



Power BI en el corazón

Rafael Ansino/Alberto Lopez

May 7th, 2016



SharePoint Saturday
Madrid



#spsmad

Actores principales

 #spsmad






Rafael Ansino Lara

Business Development Team Leader

MVP CLUSTER

 <http://cronicasdeungeek.azurewebsites.net/>

 @ransino

Rafael Ansino tiene más de 14 años de experiencia en el sector IT. Dispone de un perfil mixto con experiencia acreditada tanto a nivel de Jefatura de Proyecto, arquitectura y Análisis de Soluciones Microsoft en grandes clientes en su parte de Infraestructura y desarrollo en tecnologías como Office 365, SharePoint, Dynamics CRM e Infraestructura. En la actualidad es el Business Development Team Leader de MVP CLUSTER donde intenta aportar valor técnico y comercial desde la aparición de la oportunidad. . Es colaborador en el grupo de Usuarios de SharePoint de Madrid (Madpoint), SUGES y coordinador de Student Tech Club de Tajamar.



Alberto Lopez Grande

Data Platform & BI Team Leader

MVP CLUSTER

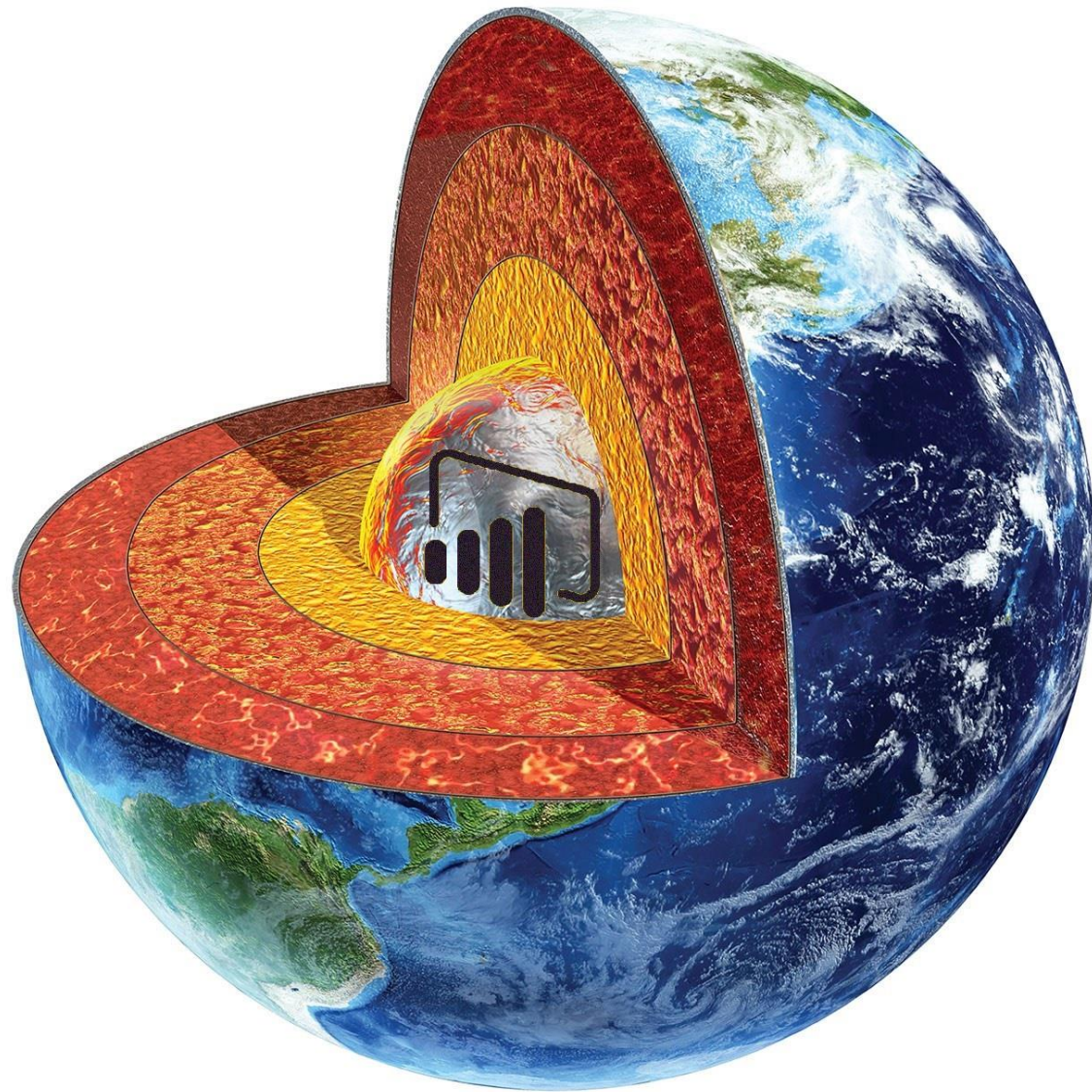
 @qwalgrande

Data Platform MVP.

DBA (tranquilos, pequeñuelos, hoy no muerdo).

Hoy veremos...

- Power BI (intro en 3 minutos).
- Conectando...
- Demo: SSAS On-Premise.
- Demo: SQL Azure Database.
- Demo: Power BI Embedded



Conectando...

... Con el corazón



¿Otra sesión de Power BI?

