
- Ability to use features that require dedicated capacity, such as Paginated Reports, linked entities in Dataflows, Deployment pipelines and Azure cognitive services.
- The ability to maintain BI assets on-premises with Power BI Report Server.
- One API surface, a consistent set of capabilities and access to the latest features for embedded analytics.

2. What does Power BI Premium do? How does it work?

Power BI Premium consists of capacity in the Power BI service exclusively allocated to each organization and supported by dedicated hardware fully managed by Microsoft. Organizations can choose to apply their dedicated capacity broadly or allocate it to assigned workspaces based on the number of users, workload needs, or other factors—and scale up or down as requirements change.

3. How is Power BI Pro different than Power BI Premium? Why is Power BI Premium necessary?

Power BI Premium is a capacity-based license, while Power BI Pro is a user-based license.

Power BI Premium consists of capacity in the Power BI service exclusively allocated to each organization and supported by dedicated hardware fully managed by Microsoft—removing restrictions on dataset sizes and refresh rates and supporting isolation due to the dedicated hardware. Power BI Premium also provides the flexibility to publish reports broadly across an enterprise, without requiring recipients to be licensed individually per user.

Power BI Pro is for those users publishing reports, sharing dashboards, collaborating with colleagues in workspaces and engaging in other related activities – such as the ability to:

- Publish reports to shared workspaces
- Share content with other uses
- Edit and save customized views

4. Do I need Power BI Pro to use Power BI Premium?

Yes. Power BI Pro is required to publish reports, share dashboards, collaborate with colleagues in workspaces and engage in other related activities.

5. Does Power BI Premium meet certification and regulatory compliance?

Yes, Power BI Premium meets certification and regulatory compliance (see Power BI Trust Center Compliance
Offering). In fact, Microsoft offers one of the most comprehensive set of compliance offerings of any cloud service provider (see Microsoft Trust Center)

6. Does Power BI support national clouds?

Yes, Power BI supports <u>national</u> clouds, helping customers meet regulations on service delivery, data residency, access, and control. National clouds—specifically Germany, China and the U.S. government—have recently been added. Power BI's certification and regulatory compliance standards apply to Power BI Premium.

Does Power BI offer multi-geo compliance?

Yes, customers can deploy Power BI Premium in specific global regions so organizations can meet data residency requirements and improve performance of data loading by locating Power BI close to data sources.

7. Can I Build Machine Learning Models in Power BI?

Yes. With Power BI Premium, customers can create their own machine learning models with Automated machine learning (AutoML). AutoML enables business analysts to train, validate and invoke Machine Learning models directly in Power BI. It includes a simple experience for creating a new ML model where analysts can use their data to specify the input data for training the model. The service automatically extracts the most relevant features, selects an appropriate algorithm and tunes and validates the ML model. Learn more about automated ML in Power BI here.

8. Does Power BI have prebuilt machine learning models?

We are bringing Azure Cognitive Service capabilities into Power BI to provide powerful ways to extract information from a variety sources like documents, images, and social media feeds. These algorithms can identify named entities such as organizations, people, and locations. They can recognize objects in images, detect language, identify key phrases, and determine positive or negative sentiment. Learn more by navigating to the Power BI AI section.

9. How can I manage content in Power BI throughout its lifecycle?

Power BI Premium enables BI teams and creators to use deployment pipelines to build an efficient and reusable process to manage Power BI content updates and releases. Deployment pipelines maintain development, test, and production environments by incrementally transitioning new or updated content between them and reconfiguring them with the appropriate data connections and permissions.

Licensing & Deployment Options

10. How much does Power BI Premium cost? How many SKUs will you make available?

Power BI Premium can be purchased based on the number of virtual cores—see the table below:

Node configuration	Number of virtual cores*	Price per month
Power BI Premium P1	8	\$4,995
Power BI Premium P2	16	\$9,995
Power BI Premium P3	32	\$19,995
Power BI Premium P4	64	\$39,995
Power BI Premium P5	128	\$79,995

^{*}For more information on nodes and v-cores, see the <u>Power BI Premium overview white paper</u>. Also use this <u>calculator</u> to get an estimate of how much Premium capacity you may need.

11. What do you mean by "capacity"?

"Capacity" refers to a named capacity provisioned by an admin through the Power BI Premium capacity admin portal. A Capacity is a grouping of one or more nodes.

See the Power BI Premium overview white paper and deployment whitepaper for more information.

12. How is Power BI Premium billed?

Power BI Premium is billed monthly with an annual commitment.

13. How do I buy Power BI Premium?

Power BI Premium is available as an add-on to Power BI Pro in the <u>0365 portal</u>. You can also contact your Microsoft representative for more information.

14. How do I know how much Power BI Premium capacity I need to purchase?

Use this cost <u>calculator</u> and <u>deployment whitepaper</u> to estimate how much Power BI Premium capacity you need.

15. Is Power BI Premium available with E5?

Power BI Premium is available as an add-on to Power BI Pro. Office 365 E5 includes Power BI Pro. E5 customers can purchase Premium as an add-on to their existing Pro licenses.

16. Can you outline a scenario of how Power BI Pro and Power BI Premium work to cover an organization for Modern BI?

The follow examples outline how customers can meet their BI needs using a combination of Power BI Pro + Power BI Premium.

