

# Supporting Your EU GDPR Compliance Journey

With Microsoft Power BI

Version 1



## Table of Contents

Disclaimer.....	3
Introduction .....	4
Using This Document .....	4
Shared Responsibility Model .....	5
The GDPR and Its Implications.....	6
Key GDPR Compliance Roles.....	7
Personal Data.....	8
Data Definitions .....	8
Data Pseudonymization .....	8
Power BI Data .....	9
Journey Toward GDPR Compliance .....	9
Four Stages to Follow.....	9
Key GDPR Steps.....	10
Microsoft Power BI and the GDPR.....	10
Power BI and the GDPR Journey .....	12
Key Messaging .....	12
Discover - Search for and identify personal data.....	12
Discover - Facilitate data classification .....	13
Discover - Key Takeaways .....	13
Manage - Enable data governance practices and processes .....	14
Manage - Correct inaccurate or incomplete personal data, or delete personal data, regarding data subjects .....	14
Manage - Provide data subject with their personal data in a common, structured format .....	14
Manage - Restrict the processing of personal data .....	15
Manage – Collect consent from data subjects.....	15
Manage – Key Takeaways .....	15
Protect - Data protection and privacy by design and default.....	15
Protect - Secure personal data through encryption .....	15
Protect - Secure personal data by leveraging security controls that ensure the confidentiality, integrity, and availability of personal data .....	16
Protect - Detect and respond to data breaches .....	16
Protect - Facilitate regular testing of security measures .....	16

Protect – Key Takeaways .....	16
Report - Maintain audit trails to show GDPR compliance .....	16
Report - Track and record flows of personal data into and out of the EU .....	17
Report - Track and record flows of personal data to third-party service providers .....	17
Report - Facilitate Data Protection Impact assessments .....	17
Report – Key Takeaways .....	18
How You Can Obtain Power BI.....	18

## Disclaimer

This white paper is a commentary on the GDPR, as Microsoft interprets it, as of the date of publication. We've spent a lot of time with GDPR and like to think we've been thoughtful about its intent and meaning. But the application of GDPR is highly fact-specific, and not all aspects and interpretations of GDPR are well-settled.

As a result, this white paper is provided for informational purposes only and should not be relied upon as legal advice or to determine how GDPR might apply to you and your organization. We encourage you to work with a legally qualified professional to discuss GDPR, how it applies specifically to your organization, and how best to ensure compliance.

MICROSOFT MAKES NO WARRANTIES, EXPRESS, IMPLIED, OR STATUTORY, AS TO THE INFORMATION IN THIS WHITE PAPER. This white paper is provided "as-is." Information and views expressed in this white paper, including URL and other Internet website references, may change without notice.

This document does not provide you with any legal rights to any intellectual property in any Microsoft product. You may copy and use this white paper for your internal, reference purposes only.

Published April 2018

Version 1.0

© 2018 Microsoft. All rights reserved.

## Introduction

On May 25, 2018, a European privacy law is due to take effect that sets a new global bar for privacy rights, security, and compliance. If your organization is a [Microsoft Power BI](#) customer that finds itself considered a data controller (see Key GDPR Compliance Roles below) as defined by the General Data Protection Regulation, or GDPR, this white paper is addressed to you.

The GDPR is fundamentally about protecting and enabling the privacy rights of individuals. The GDPR establishes strict privacy requirements governing how you manage and protect personal data while respecting individual choice—no matter where data is sent, processed, or stored.

Microsoft and our customers are now on a journey to achieve the privacy goals and mandates of the GDPR. At Microsoft, we believe privacy is a fundamental right, and we believe that the GDPR is an important step forward for clarifying and enabling individual privacy rights. But we also recognize that the GDPR will require significant changes by organizations all over the world, including Microsoft.

We have outlined our commitment to the GDPR and how we are supporting our customers within the [“Get GDPR compliant with the Microsoft Cloud”](#) blog post by our Chief Privacy Officer [Brendon Lynch](#) and the [“Earning your trust with contractual commitments to the General Data Protection Regulation”](#) blog post by [Rich Sauer](#) - Microsoft Corporate Vice President & Deputy General Counsel.

Although your journey toward GDPR compliance may seem challenging, we are here to help you. For specific information about the GDPR, our commitments and beginning your journey, please visit the [GDPR section of the Microsoft Trust Center](#).

