The Developer's
5-Step Guide to
Power BI Embedded







Start building fully interactive reports and dashboards into your application, website, or portal.

Your guide to using Power BI Embedded will briefly cover a few prerequisites, and will then look at five steps to complete:

- 1. Set up your development environment
- 2. Set up your Power BI environment
- 3. Create and publish content
- 4. Embed your content for testing
- 5. Move to production

If you're not ready to start today, get familiar with Power BI Embedded in the Power BI Embedded Playground. Try out all the front-end features you can offer customers with pre-configured visuals and data models.

# What is Power BI Embedded?

Power BI Embedded allows you to white label Microsoft Power BI to quickly and easily provide engaging front-end analytics and dashboards to your customers.



**Save** time and expense by embedding fully interactive reports and dashboards into applications, websites, and portals.



**Give** your customers high-fidelity, interactive analytics across any device.



**Choose** from a broad range of data visualizations or build your own custom illustrations.

Power BI Embedded also includes an extensive library of data connectors, APIs, and fully-documented SDKs. Choose the right set of options for your application and customers, whether you need basic data visualizations or complex interactive analytics.

# The Prerequisites:

Complete these prerequisites to get started:

- Open an **Azure subscription**. Create a free account.
- Set up your own **Azure Active Directory tenant**.
- Install **Visual Studio** (version 2015 or later).

Optional, but recommended:

• Obtain a **Power BI Pro license**. Start a free trial.

Once you've finished, you're just five easy steps away from providing a better and more engaging customer product.

# Power BI Embedded:

# Step 1

# **Set Up Your Development Environment**

First, make sure your development environment allows for embedding with Power BI.

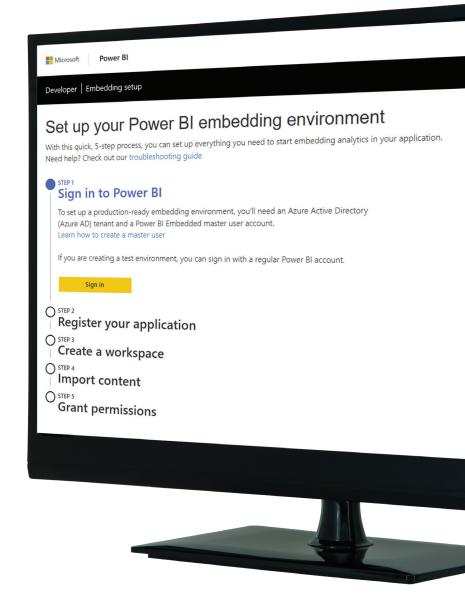
Get started quickly with our embedding set up tool. You can also download a sample application that walks you through creating an environment and embedding a report.

# Step 2

# Set Up Your Power BI Environment

You must place your content within a created Power BI app workspace to embed reports, dashboards, or tiles for your customers.

Follow these step-by-step instructions to set up your Power BI environment and app workspaces, as there are several configuration options available. The master account must be an admin of the app workspace.



# **Power BI Embedded:**

# Step 3

#### **Create and Publish Content**

Connect to, transform, and visualize your data with Power BI Desktop, a free authoring tool used to create your embedded visual artifacts. Connect it to data sources to create data models and build visuals that you can share as reports.

### Use Power BI Desktop to:

- Connect to data.
- Create a data model by transforming and cleaning that data.
- Turn your data into visual representations like charts and graphs.
- Collect those visuals into reports.
- Publish the reports to your Power BI app workspace.

There are many different types of visuals available when you create or edit a Power BI report. When you download Power BI Desktop or open Power BI service, there is a set of Power Bi visuals available out of the box. But, you aren't limited to this set – you can also choose from a library of visuals or even build your own custom Power BI visual.

If you need help connecting and modeling data or creative visualizations, our network of partners is available to assist you.

Once you've created your visuals and published them to your app workspace, you're ready to embed.

# Power BI Embedded:

# Step 4

# **Embed Your Content for Testing**

Embed your content within your application with the Power BI REST APIs using "app owns the data" options, or through .NET SDK.

Embedding within your application requires an access token for your master account from **Azure Active Directory (AAD)**.

You must get an Azure AD access token for your Power BI application before you make calls to the Power BI REST APIs.

Follow these steps to create your Power BI Client access token, get the content you want to embed, and create your embed token.

Use this guide to embed your content using a sample application.

#### Quick reference guide to the Power BI REST APIs

OPERATION GROUP	DESCRIPTION
Admin	Operations for working with administrative tasks
Available features	Operations that return available features
Capacities	Operations for working with capacities
Dashboards	Operations for working with dashboards
Datasets	Operations for working with datasets
Embed token	Operations for working with embed tokens
Gateways	Operations for working with gateways
Groups	Operations for working with groups
Imports	Operations for working with imports
Push datasets	Operations for working with push datasets
Reports	Operations for working with reports
Power BI Embedded Azure Resource Manager REST API	Operations for managing Azure resources

# Power BI Embedded:

# Step 5

#### **Move to Production**

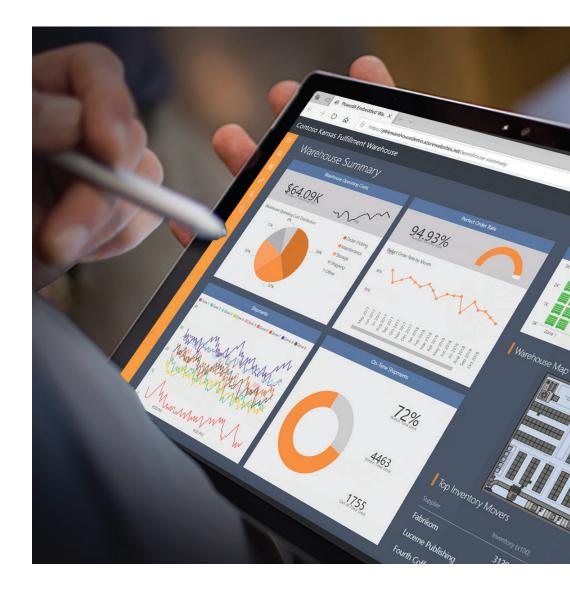
# Acquire a dedicated capacity

Now that you've developed your application, purchase dedicated capacity within the Microsoft Azure portal to back your workspace. Dedicated capacity is available through Power BI Embedded and is required to move to production.

Create and assign an app workspace to your dedicated capacity.

Use this guide in the Azure portal for details on how to create a Power BI Embedded capacity.

Once you create a dedicated capacity, follow these steps to assign your app workspace to it.



### **Power BI Embedded: Conclusion**

With all five steps completed, you now have a quick and easy way to build analytics into your application, website, or portal without having to develop and maintain them yourself. Provide fully interactive visuals to your customers to quickly respond to their requirements and expand your product offering.



# Power BI Embedded Playground

Try out front-end features of Power BI Embedded without writing code or creating visuals. Copy sample code to make your own development even easier.

**TRY IT OUT** 



### **Customer Testimonials**

See who else is using Power BI Embedded and why. View stories from companies like GE Healthcare, Converscent, Edsby, and more.

**SEE WHO** 



#### What's New

Keep up to date with Power BI Embedded's latest features and capabilities, or check out the developer blog for tips and tricks.

**KEEP UP** 



### **Developer Center**

Learn more about Power BI build options: customize, extend, and embed in applications using our comprehensive set of APIs and fully-documented SDK libraries.

**LEARN MORE**