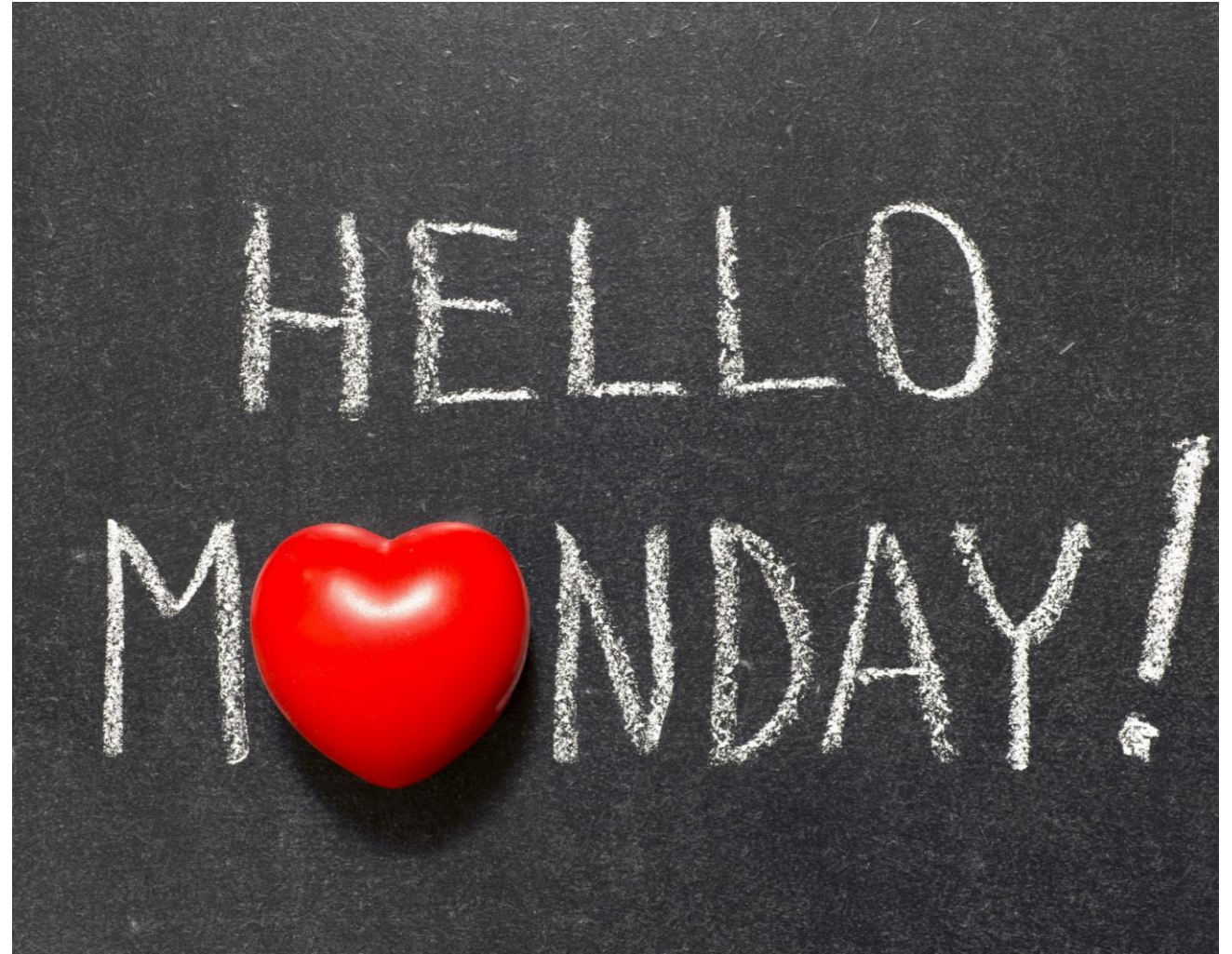


- Con sus gráficos, sus datos de twitter, sus mapas,...



Esto es de LUNES...

- Porque mis datos son de verdad...
- Mis usuarios son de verdad...
- Mis clientes son de verdad...
- Mis marrones son de verdad...



Demo SSAS On-Premise



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Tareas para montar la demo (1/3)...

- Crear máquina virtual de SQL Server 2016 RC3 (porque viene con SSAS ya instalado). Dejar la IP estática, que si no la cambia cada reinicio.
- Crear una máquina virtual para instalar ahí un DC.
 - Seguir las instrucciones de <https://azure.microsoft.com/en-us/documentation/articles/active-directory-new-forest-virtual-machine/>.
 - Como alternativa, aunque las buenas prácticas no lo recomienden, añadir el rol de DC al servidor ya existente.
- Agregar un sufijo UPN al dominio creado del dominio en el que está la cuenta con la que te logas en Power BI.
- Crear una cuenta en el dominio para la cuenta con la que te logas en Power BI y otorgar permisos en SSAS para esa cuenta. La contraseña de dicha cuenta no tiene por qué ser la misma que la de la cuenta de Power BI.

Tareas para montar la demo (2/3)...

- Descargar e instalar Power BI Desktop. Después de instalar, entrar en Opciones y marcar para que funcione la preview de Live Query. Requiere cerrar y volver a abrir el desktop.
- Descargar e instalar SQL Server Data Tools. Requiere reinicio.
- Descargar las bases de datos de ejemplo (relacional). Son dos. Restaurar backups descargados. Ojo con el nombre, mejor dejar los clásicos que los nombres que traen.
- Cambiar la cuenta que arranca los servicios de SSAS y DB Engine para que no sea una cuenta de sistema. La cuenta de administración de la máquina en Azure es perfectamente válida.
- Limitar la memoria del Engine a 1024 Gb (o ponerle límite, en general).

Tareas para montar la demo (3/3)...

- Descargar los proyectos de ejemplo de 2012 (no hay otros posteriores).
- Seguir las instrucciones de <https://msdn.microsoft.com/en-us/library/hh403424.aspx> para generar la bd multidimensional.
- Es quitar la marca de sólo lectura, abrir el proyecto para Standard (SE). El otro da problemas al procesar. Cambiar la base de datos a la que apunta el proyecto (quitarle el "2012") y desplegar (que de paso procesa).
- Instalar el Enterprise Gateway previamente descargado.
- Abrir el puerto 2383 en el firewall local de la máquina virtual y en la configuración de azure para la máquina.
- Configurar el Gateway en Power BI.
- Crear un informe o un panel con informes en Power BI Desktop que apunte al cubo y publicarlo. Esto es porque no funciona lo de "Get Data" en la versión actual.
- Comprobar el correcto funcionamiento del mismo.

Demo SQL Azure Database



Power BI Embedded

Bring data to life inside your app

What if your app could put the power of analytics everywhere decisions are made?

Modern apps with data visualizations built-in have the power to inform decisions in context—

for any user on any device



Lead the way

Enhance your app with
interactive visualizations

- No Logins are required or 365 AD accounts
- New feature that has been announced in BUILD 2016
- Still in Preview

How Power BI Embedded is different



- Integrating Power BI: requires the following
 - AAD app registration
 - O365 credentials
- Power BI Embedded
 - No logins is needed for Users
 - No AAD app registration