An organization / department has a	An organization /	A finance department is
•	and the second second	
	department has users who	actively working to
combination of users who	require self-service BI and	analyze several large
require self-service BI and	collaboration as well as	datasets in advance of an
collaboration as well as	the requirement to keep	earnings announcement
users who only need to	reports on-premises	and requires unthrottled
consume BI content		and isolated capacity to
		manage the workloads
Solution:	Solution:	Solution:
 Power BI Pro for users requiring self-service BI and collaboration Add Power BI Premium to be able to distribute BI content to users who only need to consume 	requiring self-service Bl and collaboration Add Power Bl Premium to be able to publish reports on- premises – and move to the cloud at their own pace	 Power BI Pro for every user in the finance department Add Power BI Premium for the dedicated resources – in the cloud – to be used exclusively by the finance team providing larger scale and greater
1.	equire self-service BI and collaboration as well as sers who only need to consume BI content Dolution: Power BI Pro for users requiring self-service BI and collaboration Add Power BI Premium to be able to distribute BI content to users who only	collaboration as well as the requirement to keep reports on-premises Solution: Power Bl Pro for users requiring self-service Bl and collaboration Add Power Bl Premium to be able to distribute Bl content to users who only need to consume Polution: Solution: 1. Power Bl Pro for users requiring self-service Bl and collaboration 2. Add Power Bl Premium to be able to publish reports onpremises — and move to the cloud at their

17. Do I have the option to return my Power BI Pro licenses if I want to switch to Power BI Premium?

No. Power BI Premium is an add-on to Power BI Pro; therefore, Premium requires Pro licenses.

18. Why is Power BI Pro necessary? Shouldn't I just buy Power BI Premium?

Power BI Premium is a capacity-based license, while Power BI Pro is a user-based license intended for quick, easy-to-use self-service analytics for users requiring collaboration, dashboard sharing, ad hoc analysis, and report publishing – such as the ability to:

- Publish reports to shared workspaces
- Share content with other uses
- Edit and save customized views
- Install Power BI offers from AppSource.

19. What is v-Core pooling?

Power BI Premium supports the requirements of customers managing large-scale deployments and demanding workloads, including the pooling of "virtual cores" or v-Cores.

Power BI Premium consists of dedicated capacity nodes purchased by customers to power their BI solution. These nodes, in turn, are composed of a number of v-Cores: frontend and backend cores. The frontend cores are responsible for the web service, dashboard and report document management, access rights management, scheduling, APIs, uploads and downloads, and generally for everything that relates to the user experience. The backend cores are responsible for the heavy lifting: query processing, cache management, running R servers, data refresh, natural language processing, real-time feeds, and server-side rendering of reports and images.

With the addition of v-Core pooling capabilities in Power BI Premium, customers now have increased deployment flexibility to add capacity as their performance requirements grow over time. For example, a customer could initially purchase a P1 consisting of 8 v-Cores. If the customer later determines more capacity is needed, they can purchase another P1 consisting of 8 v-Cores and combine them for a total of 16 v-Cores to be deployed as a P2. Equally, a customer could start with a P2 and later decide to add two P1s, deploying as a P3. This flexibility enables customers to change the node type they've deployed without repurchasing a new node type within their annual commitment.

See the below chart for available Power BI Premium SKUs. Visit the <u>Power BI Premium calculator</u> to generate a capacity sizing recommendation based on user counts and intensity of use as the starting point to help customers determine which Power BI Premium capacity nodes meet their needs. Also <u>read the Power BI Premium whitepaper</u> for more information on v-Cores.

CAPACITY NODE	CORES	BACKEND CORES	FRONTEND CORES
EM1	1 v-Core	.5 core, 3 GB RAM	.5 core
EM2	2 v-Cores	1 core, 5 GB RAM	1 core
EM3	4 v-Cores	2 cores, 10 GB RAM	2 cores
P1	8 v-Cores	4 cores, 25 GB RAM	4 cores
P2	16 v-Cores	8 cores, 50 GB RAM	8 cores
Р3	32 v-Cores	16 cores, 100 GB RAM	16 cores

20. Can the EM SKUs be leveraged to deploy v-Cores in denominations <8?

v-Core pooling adheres to the same deployment policies established for Power BI Premium at launch. The EM SKUs are therefore restricted to embedded scenarios, i.e. providing customers with access only to the Power BI service APIs. Customer seeking access to the SaaS service are required to purchase P1 SKU at a minimum for those nodes.

21. If v-Cores can be added to scale up, can a customer scale down the same way?

Customers can purchase P1 with a monthly option via Web Direct if they're looking to temporarily add capacity. Power BI Premium nodes purchased outside of Web Direct include an annual commitment.

22. What if a customer's deployment requirements don't fully utilize all v-Cores available in the pool? Can they be credited for the unused capacity?

Deployment and utilization of v-Cores is determined at the customer's discretion. Discounts or credit will not be issued for unused capacity.

23. What does this mean for Power BI Report Server deployments?

There's no change – with Power BI Premium the same number of virtual cores an organization provisions in the cloud can also be deployed on-premises through Power BI Report Server, without the need to split the capacity.

24. Where can I learn more about managing capacities in Power BI Premium?

Technical documentation and deployment guidance is available here.

25. What about Paginated reports in Power BI?

Power BI customers can now host and share paginated reports in Power BI and consume them through web, mobile or embed the reports in the customer's applications.

26. What are paginated reports?

Paginated reports are precisely formatted operational reports optimized for printing and document generation with the ability for the report designer to add page headers, footers and page breaks. Refer to product documentation here to learn more about paginated reports.

27. How do I create paginated reports?

Users can create paginated reports in **Power BI Report Builder** and deploy them to the service.

Refer to documentation <u>here</u> for further information on creating paginated reports and setting up data source connection and refresh schedules

28. What are the licensing requirements for paginated reports in Power BI?

Paginated reports can only be published to Power BI Premium capacity. Tools required to create paginated reports are available free to download and use. Users importing paginated reports to a Power BI Premium workspace need a Power BI Pro license and need access to the workspace. Consuming reports published to a Power BI Premium workspace does not require a separate user subscription license.

