



# Using Your On-prem Data in a Cloud World

**Daniel Glenn**

**M365 Friday Cincinnati**

<https://d-g.me/zn2k>





# SPONSORS



# Virtual SharePint



<https://bit.ly/2HiH2UG>

Please join us at the end of the event to catch up.

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# Agenda

## Cloud Benefits

- Power BI
- Power Apps
- Power Automate

## Using Our Data in the Cloud

- Data gateway
- Connect to on-prem: SQL & SharePoint Server



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URL: [MessageCenter.Show](https://MessageCenter.Show)











# Business Apps Platform

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# Microsoft Power Platform

The low-code platform that spans Office 365, Azure, Dynamics 365, and standalone applications



Power BI  
Business analytics



Power Apps  
Application development



Power Automate  
Process automation



Power Virtual Agents  
Intelligent virtual agents



Data connectors



AI Builder



Common Data Service



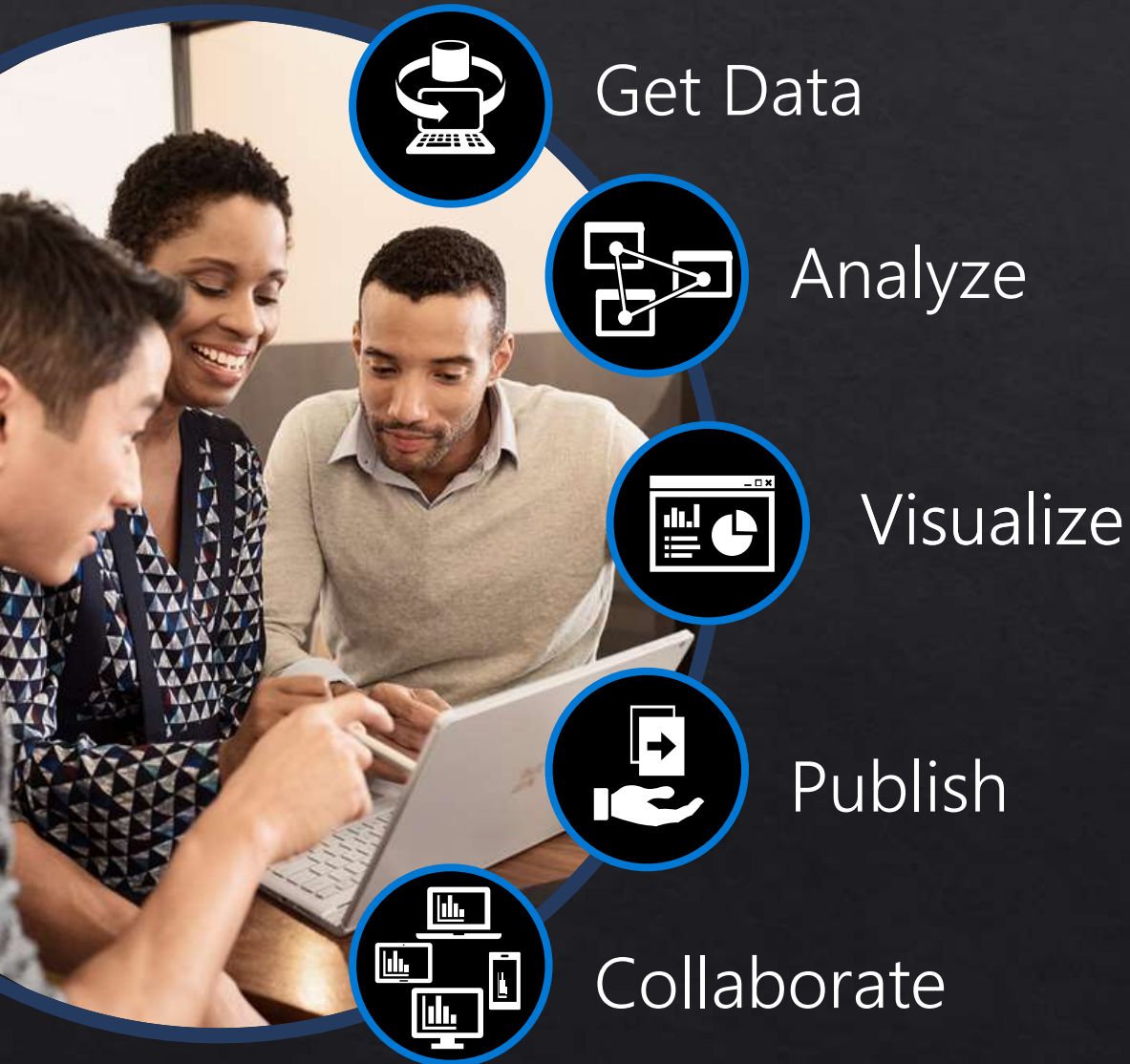
A woman with dark hair, wearing a light-colored blazer, is looking down at a tablet she is holding. The background is a blurred office setting. Overlaid on the image are several semi-transparent data visualization elements: a large bar chart on the left, a smaller bar chart below it, and several pie charts on the right. The text 'Power BI' is centered in a white serif font.