Power BI Embedded

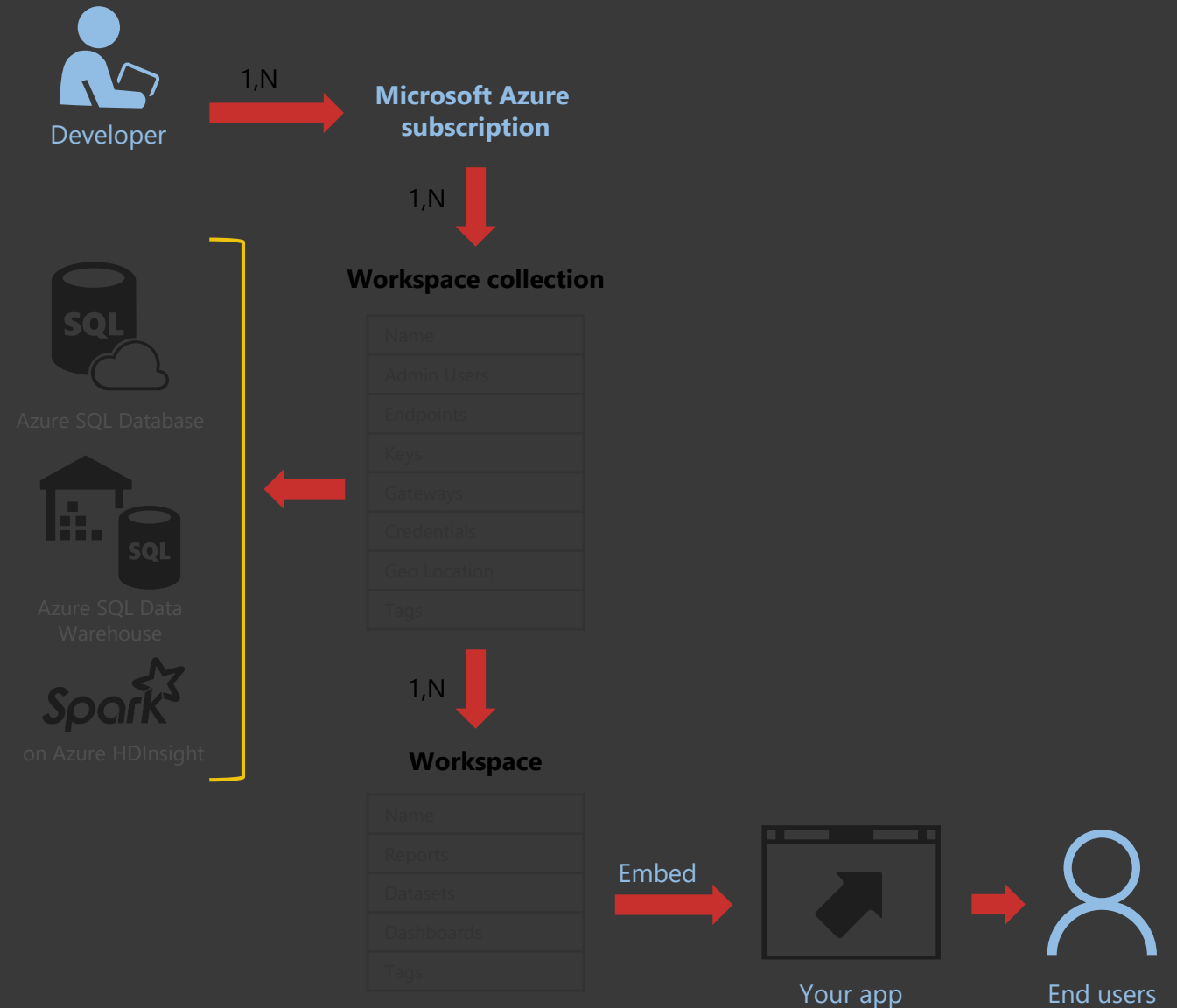
basic concepts



- You need to have an Azure subscription
- You need to provision “Power BI Workspace Collection” to provision from Azure Portal
- You need to create a workspace into Power BI workspace collection.
- You need to import a (.bpix) report file a workspace
- Embed a report with one html tag into your application.

Manage in a familiar environment—**Azure**

- Manually or programmatically provision workspaces
- Create datasets, dashboards and reports
- Embed dashboards and reports
- Control refresh behavior and credentials



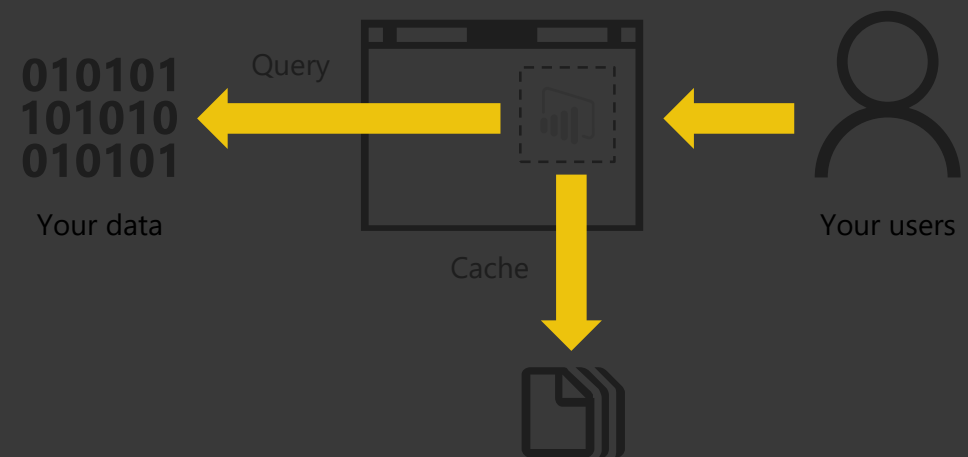
Control costs with **pay-as-you-go**, render-based pricing

- Author interactive reports in Power BI Desktop for free
- Enjoy simple pricing with no upfront costs, hidden maintenance fees or customization charges
- Provide Power BI visualizations—free for your external app users

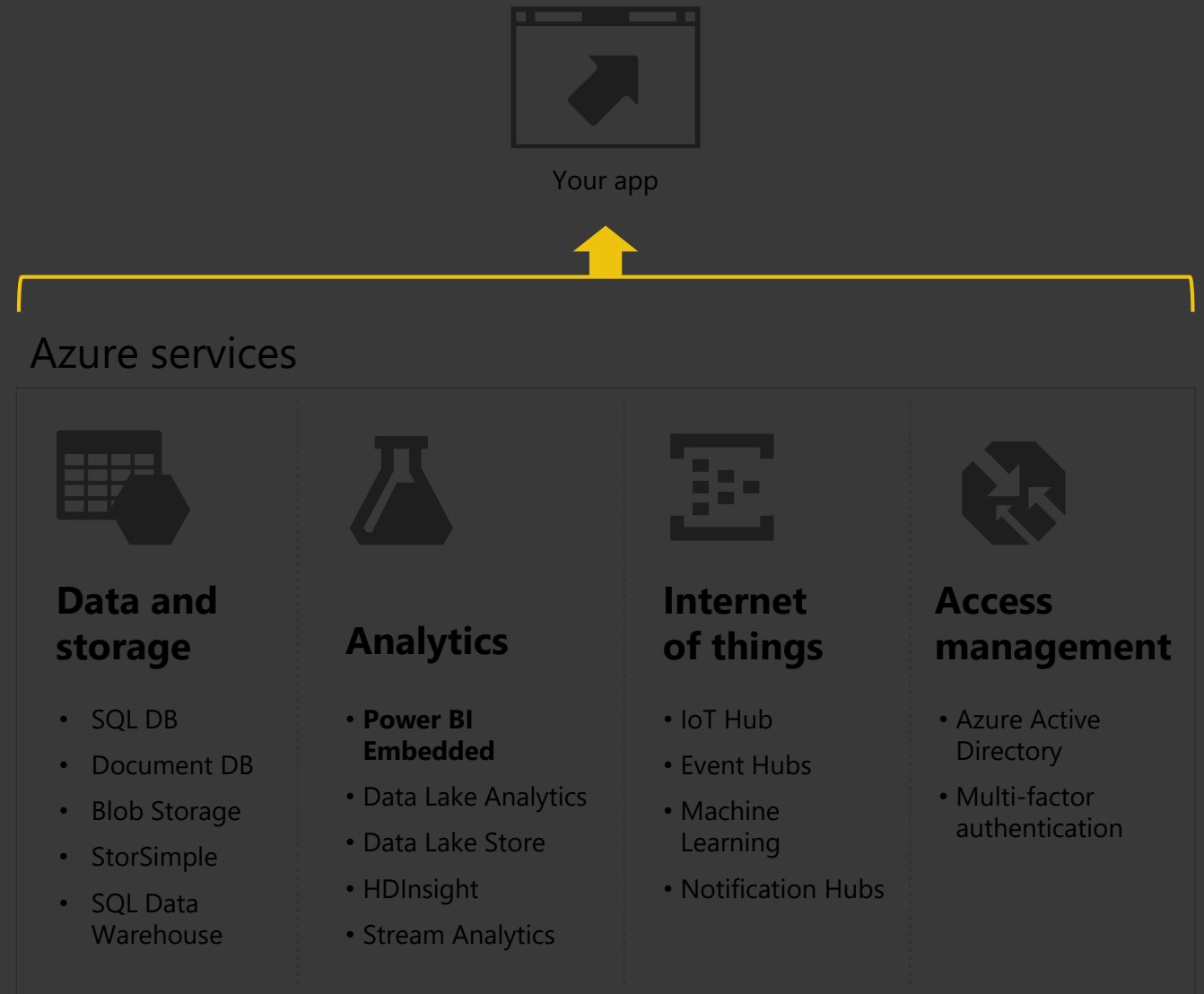
	Free	Standard
Price (per 1k renders)	—	\$2.50

Q: What is one render?