## Using This Document

The GDPR is new and your organization will need to develop its own interpretation as to how it applies to your business. Power BI can be an important part of your journey toward GDPR compliance. The purpose of this document is to provide you with some basic understanding of the GDPR and relate that to Power BI. While compliance with the GDPR is mandatory in specific situations outlined below, it is not a “check box” exercise. It is also a way to enhance your overall data protection and privacy capabilities.

Throughout this document you will find references to specific GDPR sections (e.g. Article 7). These are provided as a reference to better connect your understanding of the GDPR with capabilities related to Power BI. It is **NOT** meant to imply that by using specific features or capabilities within Power BI, your organization then complies with a specific requirement of the GDPR.

While this GDPR-related white paper is focused on Power BI, GDPR white papers have been created for the [Dynamics 365 Unified Operations Plan Business Applications](#) that includes:

- Dynamics 365 for Finance and Operations
- Dynamics 365 for Retail
- Dynamics 365 for Talent

A similar set of GDPR-related white papers have been developed for the [Dynamics 365 Customer Engagement Plan Business Applications](#) that includes:

- Dynamics 365 for Sales
- Dynamics 365 for Customer Service
- Dynamics 365 for Project Service Automation
- Dynamics 365 for Field Service

A set of GDPR-related white papers have also been developed for the Dynamics applications that run on-premises in our customer's own data centers that include:

- Dynamics NAV
- Dynamics C5

In addition to the Power BI capabilities outlined in this white paper, Microsoft has announced the [Compliance Manager](#) as a cross-Microsoft Cloud services solution designed to help organizations meet complex compliance obligations like the GDPR. It performs a real-time risk assessment that reflects your compliance posture against data protection regulations when using Microsoft Cloud services, along with recommended actions and step-by-step guidance. [Learn more about Compliance Manager and how to access the preview.](#)

The first few sections of this document will provide an overview of the GDPR and suggest an approach for how you can think about both enhancing your data protection capabilities as well as how you may want to think about complying with the GDPR as expressed in four stages – Discover, Manage, Protect and Report.

The next sections go into specific detail for how Microsoft Power BI can help address your needs in each of the four stages.

## Shared Responsibility Model

As you read through this document, keep in mind that your compliance with the GDPR involves your role as a “controller” and, in some cases, Microsoft as a “processor”. These roles are defined in the GDPR overview section further below. Depending upon which Microsoft applications you have, you may find that you are both controller and processor, or have a shared responsibility with Microsoft.

In a recent publication, [Shared Responsibilities for Cloud Computing](#), Microsoft outlines the types of responsibilities it shares with its customers that can vary from the traditional on-premises IT environment to the Cloud environments that have come to be known as Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS). The shared responsibility model for these IT environments are summarized graphically below.

As this model relates to how you utilize Microsoft Power BI, you will find that:

- You run [Power BI Report Server](#) on-premises where you are in both the controller and processor roles. Microsoft may provide important features but is not directly involved with your GDPR compliance.
- You are using IaaS to host Power BI Report Server. You remain the controller and processor, but Microsoft provides important controls for you.
- You are using PaaS with [Power BI Embedded](#) to embed analytics in your app for your customers. You are the controller and Microsoft is the processor and provides important controls for you.
- Is the SaaS version of Power BI where you are the controller and Microsoft is the processor and provides important controls.

Responsibility	On-Prem	IaaS	PaaS	SaaS
Data classification & accountability	Cloud Customer	Cloud Customer	Cloud Customer	Cloud Customer
Client & end-point protection	Cloud Customer	Cloud Customer	Cloud Customer	Cloud Customer / Cloud Provider
Identity & access management	Cloud Customer	Cloud Customer	Cloud Customer / Cloud Provider	Cloud Customer / Cloud Provider
Application level controls	Cloud Customer	Cloud Customer	Cloud Customer / Cloud Provider	Cloud Provider
Network controls	Cloud Customer	Cloud Customer / Cloud Provider	Cloud Provider	Cloud Provider
Host infrastructure	Cloud Customer	Cloud Customer / Cloud Provider	Cloud Provider	Cloud Provider
Physical security	Cloud Customer	Cloud Provider	Cloud Provider	Cloud Provider

Legend: ■ Cloud Customer ■ Cloud Provider

Additional information about the responsibilities outlined in this model can be found in the Microsoft publication *Shared Responsibilities for Cloud Computing* referenced above. **Note:** *This whitepaper focuses only on GDPR as it relates to the Power BI cloud service.*

## The GDPR and Its Implications

The GDPR is a complex regulation that may require significant changes in how you gather, use and manage personal data. Microsoft has a long history of helping our customers comply with complex regulations, and when it comes to preparing for the GDPR, we are your partner on this journey.