# Power BI

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# Microsoft Power BI



Power BI enables everyone at every level of your organization make confident decisions using up-to-the-minute analytics.

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# Gain insights from your data regardless of where it lives with Power BI



Connect to all your data and get a consolidated view across your business through a single pane of glass

Create ad-hoc analysis, live dashboards and interactive reports that are easy to consume on the web and across mobile devices

Build smart apps by infusing insights from your data and drive action with the power of the Power Platform





A person wearing glasses and a striped shirt is working on a LEGO Mindstorms robot. The robot is a white and grey construction with a motor and sensors. It is sitting on a table. In the background, there is a laptop screen showing some code or a diagram. The person is holding a small piece of the robot, possibly a sensor or a motor, and is looking at it intently. The overall scene is dimly lit, with the laptop screen providing some light.

# Power Automate

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Power Automate helps you **work smarter** by automating workflow across your apps and services



Get notifications



Synchronize files



Collect data



Automate approvals









































Integrate the systems  
you're already using...  
even custom APIs.



Get started quickly  
with hundreds of  
useful templates

Flow Preview My flows Browse Learn Search templates...

Showing All flows sorted by Popularity

  By Microsoft Used 254 times	  By Microsoft Used 195 times	   By Microsoft Used 103 times	  By Microsoft Used 99 times
    By Microsoft Used 56 times	  By Microsoft Used 55 times	   By Microsoft Used 54 times	   By Microsoft Used 53 times
  By Microsoft Used 51 times	    By Microsoft Used 40 times	  By Microsoft Used 33 times	  By Microsoft Used 32 times
  By Microsoft Used 31 times	 By Microsoft Used 30 times	 By Microsoft Used 29 times	 By Microsoft Used 28 times



# Build your own flows in an easy to use visual designer

Sending an Exchange email when a new file is added in Dropbox

Authenticate to your Dropbox account.

Select folder to monitor

Authenticate to your O365 account.

Build email *Subject* and *Body*

The screenshot shows the PowerApps flow designer interface. The top step is 'When a file is created' with a 'Include a Folder' section. A 'Dropbox / Dropbox' dialog box is open, showing the 'PowerApps' folder selected. The 'Send Email' action is configured with a subject line 'New file: [File name] has been added to your Dropbox' and a body 'New information available'. The 'To' field is empty. The flow is connected to a Microsoft account (johnsharp@hotmail.com).

Choose to include properties from previous step (Dropbox file) to improve relevance

Specify *Send To* email address and additional properties (optional): *From*, *CC*, *BCC* and *Importance*

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A close-up portrait of a smiling man with a beard, wearing a grey knit beanie and a matching scarf. He is looking slightly to the right. The background is dark with warm, out-of-focus bokeh lights in shades of orange and yellow.

# Power Apps

<https://d-g.me/zn2k>



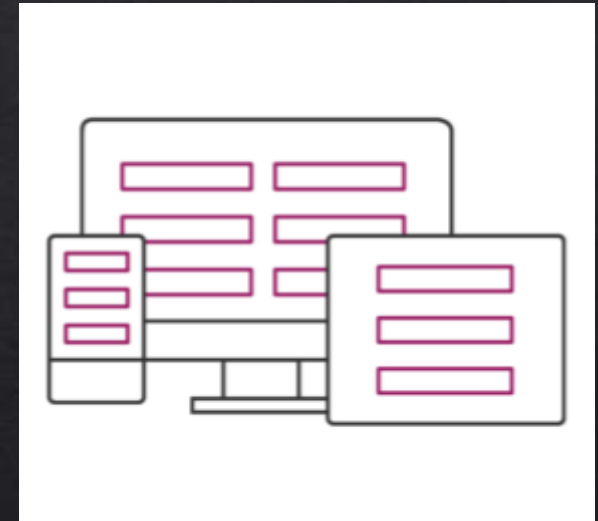
# Microsoft Power Apps is a service for creating and using custom business apps across platforms