When a Power BI visualization displayed in your app requires a query of your data



Change the game with the complete array of **Azure Services**



You have the app. You have the data.

Bring data to life inside your app with Power BI Embedded

Create compelling
interactive reports



Embed easily for
faster time to value



Deploy quickly
and manage with ease



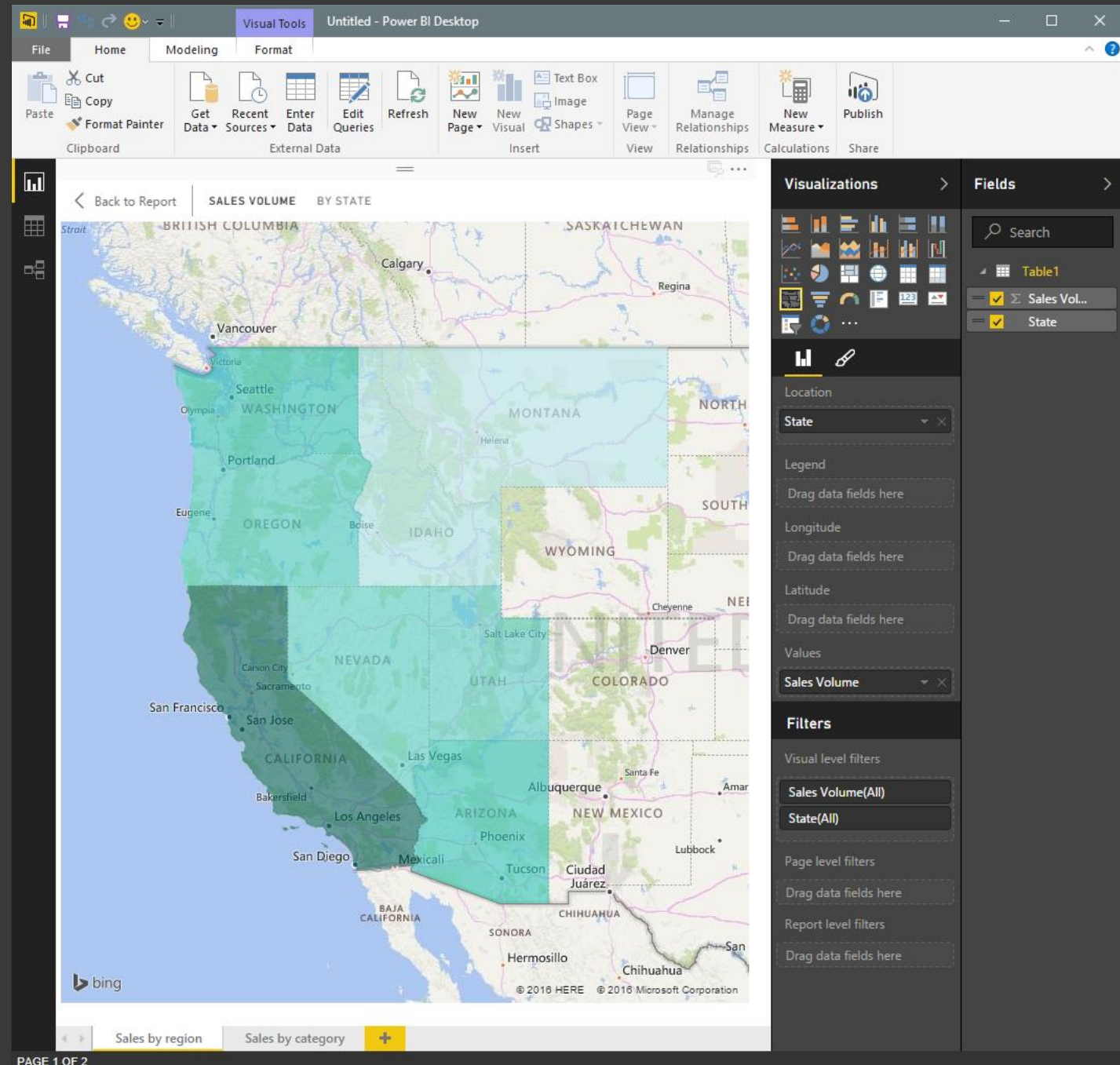
Create compelling interactive reports that are always up to date



- Author interactive reports without writing any code
- Choose modern visualizations out-of-the-box or customize without building them from scratch
- Visualize any data from a variety of cloud sources
- Keep your data always-up-to-date with DirectQuery

Easily author interactive reports for free in **Power BI Desktop**

- Shape data into the format and structure you need
- Produce rich data models using formulas and relationships
- Explore data through a freeform, drag-and-drop canvas
- Publish interactive data visualizations to your app

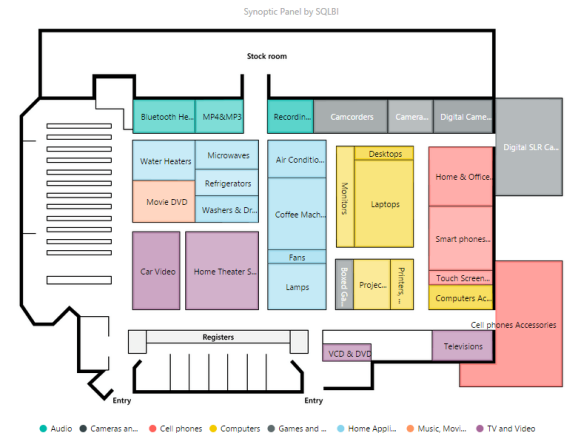
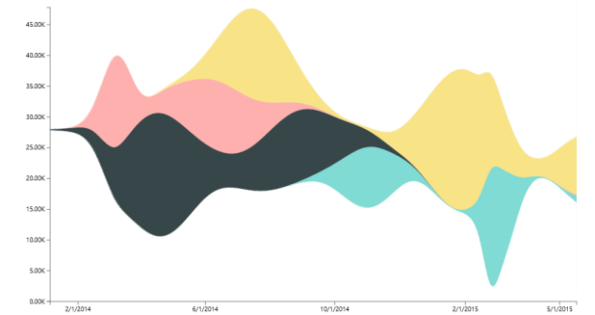
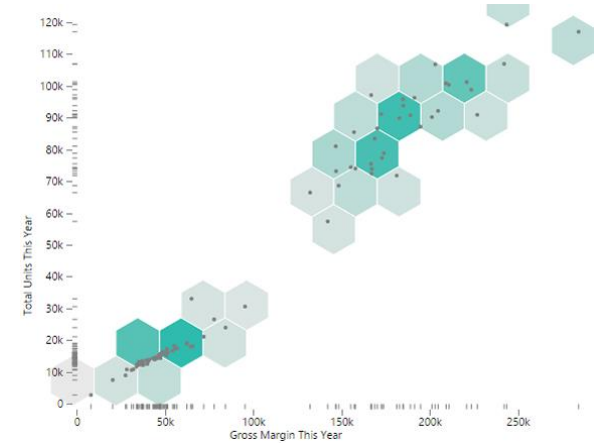
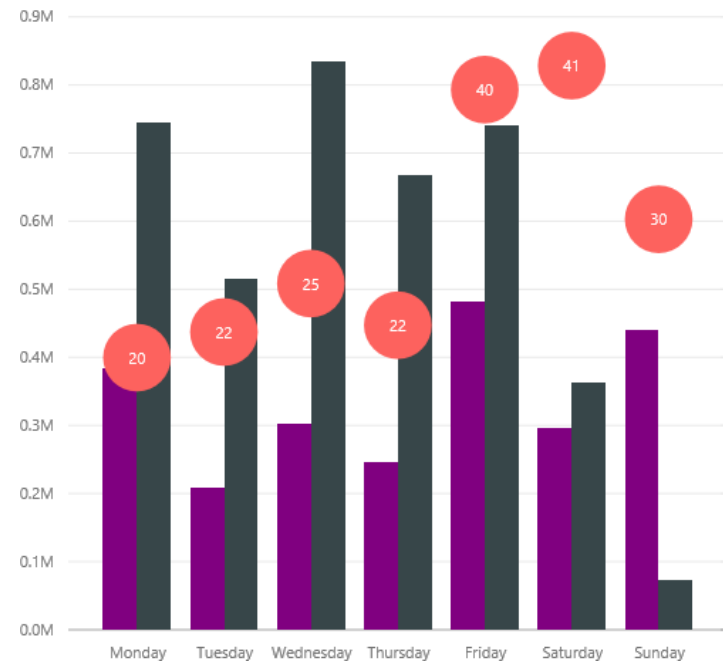
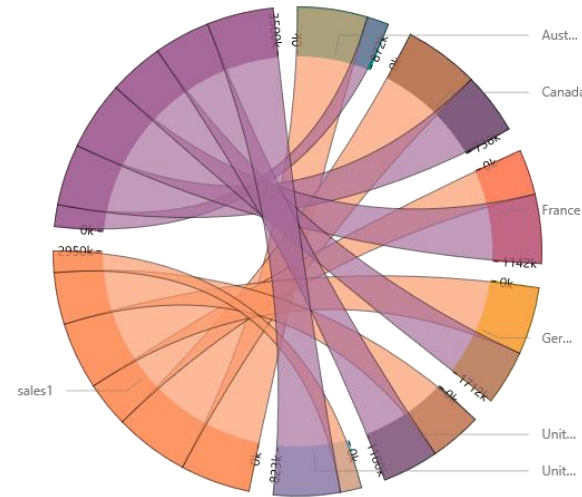