The GDPR imposes new rules on organizations established in the EU and on organizations – wherever they are located – that offer goods and services to people in the European Union (EU) or that monitor the behavior of people that takes place in the Union. Among the key elements of the GDPR are the following:

- **Enhanced personal privacy rights** - strengthened data protection for individuals within the European Union (EU) by ensuring they have the right to: access their personal data, correct inaccuracies in that data, have their personal data erased upon request, object to the processing of their personal data, and move their personal data;
- **Increased duty for protecting personal data** - reinforced accountability of companies and public organizations that process personal data, providing increased clarity of responsibility in ensuring compliance;

- **Mandatory personal data breach reporting** - companies are required to report personal data breaches to their supervisory authorities without undue delay, and generally no later than 72 hours; and
- **Significant penalties for non-compliance** - steep sanctions, including substantial fines that are applicable whether an organization has intentionally or inadvertently failed to comply.

As you might anticipate, the GDPR can have a significant impact on your business potentially requiring you to update personal privacy policies, implement / strengthen personal data protection controls and breach notification procedures, deploy highly transparent policies, and further invest in IT and training.

## Key GDPR Compliance Roles

As noted in the Shared Responsibility section, above there are specific roles defined within the GDPR that are important to keep in mind as you look at your compliance efforts and how your technology vendors, like Microsoft, impact those efforts. The GDPR defines the term “data subject” as well as two roles, controller and processor, which have specific obligations under the GDPR. These are called out in Article 4 of the GDPR:

- **Data Subject** – defined as, “an identified or identifiable natural person” and for the purposes of the scope of the GDPR that data subject is covered, regardless of their nationality or place of residence with the EU, in relation to the processing of their personal data.
- **Controller** – defined as, “the natural or legal person, public authority, agency or other body which, alone or jointly with others, determines the purposes and means of the processing of personal data.” Within the context of the GDPR, a controller does not have to be located within the EU for the GDPR to apply.
- **Processor** – defined as, “means a natural or legal person, public authority, agency or other body which processes personal data on behalf of the controller.”

It should be noted that the applicability of certain GDPR requirements may change depending on different variables such as a controller’s size (e.g., organizations defined as micro, small and medium-sized enterprises employing fewer than 250 persons); or the nature of the processing (e.g., for the purposes of prosecuting criminal offences, by the data subject in the course of a purely personal or household activity). For this reason, it is recommended that you seek legal assistance to determine your organization’s specific interpretation of the GDPR. Microsoft’s role as a controller and/or processor varies based on these definitions.

In some situations, such as holding its own employees’ data or certain types of data that can be considered as personal data, Microsoft acts as a controller using its own technologies and Cloud Services or technologies and Cloud Services from others.

There are also situations, such as with a Cloud Service like Power BI, where Microsoft can act as a processor since a customer in the role of a controller is dependent upon Microsoft, as a processor, to provide capabilities upon which a controller will depend to meet its obligations such as in the area of notification of a personal data breach. For more information on how Microsoft addresses these obligations visit the [Microsoft Business Application Trust Center](#).

# Personal Data

## Data Definitions

As part of your effort to comply with the GDPR, you will need to understand both the definitions of personal and sensitive data and how they relate to the types of data held by your organization within Power BI. Based on that understanding you will be able to discover how that data is created, processed, managed and stored.

The GDPR considers personal data to be any information related to an identified or identifiable natural person. That can include both direct identification (i.e., your legal name) and indirect identification (i.e., specific information that makes it clear it is you the data references).

The GDPR makes clear that the concept of personal data includes online identifiers (e.g., IP addresses, mobile device IDs) and location data.

Sensitive data are special categories of personal data which are afforded enhanced protections and generally requires an individual's explicit consent where these data are to be processed.

### Information relating to an identified or identifiable natural person (data subject) - examples

- Name
- Identification number (e.g., SSN)
- Location data (e.g., home address)
- Online identifier (e.g., e-mail address, screen names, IP address, device IDs)

## Data Pseudonymization

The GDPR also addresses the concept of pseudonymous data, or personal data which has been separated from its direct identifiers so that linkage to an identity is no longer possible without additional information which is being stored separately. This is different from anonymized data, where the direct link to personal data is destroyed. With anonymized data, there is no way to re-identify the data subject and, therefore, it is outside the scope of the GDPR.

As noted in the GDPR (Recital 28), "The application of pseudonymization to personal data can reduce the risks to the data subjects concerned and help controllers and processors to meet their data-protection obligations. The explicit introduction of 'pseudonymization' in this Regulation is not intended to preclude any other measures of data protection."