29. Are these reports same as the paginated reports in SQL Server Reporting Services (SSRS) and Power BI Report Server? Can I move my existing paginated reports to Power BI?

Yes. Power BI paginated reports are same as the paginated reports in SQL Server Reporting Services and Power BI Report Server. To move paginated reports currently hoisted on SSRS or Power BI Report Server customers simply import the *.RDL file into Power BI.

Note – customers may need to update some report configurations once existing paginated reports are published to Power BI. Also, users will need to create new report subscriptions in Power BI as those do not move over from SSRS / Power BI Report Server.

Please refer to the <u>product documentation</u> for the list of data sources supported for paginated reports hosted in Power BI. We will continue add support for additional data sources in coming releases.

30. What data sources are supported for Paginated reports in the first release?

Please refer to the <u>product documentation</u> for the list of data sources supported for paginated reports hosted in Power BI. We will continue add support for additional data sources in coming releases.

Power BI Premium Proof of Concept Program

1. What is the Power BI Premium Proof of Concept Program?

A free 30 or 60 day Proof of Concept is available for Power BI Premium, with limited availability, through the Business Applications Sales Desk.

A Proof of Concept (POC) is used in the pre-sales process as required by the customer or as needed to prove out use cases. It is also used for formal (specific requirements provided by customer) and informal (impression/subjective only) performance testing.

Please note that the Power BI Premium POC is not being publicly disclosed or made available to all customers at this time. Admittance may be granted upon review based on the answers to the eligibility questions in the nomination form at aka.ms/bizappssalesdesk

The goal of the POC is to help customers:

- a. Determine the required number of Power BI Premium nodes by enabling configuration benchmarking.
- b. Evaluate Power BI Premium's features and capabilities (not available in Power BI Pro) with their own data.

2. How do I nominate a customer for the Power BI Premium proof of concept program? Visit the nomination form to nominate a customer.

3. What criteria must a customer meet to be considered for the program?

POC environments are strictly for use by Microsoft employees and Partners working with a prospect to close a sale. It must be a qualified opportunity and MSX Opportunity ID must be provided. Visit the <u>nomination form</u> for full eligibility criteria.

4. Will every customer that meets the criteria be admitted?

Customers will be admitted based the eligibility criteria and available slots in the program.

5. How many customers will you be accepting into the program?

The Power BI Premium proof of concept program currently has limited availability. If successful, we may look to scale over time to allow for onboarding of additional customers. We are not committing to a broader, long term rollout at this time.

6. Should I disclose the existence of the program to my customer?

No – do not disclose the program to your customer. Customers will be admitted based the eligibility criteria and available slots in the program, so customers should not be made aware of the program until they are approved.

7. What happens if my customer isn't accepted into the program?

Customers interested in trying Power BI Premium can purchase P1 nodes on a monthly basis via Web Direct.

8. Is the program open to customers in all geographies?

Yes – customers in regions supported today by Power BI Premium are eligible for nomination.

9. If my customer is accepted into the program, can they defer participation to a later date if necessary?

If you know your customer isn't ready to start the proof of concept immediately, identify a target date; Otherwise please ensure the customer activates within 30-days of receiving the code or it's possible the trial will be reallocated.

10. Which capacity node is being made available to customers as part of the program? What if my customer requires more capacity?

One Power BI Premium P1 capacity node will be made available for free to participating customers during the proof of concept. Customers can purchase additional P1 nodes to use for one month via Web Direct.

11. My customer is new to Power BI and wants to explore the core capabilities and features of the service – should I nominate them for the program?

No – the existing 30-day Power BI Pro trial should be the entry point for all customers interested in experiencing Power BI. The Pro trial – coupled with the <u>Power BI Premium calculator</u> – should be sufficient for most customers seeking to make a purchase decision.

The Power BI Premium proof of concept is designed for a select, limited number of customers nearing the final stages of deployment who meet the criteria defined in the <u>nomination form</u> and with the following conditions:

- 1) Determine the required number of Power BI Premium nodes by enabling configuration benchmarking.
- 2) Evaluate Power BI Premium's features and capabilities (not available in Power BI Pro) with their own data.

Customers interested in trialing Power BI Premium can also purchase P1 nodes on a monthly basis via Web Direct.

12. Is this program a substitute for the Power BI Premium calculator?

No – The <u>Power BI Premium calculator</u> provides a capacity sizing recommendation based on user counts and intensity of use, and it is the best resource for customers seeking to determine which Power BI Premium capacity nodes meet their needs.

13. What are the requirements for my customer to activate the proof of concept?

Your customer will need a promo code (provided by Microsoft) and permissions to the Office 365 Admin Center with the "Global Administrator" or "Bill Administrator" roles.

For questions relating to Power BI Premium Proof of Concept, please contact bizapppoc@microsoft.com

For questions about Licensing, please contact Power BI Licensing and Pricing <u>Yammer</u>.

Power BI Report Server

Overview

1. What is Power BI Report Server? Does this mean you're making Power BI available onpremises?

Power BI Report Server is available as part of Power BI Premium and compatible with SSRS reports, allowing the deployment and distribution of interactive Power BI reports—and traditional paginated reports—on-premises within the boundaries of an organization's firewall. Organizations can choose Power BI in the cloud or elect to keep reports on-premises with Power BI Report Server and move to the cloud at their pace.

Power BI capabilities such as real-time dashboards, natural language query, and others in the Power BI service are not available as part of Power BI Report Server. Visit the <u>Power BI Premium overview</u> and the <u>Power BI Report Server overview</u> decks for more information and Comparing Power BI Report Server and the Power BI service to see key differences.