Embedded reports



Get started quickly with Microsoft's **open-sourced, production-quality** visualization code

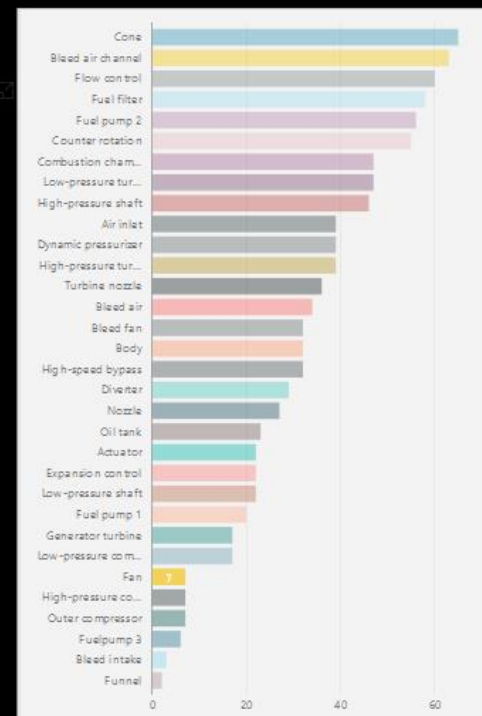
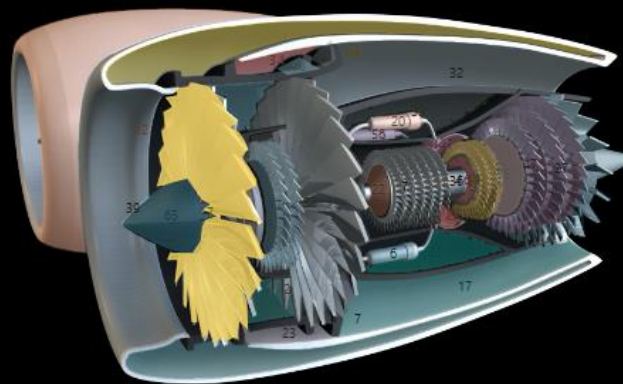
Leverage the visualization framework, test suite and tooling to build the right custom visuals for your app



Demo

Visuals

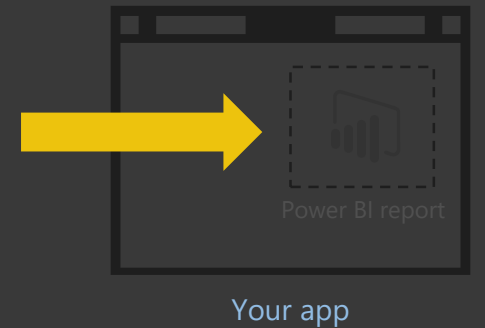
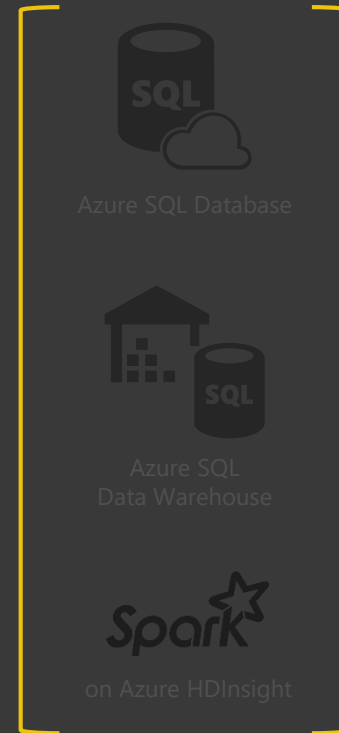
Engine diagnostics summary



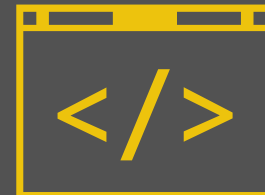
Keep visuals up to date without refreshing data using **DirectQuery**

- Connect directly to the source without moving your data
- Build visualizations over very large datasets

010101
101010
010101



Embed visuals easily—for any device and faster time-to-value



- Easily embed interactive visuals in your app using REST APIs and the Power BI SDK
- Ensure consistent high-fidelity data experiences across any device
- Provide friction-free authentication and authorization experiences
- Realize faster time-to-value without redesigning your app