If your organization pseudonymizes your data you may benefit from the relaxation of certain provisions of the GDPR, such as personal data breach notification requirements. The GDPR also encourages pseudonymizing in the interests of enhancing security and as a privacy by design measure.

You will have very strong incentives to employ data pseudonymizing technologies under the GDPR to mitigate your compliance obligations and manage your risks. But bear in mind, while the GDPR considers both encryption or pseudonymization as safeguards, under Article 34, breach notification may be avoided if "the controller has implemented appropriate technical and organizational protection measures...such as encryption." (GDPR Article 34)

## Power BI Data

With the data definitions outlined in the GDPR in mind, let's look at data that may be contained in your Power BI assets and see how they relate. Microsoft defines specific data categories related to its Cloud Services, such as Power BI, in the [Microsoft Privacy Statement](#). As noted below, some of this data will be your responsibility as the controller to manage in a way that is in line with the GDPR. This list will start you on your discovery step:

- **Customer data** is all data, including text, sound, video, or image files and software, that you provide to Microsoft or that is provided on your behalf through your use of Microsoft enterprise online services. For example, it includes data that you upload for storage or processing, as well as applications that you upload for distribution through a Microsoft enterprise Cloud service. Customer data does not include administrator or other contact data, payment data, or support data.
- **Content** is a subset of customer data and includes, for example, Exchange Online email and attachments, Power BI reports, SharePoint Online site content, IM conversations, or data about your interactions with customers.
- **Administrator data** is the information about administrators supplied during signup, purchase, or administration of Microsoft services, such as names, phone numbers, and email addresses. It also includes aggregated usage information and data associated with your account, such as the controls you select. We use administrator data to provide services, complete transactions, service the account, and detect and prevent fraud.
- **Payment data** is the information you provide when making online purchases with Microsoft. It may include a credit card number and security code, name and billing address, and other financial data. We use payment data to complete transactions, as well as to detect and prevent fraud.
- **Support data** is the information we collect when you contact Microsoft for help, including what you supply in a support request, results from running an automated trouble shooter, or files that you send us. Support data does not include administrator or payment data.

All these data categories may contain personal data subject to the GDPR.

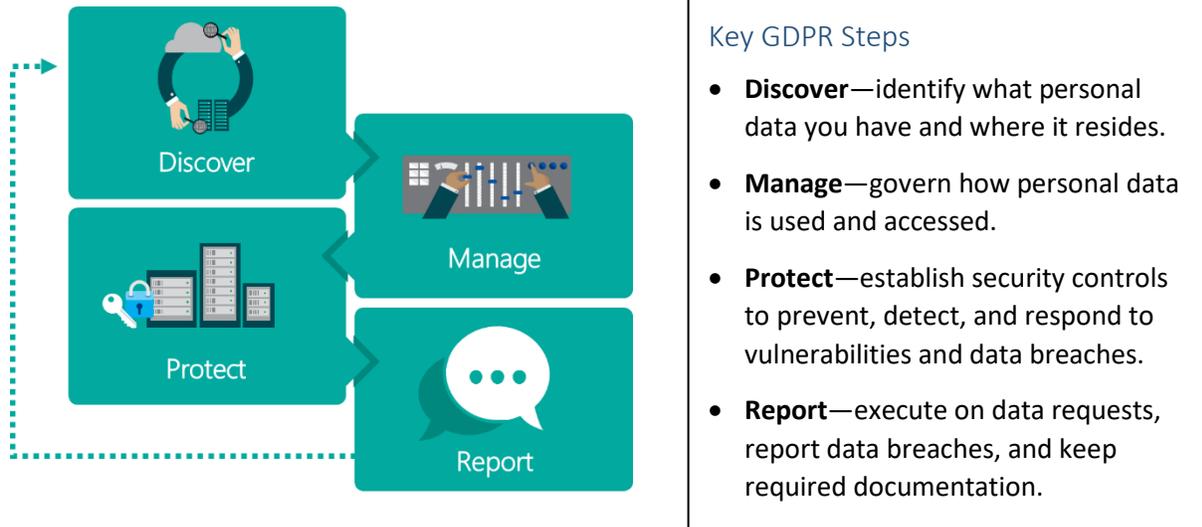
## Journey Toward GDPR Compliance

### Four Stages to Follow

Where do you begin? How do you start the journey toward GDPR compliance as you utilize Power BI and other Microsoft services?