2. Why is Power BI Report Server included in Power BI Premium rather than being sold as a separate product?

Power BI Premium introduces the ability to maintain BI assets on-premises with Power BI Report Server. Power BI Report Server is an on-premises server that allows the deployment and distribution of interactive Power BI reports – and traditional paginated reports – completely within the boundaries of the organization's firewall. With Power BI Premium the same number of virtual cores an organization provisions in the cloud can also be deployed on-premises through Power BI Report Server, without the need to split the capacity. Organizations can choose Power BI in the cloud, or elect to keep reports on-premises with Power BI Report Server and move to the cloud at their pace.

Power BI Premium is a capacity-based licensing model that increases flexibility for how users access, share and distribute content. It enables Power BI Pro users to publish reports broadly across the enterprise and beyond, without requiring recipients to be licensed per user. Power BI Report Server which is included in Power BI Premium, enables wider distribution of Power BI reports on-premises without the need to license report consumers with per user licenses. Hence Power BI Report Server is a natural fit into the Power BI Premium offering

3. Does Power BI Report Server support SSRS paginated reports (RDL reports)?

Yes. Customer can create paginated reports using supported tools like Report Builder, and publish the reports on Power BI Report Server for on-premises distribution

Licensing

4. How can customers acquire Power BI Report Server?

Power BI Report Server is available through Power BI Premium or as a Software Assurance (SA) benefit for customers with active SQL Server EE with SA licenses. Contact your Microsoft representative for more information.

5. Why is Power BI Report Server not available as benefit for SQL Server Standard or Enterprise Edition customers?

Power BI Report Server is available to SQL Server customers with EE + SA licenses or for purchase through Power BI Premium. Power BI is a SaaS service, and Power BI Report Server will follow the same subscription-based delivery model.

6. To which SQL Server version(s) does the SQL Server EE+SA benefit for Power BI Report Server apply?

Software Assurance is not SQL Server version specific. Any customer with active core based SQL Server Enterprise Edition with SA license can deploy Power BI Report Server on available cores

7. Do I need a Power BI Pro license with Power BI Report Server?

A Power BI Pro license is required to publish Power BI reports from Power BI Desktop to the Power BI Report Server and to further distribute to users on-premises. A per user license is not required to consume Power BI reports published on the report server.

8. How is the Power BI Pro requirement for publishing enforced?

It's an honor-based licensing structure and there isn't any a technical restriction to enforce the licensing requirement.

Meanwhile a suggested workaround is to use the Power BI Report Server security feature to restrict which groups/users have permission to publish reports, so customers can track groups/users that publish reports to the report server and ensure those users have Pro licenses.

9. Why do I need a Power BI Pro license when publishing Power BI reports to the Power BI Report Server, especially if I have acquired the report server through the SQL Server SA benefit?

Power BI Report Server is part of the Power BI family. Just like you need Power BI Pro license to be able to share content on Power BI Premium, you need a Power BI Pro license to be able to share content on-premises through Power BI Report Server. At the same time, just like you don't need per user subscription license to consume content published on Power BI Premium, you don't need a per user license to consume Power BI reports published on Power BI Report Server

10. Do I need a Power BI Pro license for any other user actions? What about export to Excel?

A Power BI Pro license is required to publish Power BI reports to Power BI Report Server for further distribution on-premises. Ability to Export Power BI reports hosted on the report server to Excel is targeted in a subsequent release. Users without a Power BI Pro license will be able to export to Excel when the functionality becomes available.

11. Will Power BI Report Server be available under SPLA?

No. Power BI Report Server is only to be used on-premises. It is not really designed to be used as a software as a service. Given the use right restriction to be only used on-premises, it's not a good fit for SPLA.

12. Can I deploy Power BI Report Server on an Azure VM or on other public cloud provider?

Yes, when acquired through Power BI Premium OR SQL Server Enterprise with Software Assurance.

Power BI Report Server enables deployment and distribution of interactive Power BI reports—and traditional paginated reports. Power BI capabilities such as real-time dashboards, natural language query, and others in the Power BI service are not available as part of Power BI Report Server.

Power BI Report Server is supported on dedicated hardware or Azure VM's when acquired as SA benefit.

Power BI Premium also allows customers to deploy Power BI Report Server on Azure VMs in addition to dedicated hardware.

This table will help explain support terms

		Power BI Repo	Power BI Report Server deployment options	
		Dedicated Hardware	Azure VM	Other Cloud Providers
Power BI Report Server license acquired	1. Power BI Premium	✓	✓	
through	2. SQL Server EE + SA benefit	✓	✓	

Current licensing terms for both options are available in the Product Licensing Terms & Documentation (here).

- Go to section 4.6 on page 28 for Power BI Report Server licensing terms acquired as a SA benefit
- Go to section 2.1 on page 64 for Power BI Report Server licensing terms acquired through Power BI Premium

Customer Facing Message:

Microsoft launched Power BI Report Server to enable customers to host their Power BI reports on-premises, behind their firewall.

Power BI Report Server is part of the Power BI family and is included as part of the Power BI Premium offering. Power BI Premium extends maximum flexibility to customers allowing them to build on their on-premises BI investments through Power BI Report Server, take advantage of dedicated Power BI capacity in the Microsoft cloud or develop a hybrid BI solution. When purchased as part of Power BI Premium, the licensing terms enable customers to deploy Power BI Report Server on their own hardware or on their Azure virtual machines.

Power BI Report Server is also available as a benefit for SQL Server Enterprise customers with active SA coverage and provides the same ability to deploy the solution on Azure virtual machines or dedicated hardware.