Power BI Embedded API surface

Power BI APIs

Discovery: Enumerate datasets and reports

Content Creation: Provision datasets and reports

Embed: Embed reports

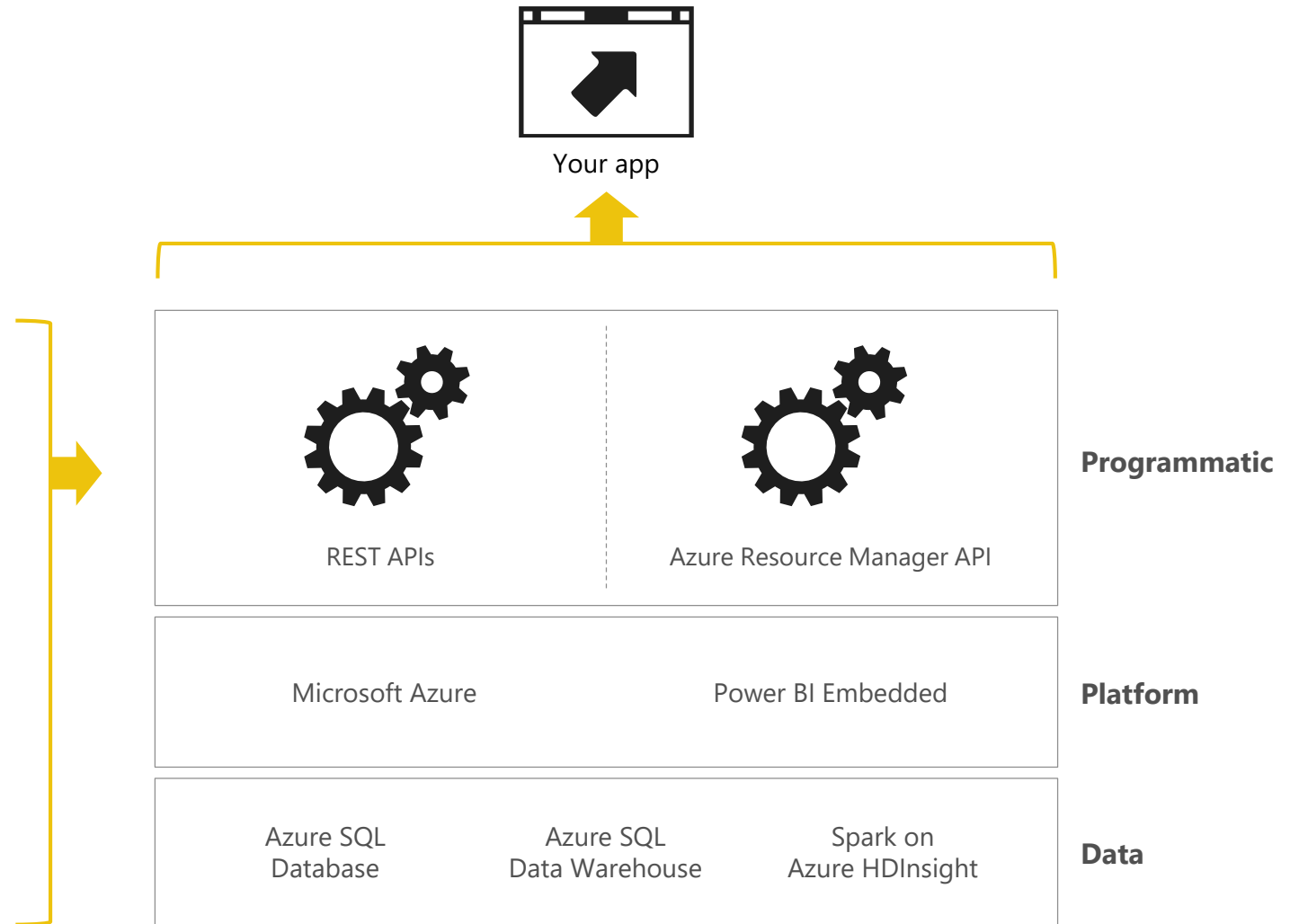
Utility: Set connection strings and credentials

Azure APIs for automation

Provision workspace collections

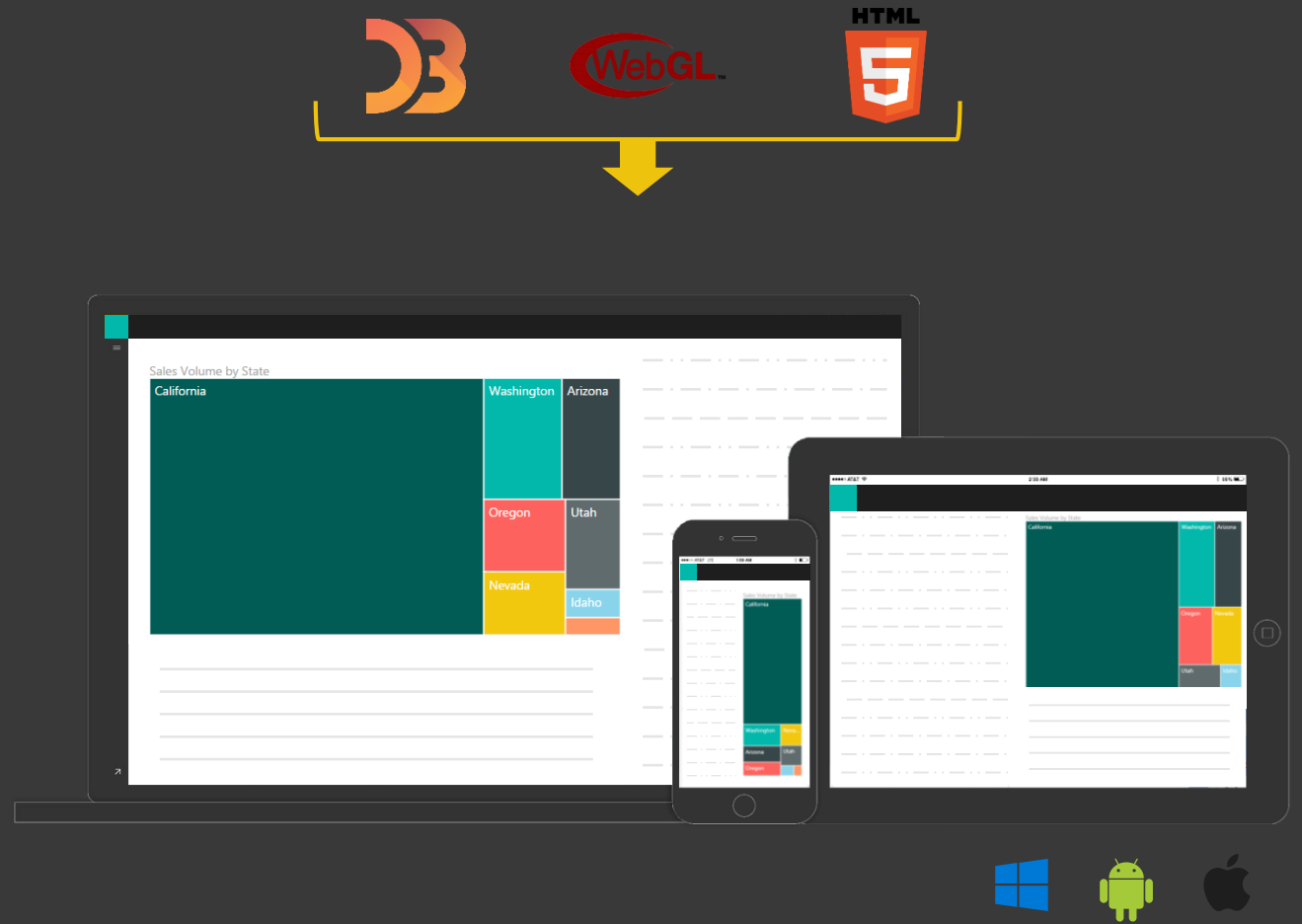
De-provision workspace collections

Manage API keys



Ensure consistent, high-fidelity data visualization experiences across **any device**