In the general white paper [“Beginning your General Data Protection Regulation \(GDPR\) Journey”](#), we addressed topics such as an introduction to GDPR, how it impacts you and what you can do to begin your journey today.

We also recommended that you begin your journey to GDPR compliance by focusing on four key steps:



For each of the steps outlined in the general white paper referenced above, we outlined example tools, resources, and features in various Microsoft solutions that can be used to help you address the requirements of that step. While this white paper for Power BI is not a comprehensive “how to,” we have included links for you to find out more details, and more information is available at [Microsoft.com/GDPR](https://Microsoft.com/GDPR).

Given how much is involved, you should not wait to prepare until GDPR enforcement begins. You should review your privacy and data management practices now. The balance of this white paper is focused on how Power BI can support your compliance with the GDPR, following the four steps introduced above, as well as approaches, recommended practices, and techniques to support your ongoing GDPR compliance journey.

## Microsoft Power BI and the GDPR

As described above, the scope of GDPR is intended to apply to the processing of personal data whatever technology is used. Because Microsoft Power BI may be used to process personal data there are certain requirements within the GDPR (as noted by the references to regulation Articles contained in the GDPR below) where Power BI users should pay close attention (but this is not to the exclusion of other Articles containing GDPR requirements with which you must comply):

- **Consent** (Article 7) - Under the new regulation, there must be a basis for any processing. If the basis is consent, that consent must be demonstrable and “freely given.” Furthermore, the data subject must also have the right to withdraw consent at any time. This may change how marketing and sales activities are managed.
- **Rights to access** (Article 15), **rectification** (Article 16), and **erasure** (Article 17)- Under the GDPR, mechanisms need to be provided for data subjects to request access to their personal data and receive information on the processing of that data, to rectify personal data if incorrect, and to request the erasure of their personal data, sometimes known as the “right to be forgotten.” You

should ensure that any personal data that is requested to be erased or corrected does not conflict with other obligations you may have around data retention (e.g., proof of payment, proof of tax).

- **Documentation** (Articles 24 and 30) - An important aspect of the GDPR is to maintain audit trails and other evidence to demonstrate accountability and compliance with the GDPR requirements, and to maintain an inventory of your organization's personal data detailing categories of data subjects and the personal data held by the organization.
- **Privacy by design** (Article 25) is a key element of the GDPR. It requires controllers and processors to implement the necessary privacy controls, safeguards, and data protection principles, such as minimizing the data collected, not just at the time of processing but, in advance, when determining the means of processing.
- **Data security** (Articles 25, 29, and 32) – The GDPR requires controllers and processors to control access to personal data (e.g., role-based access, segregation of duties) and implement appropriate technical and organizational measures to protect the confidentiality, integrity, and availability of that data and processing systems.

The capabilities of Power BI described in this white paper are designed to help you get started on your journey to GDPR compliance. The Trust Center highlights our [four trust pillars](#).

- **Security** – Power BI is built using the [Security Development Lifecycle](#), a mandatory Microsoft process that embeds security requirements into every phase of the development process. Azure Active Directory helps protect Power BI from unauthorized access by simplifying the management of users and groups and enabling you to assign and revoke privileges easily.

For example, Microsoft uses encryption technology to protect your data while at rest and when it travels between user devices and our Azure datacenters. Power BI production environments are monitored to help protect against online threats by using distributed denial-of-service (DDoS) attack prevention and regular penetration testing to help validate security controls. At the interface with the public network, Microsoft uses special-purpose security devices for firewall, NAT, and IP filtering functions. For more information, please refer to the [Power BI Security Whitepaper](#).

- **Privacy** – You are the owner of your data. We do not mine your data for advertising. If you ever choose to terminate the service, you can take your data with you. Microsoft is the custodian or processor of your data. We use your data only for purposes that are consistent with providing the services to which you subscribe. If a government approaches us for access to your data, we redirect the inquiry to you, the customer, whenever possible. We have challenged, and will challenge in court, any invalid legal demand that prohibits disclosure of a government request for customer data. For more information, please visit the [Microsoft Trust Center](#).
- **Compliance** – Microsoft complies with leading data protection and privacy laws applicable to Cloud services, and our compliance with world-class industry standards is verified by third parties. As with all our Cloud services products, Power BI is enabled to help customers comply with their national, regional, and industry-specific laws and regulations.

- **Transparency** – In line with the tenets of the GDPR, we provide you with clear explanations about where your data is stored and how we help secure it, as well as who can access it and under what circumstances. Further, if you have requested notifications, we will notify you about changes in our service operations. For more information, see [Microsoft Trust Center Transparency](#).