For questions about Licensing, please contact Power BI Licensing and Pricing Yammer.

Technical

13. What is included in the Power BI Report Server installation package?

Power BI Report Server installation package includes Power BI Report Server installation and a special version of Power BI Desktop optimized for publishing Power BI reports to the report server. Along with installing Power BI Report Server, the installation package will also deploy an Analysis Services engine to host imported datasets of Power BI reports.

Commonly, an enterprise would use their existing, licensed SQL Server to host the report server database; Standard edition is adequate. Alternatively, Power BI Report Server license includes a "SQL Server Technology" license that enables customers to run SQL Server Standard Edition Database Engine to host the report server database only.

14. What are the system requirements and software needed to install Power BI Report Server?

The system requirement for installing an instance of Power BI Report Server are: Windows Server 2012 plus SQL Server Database Engine 2008 or later.

15. Which data sources does Power BI Report Server support?

You can host Power BI reports on the report server connecting any Power BI Desktop data source. This includes all the most popular data sources customers use in the Power BI Service, including SQL Server, Oracle, Excel Workbooks, SAP HANA and many others. We have the complete list of supported data sources in the online documentation, including data sources supported for scheduled refresh and Direct Query connection.

16. Do I need to use two different Power BI Desktop versions, one to publish to the Power BI Report Server and another one to publish to Power BI?

You'll need to use the version of Power BI Desktop that matches the version of Power BI Report Server; for example, Power BI Desktop (May 2019) with Power BI Report Server (May 2019).

We'll offer a build of Power BI Desktop optimized for use with Power BI Report Server, disabling prompts to update and adding the convenience of Open from/Save to Power BI Report Server, right within Power BI Desktop

17. Can I install the two Power BI Desktop versions on the same machine?

Yes, you can install the Power BI Desktop version packaged with Power BI Report Server, side by side with other Power BI Desktop versions

18. Can I publish a report hosted on the Power BI Report Server to Power BI (service)?

Yes, you can publish the Power BI report hosted on Power BI Report Server to the Power BI (Service) by downloading the pbix file from the report server and upload it to the service (through Get Data -> Files option)

Additionally, if your report connects to an on-premises Analysis Services data model, you will need to configure Power BI (service) to connect to it via the On-premises Data Gateway

19. Is there a developer edition of Power BI Report Server?

Yes. Customer can take advantage of the free developer edition of Power BI Report Server for their development and test processes. It's not supported for production workloads.

20. Do I need a Power BI Pro license to publish Power BI reports to the developer edition of Power BI Report Server?

No. You do not need a Power BI Pro license when developing your solution with the developer edition of Power BI Report Server. You do need a Power BI Pro license however when publishing to your production Power BI Report Server environment.

21. Why don't customers need a Power BI Pro license when publishing Power BI reports to the developer edition of Power BI Report Server

Microsoft's developer licensing treatment for on-premises products is anchored around providing a "friction free" experience where possible and to lower the entry bar for customers to develop their solutions with Microsoft products. To make it easy for customers to build, test and validate their solution with Power BI Report Server on-premises, Microsoft does not require users to have Power BI Pro license to publish Power BI Reports to the developer edition of Power BI Report Server.

22. Can I embed Power BI reports stored in Power BI Report Server into other apps?

There's an ability to embed a Power BI report stored in Power BI Report Server into an iframe, but since that approach gives you no control of authentication, it can be useful for intranet apps (used by employees in the customer's Active Directory) but not for extranet apps (external users not in AD). Refer <u>product documentation</u> for further information.

23.Is there a minimum recommended core count for the deployment of Power BI Report Server?

Technically, you can run Power BI Report Server on 4 cores. Whether 4 cores are adequate is a question of scale and varies depending on many factors. For a development or testing environment, 4 cores are often adequate. For a production environment, we recommend a minimum of 8 cores.

Additionally, customers can review the Power BI Report Server sizing guidance document (<u>link</u>) to plan their Power BI Report Server deployments

Power BI Report Server and SQL Server Reporting Services

24. What's the difference between SQL Server Reporting Services (SSRS) and Power BI Report Server?

Power BI Report Server features are a superset of Reporting Services: everything you can do in Reporting Services, you can do with Power BI Report Server, along with support for Power BI reports.

25. Can I replace my existing SQL Server Reporting Services installation with Power BI Report Server?

Yes. Customers can easily migrate their SQL Server Report Services report catalog to Power BI Report Server and can use Power BI Report Server as the single reporting solution on-premises to host interactive Power BI Reports as well as precisely formatted operational reports

26. How can I migrate my existing SSRS paginated and mobile reports to Power BI Report Server report catalog?

For Native mode: You will follow the same familiar process for migrating Reporting Services deployments across servers: back up the report server database and encryption key and restore it in the destination deployment.

For SharePoint mode: You can't migrate the database, so you need to migrate the reports. There's a <u>sample script</u> online that can migrate reports from SharePoint mode to Native mode.

27. I have existing SQL Server Reporting Services licenses. Is there any way for me to get access to Power BI Report Server without the purchasing Power BI Premium?

A new Power BI Report Server benefit is available to SQL Server EE with SA customers that provides them rights to deploy Power BI Report Server on any cores licensed with EE – SA. Please refer to the licensing terms in the SA document or contact your Microsoft representative

28. Does this mean Microsoft is planning to end support for SQL Server Reporting Services as a product?

No. We continue to develop both Power BI Report Server and SSRS to meet customers' needs. For customers who want an on-premises solution for self-service BI as well as enterprise reporting, we offer Power BI Report Server. For customers who need a solution for traditional enterprise reporting only, SQL Server 2017 will continue to include Reporting Services.