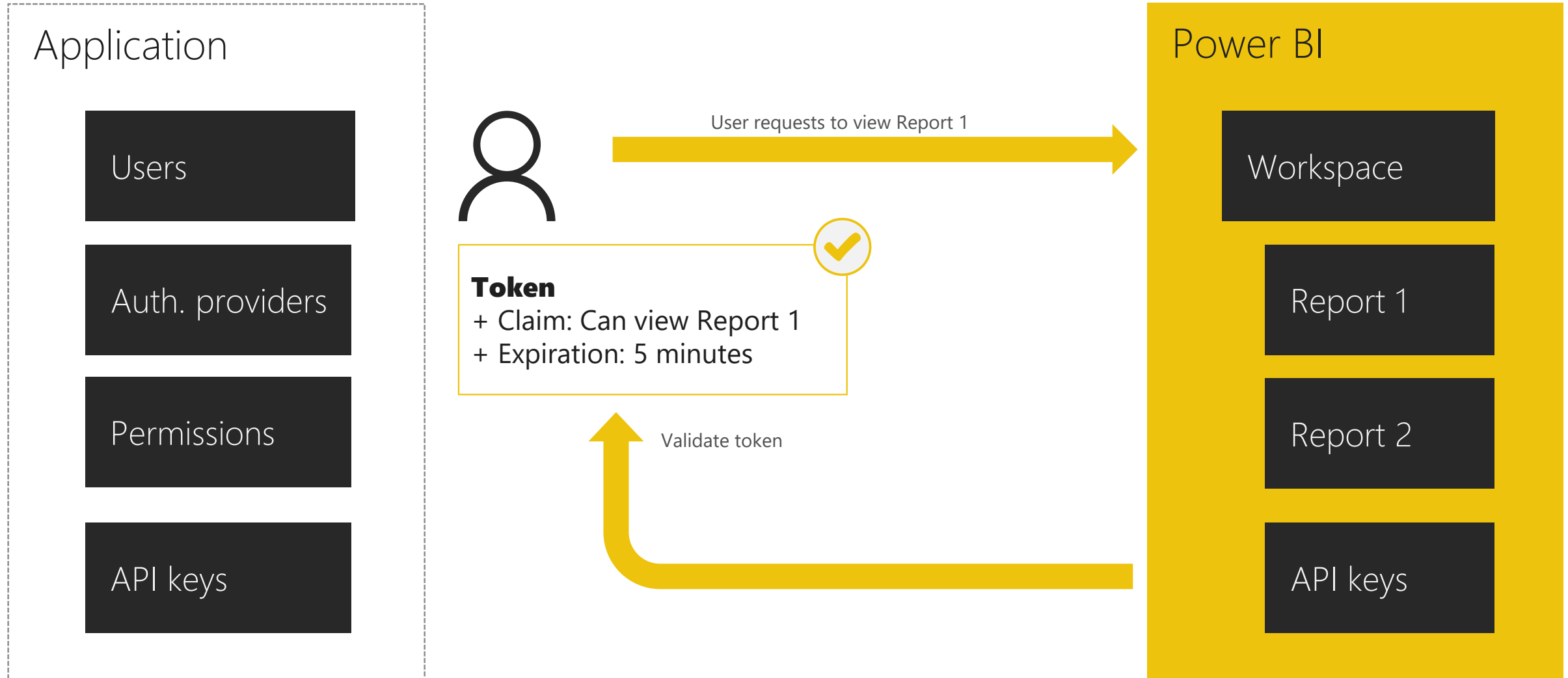
- Built-in, responsive design adjusts content for different devices and orientations
- Visualizations are built on open technologies like D3 and WebGL
- Rendered in HTML5



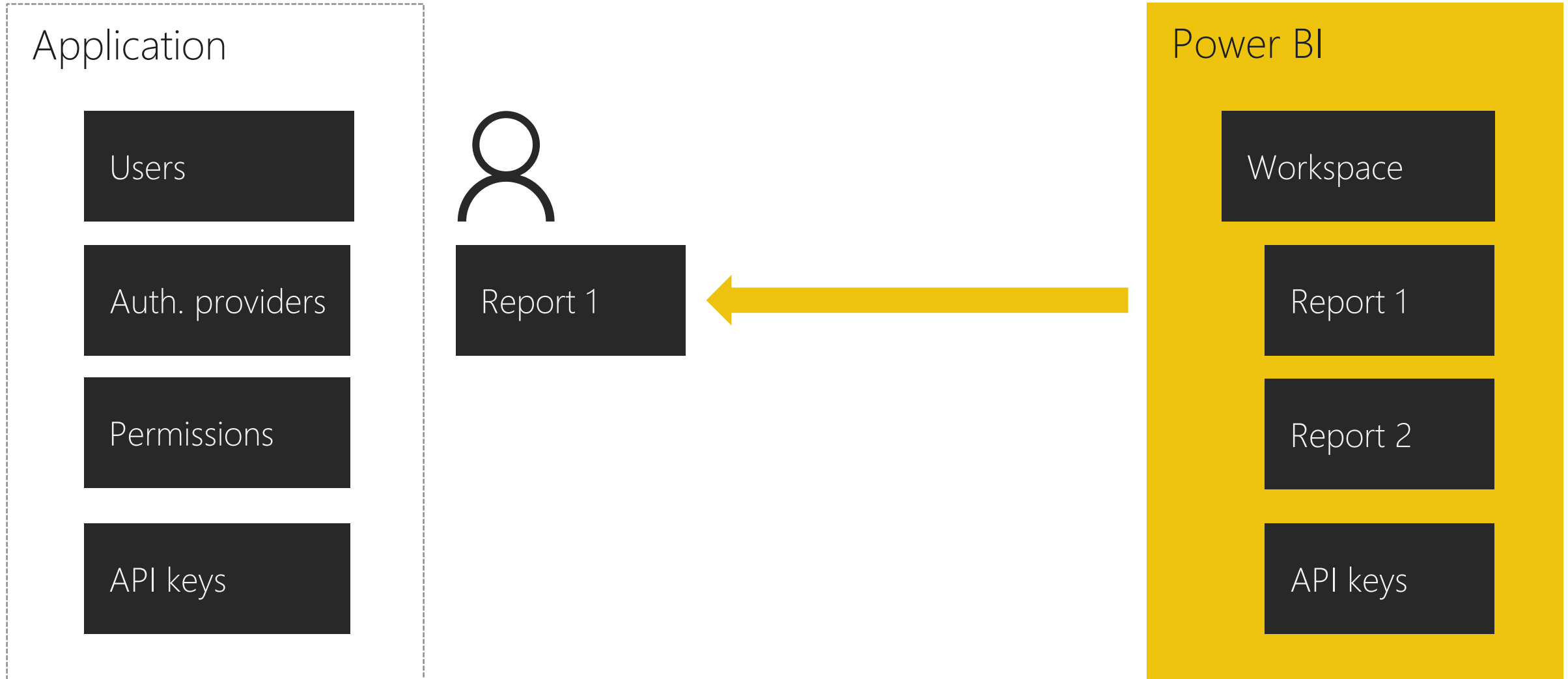
Provide seamless authentication experiences



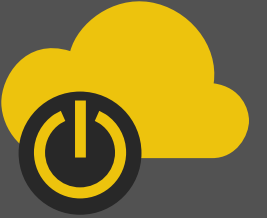
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Provide seamless authentication experiences