If your organization collects, hosts or analyzes personal data of EU residents, the GDPR requires you only use third-party processors, such as Microsoft, who provide the required guarantees of compliance set out in Article 28 of the GDPR.

## Power BI and the GDPR Journey

In this section, you will see how the key features within Power BI can be brought to bear on the important steps of your journey toward GDPR compliance – Discover, Manage, Protect, and Report. Because Power BI is designed to show up-to-date data that is reflected based on an original data source, many GDPR requirements around the data being reflected in Power BI will be achieved through a combination of tools and internal processes. It should be noted that there are many other ways of achieving GDPR compliance and you can always adjust your Microsoft product environment to meet your exact business and solution requirements.

### Key Messaging

Power BI helps you comply with GDPR regulations to:

- Obtain explicit consent from customers to process their data by providing tools to create notifications to inform customers about how their data will be used.
- Respect Data Subject Rights (DSR) by
  - Supporting correction, erasure, or transfer of your customers' personal data.
  - Enabling portability of your customers' personal data in a commonly used and machine-readable format.
  - Incorporating privacy-by-design and privacy-by-default methodologies into the design of your systems.
  - Increasing data security by providing you with multiple ways to grant or restrict access to personal data and also encrypting personal data at rest and in transit.
  - Enabling audit trails to help document compliance with GDPR regulations.

### Discover - Search for and identify personal data

Power BI provides native search capabilities to [search a workspace for content](#) and view the assets stored in a workspace. In future releases, there will also be an option for the Power BI administrator to report out all the assets across their tenant. This includes the names and owners of all the workspaces, reports, datasets, and other assets in their tenant. Additionally, customers can store their Power BI assets in Office 365 to take advantage of the [robust search options](#) in combination with classification

options discussed later in this document. These techniques and capabilities are designed to enable customers to identify which Power BI assets may contain personal data and contact report owners accordingly.

Power BI does not control the underlying data sources that a customer chooses to connect to Power BI, so there is no option to search the underlying data sources out of the box directly from Power BI. Customers should develop and maintain policies and procedures to search across the landscape of their underlying data sources and systems, including using tools provided by the applicable vendor. Customers may wish to create a custom set of reports in Power BI in conjunction with products like [Azure Data Catalog](#) to help with this scenario. See “Discover – Facilitate data classification” for more details on this scenario.

### Discover - Facilitate data classification

Microsoft has a number of options to help customers with data classification of their Power BI assets. By using [Azure Data Catalog](#), customers can register and classify the enterprise data assets that they've built Power BI reports on and set controls around who can manage these assets across an organization. Azure Data Catalog includes capabilities for popular data sources used in Power BI like SQL Server Analysis Services (SSAS), SQL Server and Oracle. In addition, the Power BI team is actively exploring how to integrate Power BI tenant's assets directly into the Azure Data Catalog and will have updates around this effort in the coming months.

Customers can also use Office 365 to store their Power BI Reports, either in OneDrive for Business using [labels](#) that classify these assets, or in a [SharePoint Online](#) library to use more granular options like [Enterprise Keywords](#). Power BI is already integrated with both OneDrive for Business and SharePoint Online as part of its “[Get Data](#)” experience when you're creating reports or dashboards.

For Power BI PaaS scenarios ([Power BI Embedded](#)), it is your responsibility to manage access of your users to Power BI artifacts to meet your GDPR obligations.

### Discover - Key Takeaways

- There is potential for personal data to reside within Power BI that can vary based on the underlying data sources for your Power BI assets and the policies your organization has implemented around the use of that source data.
- Power BI provides several reporting and [auditing capabilities](#) that can be used to identify where personal data may be stored.
- Power BI utilizes Microsoft technologies such as Azure Active Directory and certain Office 365 administrator interfaces to enable customers to customize, in the administrator settings console, privacy notices displayed to users in the application.
- As the controller, you are responsible for identifying personal data that you have collected and responding to Data Subject Rights (DSR) requests. This may require you to setup specific policies for your organization on how to manage and store content in Power BI. Leveraging capabilities in products like Office 365 or Azure Data Catalog can also help you meet these needs.

- Power BI assets are connected to external data sources you set up where personal data is potentially stored. As a controller, you are responsible for managing the personal data that flows to or from those applications or services.

### Manage - Enable data governance practices and processes

Power BI provides you with a set of features to manage the access of both users and groups in your Power BI environment. Power BI uses app workspaces to allow you to share content with [specific users and groups you identify](#) and determine what actions they can perform. [Row-level security](#) lets you restrict access to specific records that users can see when viewing a report. Power BI administrators can restrict the ability for users and groups to [share content externally and export data](#) contained in their tenant.