Power BI Embedded

1. What is Power BI Embedded

Give users world-class analytics without building them yourself

Quickly and easily provide exceptional customer facing reports, dashboards, and analytics in your own applications by white labeling Power BI. Get full control over the user experience and select from features that range from simple reporting to AI-powered advanced analytics. Minimize your developer investment by automating the monitoring, management, and deployment of your Power BI content through APIs.

2. Who is the intended audience for Power BI Embedded?

Application developers both inside the organization (IT) and ISVs.

3. How is Power BI Embedded different from Power BI the service?

- a. Power BI Embedded is intended for ISVs or application developers who are building applications and want to embed visuals into those applications and web-portals to help their customers make decisions without building an analytics' solution from the ground up. Embedded analytics enables users to access data and perform queries to generate insights from within the application.
- b. Power BI, on the other hand, is a software-as-a-service analytics solution that gives organizations a single view of their most critical business data.

4. What is the Microsoft recommendation for when a customer should buy Power BI Premium vs Power BI Embedded?

- a. The recommendation of Microsoft is that enterprises buy Power BI Premium for organizational BI, an enterprise-grade, self-service cloud BI solution, and ISVs buy Power BI Embedded, cloud-powered embedded analytics components. However, there are no restrictions on which product a customer can buy.
- b. Enterprises may decide to use A SKUs in Azure if they are only interested in building line of business applications and embedding analytics into them and are not interested in using the pre-packaged Power BI service.

5. What is the guidance for existing Power BI Workspace Collections and Power BI Premium (EM) customers who want to deploy in Azure.

Note that customers on an EM SKU have no obligation to move, but those using Power BI Workspace Collections need to migrate to Power BI Embedded prior to their retirement date in order to avoid a service failure.

Scenario	Core Message
Existing Power BI Workspace Collection	We've now made it even easier to migrate to the new
customer who has not migrated to the	Power BI Embedded. You can continue to use the
converged API surface yet.	Azure portal and your subscription to manage and

deploy your Power BI Embedded solution. When you're ready to migrate to the new service, follow these steps. How to migrate Power BI Embedded Workspace Collection content to Power BI Embedded.
Note: These customers may continue using the previous version of the service metered on sessions consistent with the program they are purchasing through. Or they may move all or part of their usage to the new version of the service meted on node hours. We encourage our customers to move to the Power BI Embedded solution

Technical

6. What is the difference between Power BI Premium and Power BI Embedded?

- a. Power BI Premium is capacity geared toward enterprises, who want a complete BI solution that provides a single view of its organization, partners, customers, and suppliers. Power BI Premium helps your organization make decisions. Power BI Premium is a SaaS product and comes with the ability for users to consume content through the Power BI portal, mobile app, and through internally developed apps.
- b. Power BI Embedded is for ISVs or developers who are building applications and want to embed visuals into those applications. Power BI Embedded helps your customers make decisions Because Power BI Embedded is for application developers, only customers of that application can consume content stored on Power BI Embedded capacity, including anyone inside or outside the organization. Power BI Embedded capacity content cannot be shared through one-click publish to Web or one-click publish to SharePoint, and it does not support SSRS reports.

7. What is the difference between the A SKUs in Azure and EM SKUs in Office 365?

- a. PowerBl.com is an enterprise solution that includes many capabilities like social collaboration, email subscription, etc. in a Software as a Service offering
- b. Power BI Embedded is a set of APIs available for developers to create an embedded analytics solution in a Platform as a Service offering. For the Embedded analytics scenario, PowerBI.com should be used to help ISVs and developers manage their embedded analytics solution content and tenant level settings.
- c. Here is a partial list of differences you may use with each

Feature	Power BI Embedded (A SKUs)	Power BI Premium Capacity (EM SKUS)
Embed artifacts from a Power BI App workspaces	Azure capacity	Office 365 capacity
Power BI license required to consume reports	No	Yes
Consume Power BI reports in an Embedded application	Yes	Yes
Consume Power BI reports in SharePoint	No	Yes
Consume Power BI reports in Teams	No	Yes

8. Power BI offers three SKUs for embedding: A, EM and P. Which one should I purchase for my scenario?

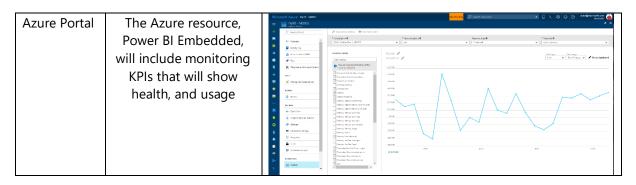
	A SKU (Power BI Embedded)	EM SKU (Power BI Premium)	P SKU (Power BI Premium)
Purchase	Azure portal	Office	Office
Use cases	Embed content in your own application	,	1.Embed content in your own application 2.Share content with Power BI Pro users or users added to the Power BI Premium instance and embed in other SaaS applications (SharePoint, Teams) 3. Share content with Power BI registered account holders through PowerBI.com
Billing	Hourly	Monthly	Monthly
Commitment	No commitment	Monthly/ Yearly	Monthly/ Yearly
Differentiation	Full elasticity- can scale up/ down, pause/ resume resources in Azure portal or through API	Can be used to embed content in SharePoint Online and Microsoft Teams	Combine embedding in applications and use the Power BI Service in the same capacity

9. Will my capacity scale automatically to adjust to the consumption of my app?

While there is no automated scaling now, all the APIs are available to scale at any time.