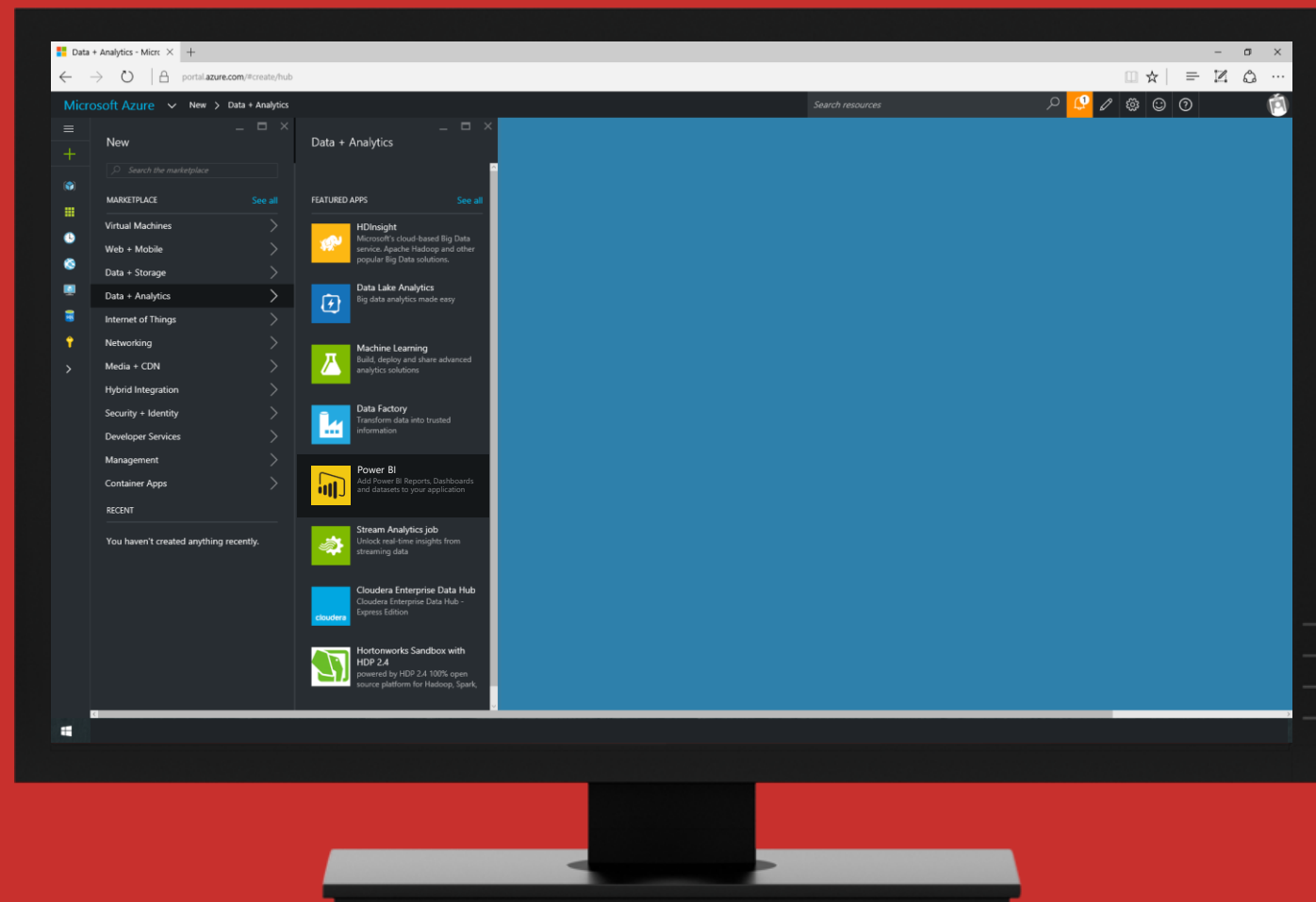
Deploy quickly at cloud scale while managing costs and resources



- Automate deployment via Azure Resource Management and Power BI APIs
- Automatically scale as your app grows
- Pay as you go with consumption-based pricing

Demo

Azure Portal



Get started for free, today

Sign up for the Power BI developer newsletter

Developer resources

Home page	http://azure.com/powerbiembedded
Developer center	http://dev.powerbi.com
Developer blog	http://blogs.msdn.com/powerbidev
Samples	http://github.com/PowerBI
Open source visuals	http://github.com/Microsoft/PowerBI-visuals
Visuals gallery	http://visuals.powerbi.com
Ask us questions	http://stackoverflow.com/questions/tagged/powerbi

Appendix

New

Recent

Resource groups

All resources

Subscriptions

Browse >

New

Recent

Resource groups

All resources

Subscriptions

Browse >

SQL Database

Windows Server 2012 R2 Data...

Couchbase Server 3.0.1 Comm...

Compute

Web + Mobile

Data + Storage

Data + Analytics

Networking

Media + CDN

Hybrid Integration

Security + Identity

Developer Services

Management

Container Apps

Marketplace

Recent

Marketplace

HDInsight

Machine Learning

Data Factory

Event Hub

Azure Stream Analytics

Cloudera Enterprise

Hortonworks Sandbox with HDP 2.3

Power BI



New

Recent

Resource groups

All resources

Subscriptions

Browse

New

Recent

SQL Database

Windows Server 2012 R2 Data...

Couchbase Server 3.0.1 Comm...

Browse

Compute

Web + Mobile

Data + Storage

Data + Analytics

Networking

Media + CDN

Hybrid Integration

Security + Identity

Developer Services

Management

Container Apps

Marketplace

Marketplace

HDInsight

Machine Learning

Data Factory

Event Hub

Azure Stream Analytics

Cloudera Enterprise

Hortonworks Sandbox with HDP 2.3

Power BI

Power BI

Name

Pricing tier

Standard S0

Resource group

Group-6

Subscription

Azure ML Build-Demo

Pin to Startboard

Create

Internal Microsoft Azure New > Data + Analytics

Report bug Search resources

- New
- Browse
- Compute >
 - Web + Mobile >
 - Data + Storage >
 - Data + Analytics >**
 - Networking >
 - Media + CDN >
 - Hybrid Integration >
 - Security + Identity >
 - Developer Services >
 - Management >
 - Container Apps >
 - Marketplace >
- Recent

SQL Database
Microsoft

Windows Server 2012 R2 Datac...
Microsoft

Couchbase Server 3.0.1 Comm...
Couchbase

Data + Analytics

Marketplace

- HDInsight**
Microsoft's cloud-based Big Data service. Apache Hadoop and other popular Big Data solutions.
- Machine Learning**
Build, deploy and share advanced analytics solutions
- Data Factory**
Transform data into trusted information
- Event Hub**
Cloud-scale telemetry ingestion from websites, apps, and devices
- Azure Stream Analytics**
Stream Analytics is a real-time event processing service that helps uncover insights from
- Cloudera Enterprise**
This is a pre-production cluster running and evaluation copy of Cloudera Enterprise Basic Edition
- Hortonworks Sandbox with HDP 2.3**
powered by HDP 2.3, 100% open source platform for Hadoop,
- Power BI**
Add Power BI Reports, Dashboards and datasets to your application

Power BI

* Name
contoso

Pricing tier ⓘ
Standard S0

* Resource group
Group-6


* Subscription
Azure ML Build-Demo

☒ Pin to Startboard

Create


PREVIEW

Start




Browse all
Access all your resources, all in one place

Service health
MY RESOURCES





PBlappdemoDXT

Running




Contoso
Power BI






Marketplace




Subscriptions
Forecast expenses and costs to optimize your apps




Help + support

pbiappdemo


Running




Tour




How it works




What's new



Portal settings




Feedback




Azure Portal


Virtual machines (clas...



AcumaticaVM



PBlappdemoDXT



CPANDL-DC-01

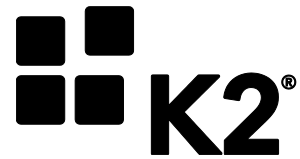
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Demo Power BI embedded

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Collaborate



Bronze sponsors