### Manage - Correct inaccurate or incomplete personal data, or delete personal data, regarding data subjects

Power BI user accounts are members of the Azure Active Directory for an organization and managed through the [Office 365 Admin center](#). This integration provides users with several tools for correcting inaccurate or incomplete personal data; or erasing personal data regarding data subjects as well as employee user accounts, but the decision and implementation is your responsibility. Starting later in 2018, Power BI admins will have the ability to takeover and either reassign or delete content in an orphaned Power BI workspace. For orphaned Power BI workspaces, future updates will allow Power BI admins to takeover and either reassign or delete content.

Organizations with a SharePoint Online subscription can also track requests to correct, delete, or transfer personal data by taking advantage of [custom workflows](#). These workflows can also allow organizations to create support cases to track and manage DSR requests, in addition to providing insight into the actions taken during the lifecycle of the request.

Power BI relies on the underlying source data used in its dashboards and reports to be complete and accurate. By taking advantage of the [scheduled data refresh](#) capabilities in Power BI, you can amend or correct the underlying source data and have that information reflected in the dependent Power BI assets.

By taking advantage of the [scheduled data refresh](#) capabilities in Power BI, once the data is deleted from the underlying data source, it will no longer be reflected in any Power BI reports or dashboards leveraging that data. Customers should have policies in place to ensure they are refreshing their data at an appropriate cadence to help them comply with their GDPR requirements.

### Manage - Provide data subject with their personal data in a common, structured format

Power BI data can be exported from reports to a static Excel file or a Power BI Desktop file to facilitate a data portability request. Using Excel, you can then edit the personal data to be included in the portability request and then save as a commonly used, machine-readable format such as .csv or .xml.

## Manage - Restrict the processing of personal data

Power BI helps users protect personal data and service availability as required by the GDPR by incorporating security measures at the platform and service levels. With Power BI's administrative controls, including via the [Office 365 Admin center](#), administrative users can grant and restrict user access to the Power BI service by assigning the proper license for users of the Power BI tenant in their organization, in addition to providing more granular security options to limit access to content in the Power BI service.

## Manage – Collect consent from data subjects

Microsoft provides several options around the gathering of unambiguous, granular consent from data subjects. Office 365 includes the ability to display custom privacy or consent notices with information to data subjects on a [custom login screen](#) prior to logging into your Power BI portal, or optionally you may setup a custom workflow using custom workflows in SharePoint Online. [Microsoft Intune](#) also offers additional controls and options to require each user to [accept custom terms and conditions](#) you display when they are enrolling their device and accessing company resources.

## Manage – Key Takeaways

- As the controller, you need to ensure any templates, entities or other controls around the exporting and importing functions that you utilize with Power BI are consistent with your interpretation of the GDPR requirements. The Power BI capabilities, including its integration with the Office 365 portal, can be an option to help with GDPR consent, notification, and DSR requests and requirements.

## Protect - Data protection and privacy by design and default

Power BI services are developed using the Microsoft [Security Development Lifecycle](#), which incorporates privacy-by-design and privacy-by-default methodologies, and in accordance with [Microsoft privacy policies](#). To demonstrate Microsoft's commitment to the privacy and security of customer data, the Power BI service is audited at least annually against various [compliance offerings](#), including ISO 27001, ISO 27017, ISO 27018, SOC 1 Type 2 and SOC 2 Type 2.

## Protect - Secure personal data through encryption

The [Power BI](#) service encrypts certain key data when at rest, including Direct Query datasets as well as Power BI desktop and Excel reports, and is encrypted in transit by using HTTPS, TCP/IP and TLS to connect from the data source to the Power BI service. For detailed information about how your data is secured with Power BI, please download and review the [Power BI security whitepaper](#).

## Protect - Secure personal data by leveraging security controls that ensure the confidentiality, integrity, and availability of personal data

Power BI offers multiple tools to help safeguard data according to an organization's specific security and compliance needs, including: [Security concepts for Power BI](#), which helps protect data integrity and privacy in your Power BI environment. Using the [Office 365 admin center user setup](#), you can define roles that limit the tasks a user can perform in Power BI and other Microsoft services in your organization. Power BI uses [app workspaces](#) to allow you to share content with [specific users and groups you identify](#) and determine what actions they can perform. [Row-level security](#) lets you restrict access to specific records that users can see when viewing a report. Power BI administrators can restrict the ability of users and groups to [share content externally and export data](#) contained in their tenant.