10. How can I monitor capacity consumption?

Monitoring through Azure is on the near-term roadmap:



11. What happened to the previous version of Power BI Embedded in Azure?

(Only applicable to existing Power BI Embedded customers prior to July 1, 2017)

a. The resource for Power BI Embedded in Azure has been renamed to Power BI Workspace Collections. "Workspace Collections" will denote the previous service in documentation and UI. There will be no mention of workspace collections in Power BI Embedded.

b. Power BI Workspace collection is a retired service and should not be used in cases it was not used before July 1, 2017

12. What is the authentication model for Power BI Embedded?

- a. Power BI Embedded will continue to use AAD for authentication using either a <u>service principal apponly token</u> or AppUser (Power BI Pro license user), authenticating the application inside Power BI.
- b. The authentication and authorization of the application users will be implemented by the ISV, the ISV can implement their own authentication for their apps.
- c. If you already have an AAD you can use your existing directory, or you can create a new AAD for your embedded App content security.

13. How is Power BI Embedded different from other Azure services?

- a. The ISV/developer must have a Power BI account before the purchase Power BI Embedded in Azure. Your Power BI Embedded deploy region is determined by your Power BI account.
 - i. Manage your Power BI Embedded resource in Azure to:
 - 1. Scale up/down
 - 2. Add capacity admins
 - 3. Pause/resume of service
 - ii. Use PowerBl.com to assign/un-assign workspaces to your Power Bl Embedded capacity.

14. What deploy regions are supported?

<u>This documentation page</u> contains the most up to date list of deployment regions. Please note that Multi-geo deployment is an option as well.

15.My customer is already using PowerBl.com for their organizational reports, can I distribute my App reports to my customers PowerBl.com tenant?

As an ISV you can package your App analytics content by building a <u>Power BI Template App</u>. The template app you build allows your customers to connect and instantiate analytics within their own accounts. Distribute your Template App by submitting to the Cloud Partner Portal. The apps then become publicly available in the <u>Power BI Apps marketplace</u> and on <u>Microsoft AppSource</u>.

Licensing

16. What SKUs are available in Azure and how much do they cost?

SKU	Price*	Dedicated	Memory	Total Cores
		Infrastructure		
A1	\$1.01/hour	No	3 GB RAM	1
A2	\$2.01/hour	No	5 GB RAM	2
A3	\$4.03/hour	Yes	10 GB RAM	4
A4	\$8.06/hour	Yes	25 GB RAM	8
A5	\$16.13/hour	Yes	50 GB RAM	16
A6	\$32.26/hour	Yes	100 GB RAM	32

17. What will my customers experience at peak time if the application is supporting a volume of page renders higher than the limit stated on the selected SKU

If you have not purchased the SKU that is right for your required needs, your customers will get a degraded performance and report loading latency will increase.

18. How do I purchase Power BI Embedded?

Power BI Embedded is available through Azure.

19. How Power BI Embedded be metered?

Power BI Embedded will have an hourly meter.

20. How does the usage of Power BI Embedded show up on my bill?

Power BI Embedded bills on a predictable hourly rate based on the type of node(s) deployed. Actual usage is computed to the second and billed hourly. For example, if an instance exists for 12 hours, 15 minutes in a month, your bill will show usage of 12.25 hours. If your instance is only active for 6 minutes, your bill will show usage of 0.1 hour.

21. What happens if I already purchased Power BI Premium and now I want some of the benefits of Power BI Embedded in Azure?

Customers will continue to pay for any existing Power BI Premium purchases until the end of their current agreement term and then may true down Power BI Premium purchases as necessary at that point.

22. Will you release any additional EM SKUs in Office 365?

No additional EM SKUs will be made available in Office 365. We do not market the current EM SKUs, instead focus on A SKUS for ISV scenarios and P SKUs for organizational BI scenarios. Current EM SKU availability:

EM Office SKU	Available channels	Available commitment
EM1	VL	Yearly
EM2	VL	Yearly
EM3	VL, Web Direct	Yearly, Monthly

23. What are the licensing scenarios for Embedding Power BI in an Application?

- a. A developer and a content creator require a Power BI PRO license
- b. The ISV acquires Power BI Embedded capacity in Azure
 - i. No end user licensing is required for consumption of white labeled Power BI inside an ISV's application

24. Do I still have to buy Power BI Premium to get access to Power BI Embedded?

No, Power BI Embedded includes the Azure based capacity that you need to deploy and distribute your solution to customers.

25. Who needs a Power BI Pro license for Power BI Embedded and why?

- a. It is required that any content publisher that adds reports to a Power BI workspace, any developer that requires use of the REST APIs, any tenant admin that needs to manage the Power BI tenant and capacity will need a Power BI Pro license.
- b. Because Power BI Embedded allows use of the Power BI portal for managing and validating embedded content, the Power BI Pro license is required to authenticate the App inside PowerBI.com to get access to the reports in the right repositories. The <u>service principal is also available for authentication</u>, which removes the requirement for this Power BI Pro "master account" license.

26. Can I get started for free?

Yes, you can use your Azure credits for Power BI Embedded. On top of that

27. What's the purchase commitment for Power BI Embedded?

Customers may change their usage on an hourly basis. There is no monthly or annual commitment for the Power BI Embedded service.

28. Is Power BI Embedded available for non-profits and educational?

Non-profit and educational entities can purchase Azure. There is no special pricing for these customer in Azure.

29. Can I get a trial experience for Power BI Embedded in Azure?

Because Power BI Embedded is a part of Azure it is possible to use the service with the \$200 credit received when signing up for Azure.

30. Is there a promo for Power BI Embedded?

No, there are no promotions for Power BI Embedded.

For questions about Licensing, please contact Power BI Licensing and Pricing Yammer.

Power BI Mobile

1. Does Power BI support mobile devices?

Yes. Power BI has native apps for Android, iOS, and Windows 10 devices.