## Protect - Detect and respond to data breaches

Power BI deploys security measures intended to prevent and detect data breaches, including software to provide intrusion detection and distributed denial-of-service (DDoS) attack prevention. Microsoft responds to incidents involving data stored in Microsoft datacenters by following a Security Incident Response Management process. Microsoft will also notify affected Microsoft customers with enough details to conduct their own investigations, and to meet any commitments they have made while not unduly delaying the notification process.

## Protect - Facilitate regular testing of security measures

Microsoft conducts ongoing monitoring and testing of Power BI security measures. These include ongoing threat modeling, code review, security testing, live site penetration testing, and centralized security logging and monitoring. In addition, by combining the capabilities of Office 365 and Intune with Power BI, Microsoft provides administrative users with audit functionality that can help identify opportunities and improve the security posture to protect personal data, in addition to detecting data breaches, across their environment.

## Protect – Key Takeaways

- Power BI is enabled to help customers comply with their national, regional, and industry-specific laws and regulations.
- You can use the [security concepts for Power BI](#) to protect the data integrity and privacy in Power BI for your organization
- Microsoft Power BI supports an [auditing capability](#) where entity and attribute data changes within an organization can be recorded over time for use in analysis and reporting purposes.

## Report - Maintain audit trails to show GDPR compliance

Power BI allows you to track and record data changes in a Power BI environment via audit logs that are available in the [Office 365 Security & Compliance center](#). The data and operations that can be audited include: the creation, modification, and deletion of Power BI assets, including dashboards, reports,

datasets, apps, and gateways; changes to the shared privileges of these assets; the addition and deletion of users; the assignment of users to Power BI groups and capacity (both Premium and Shared); and who exported data from Power BI dashboard tiles and report visuals.

[Power BI Embedded](#) allows you to track and record Power BI API activities using the same auditing mechanism as the Power BI SaaS service, which means you can correlate your users' logged activities and the corresponding API activities logged in Power BI. In addition, Power BI Embedded allows you to track and record [Azure Resource Manager](#) API activities, using Azure logging and auditing mechanisms. You can use [these logging and auditing tools](#) to record the resolution of DSR requests, and to log events associated with correcting, deleting, or transferring personal data.

### Report - Track and record flows of personal data into and out of the EU

Power BI lets you reduce the need for transfer of personal data (except for directory data needed to authenticate your access to the online service) outside of the EU by enabling you to select a geographic location or a sovereign Cloud [where you want to run the service](#). This includes multiple choices within Europe as well as the German sovereign data storage region. Starting later this year, [Power BI Premium](#) and [Power BI Embedded](#) will also allow organizations to provision dedicated capacity for their app workspaces in a specific region, providing additional options around where your Power BI assets are stored across your company.

Additionally, Microsoft has made [several contractual commitments](#) related to Power BI that enable the appropriate flow of personal data within the Microsoft ecosystem. Microsoft has implemented EU Model Clauses and is certified to the EU-US Privacy Shield framework.

### Report - Track and record flows of personal data to third-party service providers

Power BI customers acting as controllers are responsible for tracking distribution of personal data to third party custom services and applications. Microsoft [maintains an inventory](#) of third-party service providers who may have access to customer data and is expanding that process to additional products and scenarios to meet GDPR compliance needs.

### Report - Facilitate Data Protection Impact assessments

Power BI audit logging is available as part of the Office 365 [audit logs](#), so you can track and record processing activities across your Office 365 environment to help inform your Data Protection Impact Assessment (DPIA).

In addition, Microsoft provides detailed information regarding its privacy standards, its collection and processing of customer data, and the security measures used to protect that data. This information, accessible via the Microsoft Trust Center, includes: [what data Microsoft collects and processes](#); [Microsoft privacy standards](#); [access to data controlled by Microsoft](#); [details on the Business Application Platform security measures](#); and [details regarding the Microsoft privacy reviews process](#).

## Report – Key Takeaways

- Power BI is enabled to help customers comply with their national, regional, and industry-specific laws and regulations
- Power BI has implemented security and privacy controls. These reports include testing annually against various [compliance offerings, including SOC 1 Type 2 reports, SOC 2 Type 2 reports, ISO 27001, ISO 27017, and ISO 27018](#) audit reports, and [Security assessment](#) reports.

## How You Can Obtain Power BI



### [Get started with Power BI today](#)

- Options for one or many products
- Choices for any type of user
- Editions for businesses of any size

### [Learn more about security and compliance for Power BI](#)