Download each of the **Power BI mobile apps** from its respective store:

- <u>Apple AppStore</u> (iPad, iPhone, and Apple Watch)
- Google Play (phone and tablet)
- Windows Store (PC, Mobile Device and HoloLens)

2. Do I need a Power BI Pro license to use the mobile apps?

The Power BI mobile apps provide a streamlined experience for users to consume Power BI reports and dashboards hosted on the Power BI service on their mobile devices. This means that users need a Power BI account to access their reports and the reports that have been shared with them.

3. What options are available for enterprise support of the Power BI mobile apps (MDM and MAM)?

Organizations can use Microsoft Intune to manage devices and applications, including Power BI mobile apps for Android and iOS. Microsoft Intune lets organizations control items like requiring an access pin, controlling how data is handled by the application, and even encrypting application data when the app isn't in use. Learn how to configure the Power BI mobile apps with Microsoft Intune.

There are some app configurations that can be done using any MDM tool that supports appconfig format, this includes configuring Report Server, force Face/Touch Id, enabling multi-select and more. For complete list of app setting that can be configured remotely using App Config read here: Remotely configure Power BI app using mobile device management (MDM) tool.

4. What Power BI reports and dashboard are available in Power BI Mobile app?

any Power BI item (report, dashboard, workspace, app) that users can access from their browser are also available from the app, without additional effort.

Creators can choose to <u>create mobile optimized layout</u> to the reports they are building, so it will be easier to view and interact with those reports from a mobile device.

5. Are Q&A and Quick Insights available in the Power BI mobile apps?

Yes, but only in the iOS version of the app. Both features are embedded in the Q&A mobile experience. Users can ask questions in chat form and get answers as visualizations. In the process, the app provides the user with featured insights in their model and specific insights depending on their question. Learn more about Q&A in the iOS mobile apps.

For product management questions relating to Power BI Mobile, please contact; Rebar Niemi. For Engineering questions, please contact Maya Shenhav.

Power BI AI

1. What AI capabilities does Power BI have?

Power BI has a spectrum of AI capabilities available throughout the whole product portfolio. Business users are able to right click visuals and get insights like why a metric changed or increased. They can also interact with their data by asking questions using natural language. Analysts can build their own machine learning models and enrich their data using cognitive services. They can also build AI visualizations for end users to consume. Data scientists can extend Power BI with Azure ML, R and Python.

2. Is there an easy way to demonstrate Power BI AI capabilities to customers?

You can show customers GIFs of all the AI capabilities in Power BI using the AI in Power BI Field Deck.

If you would prefer to demo the AI capabilities yourself, you can learn how to do that through this video tutorial.

3. What are AI visualizations?

Al visualizations are core Power Bl visuals that an analyst can add to their Power Bl report. Al visualizations have some intelligence built into them which means they do more than simply plot the data. For example, the key influencers visualization runs a statistical model to determine what are the top influencers of a metric. The Q&A visualization converts a user's natural language question into the visual that best answers it.

4. What kind of machine learning models can you build with Power BI?

In Power BI dataflows, you can build a variety of machine learning models that help predict a value or number. You can choose from a binary prediction model (predict one of two states – e.g. fraud or no fraud), a classification model (prediction one of three + states – e.g. dissatisfied, neutral, satisfied) or a regression model (predict a value – e.g. a house price). To learn more about what options are available you can take a look at the <u>Automated ML documentation</u>.

5. What does Power BI use to run its machine learning models?

Power BI leverages Automated ML behind the scenes. Automated ML is an Azure service that has been embedded into the Power BI experience. Automated ML does automatic feature selection, algorithm selection and hyper parameter tuning to build the best possible machine learning model with minimal effort from the end user.

6. Which Cognitive Services are available in Power BI?

You can use text analytics functions (sentiment analysis, key phrase extraction, language detection) as well as image detection out of the box in Power BI.

7. How do I use Azure ML with Power BI?

If an Azure ML webservice is shared with a Power BI user, the model automatically appears as a new function in AI Insights. AI Insights are available as data transformation steps in Power Query in the Desktop as well as dataflows. Learn more by taking a look at our <u>Azure ML documentation</u>.

8. Which Power BI AI features require Premium?

Cognitive Services and AutoML in Power BI both require Power BI Premium. It is also possible to leverage Power BI embedded (minimum A2 SKU) to use these features. Azure ML integration, AI visuals including Q&A as well as R and Python do not require Premium.

9. Why do some Power BI AI features require Premium?

Some of the AI features like Cognitive Services and AutoML require a lot of compute power to run. For example, AutoML could run for 2-3 hours to build the best predictive model for a user. When a user uses Premium or Embedded they use their own capacity and so they can run compute intense operations without deprecating the experience for others.

10. What is the difference between using Cognitive Services in Azure vs. Power BI?

Cognitive Services in Azure require an Azure subscription whereas in Power BI they require Premium/Embedded capacity. In Azure a user needs to write code to invoke and run the cognitive services whereas in Power BI this is all done through point and click functionality.

11. What is the difference between using Automated ML in Azure vs. Power BI?

Automated ML in Azure require an Azure subscription whereas in Power BI it requires Premium/Embedded capacity. In Azure a user needs to write code to train and run the model whereas in Power BI this is all done through point and click functionality. AutoML models built in Power BI can only be leveraged by Power BI.

12. Is Power BI AI available in Power BI embedded?

All Power BI Al functionality works in Power BI embedded apart from Quick Insights.

13. Is Power BI AI available on Power BI mobile?

All Power BI Al functionality works on Power BI mobile. Q&A and Quick Insights are only available on the iOS version of the app.