Connect to data & systems you're already using; create the data you need



Create apps, forms, and workflows without writing code



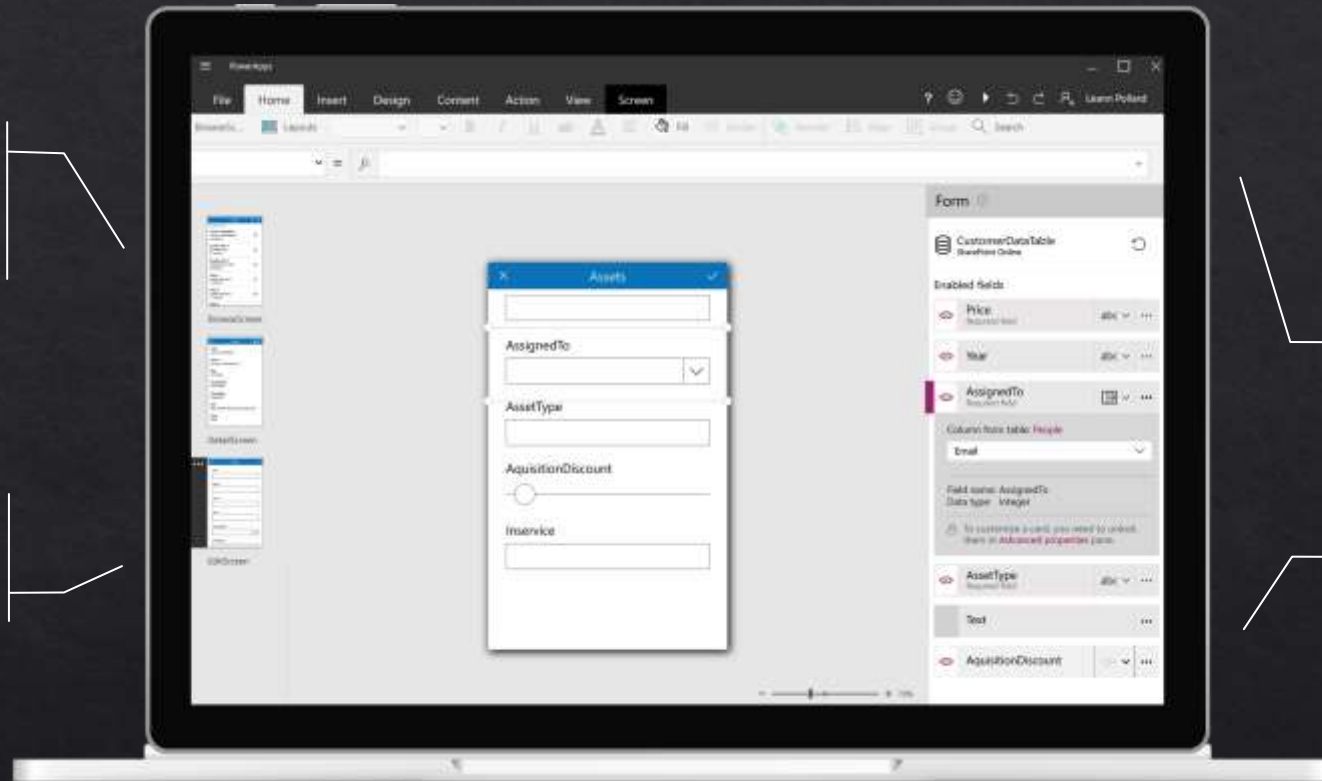
Use apps on web and mobile



# Build useful apps without writing code

Craft forms and screens in a visual designer that helps you see exactly what you'll get

Take advantage of device capabilities like cameras, GPS, and pen controls



Build business logic into your apps with an Excel-inspired expression language

Extend the capabilities of connected data sources, or focus just on the bits you need

<https://powerapps.microsoft.com/en-us/tutorials/formula-reference/>

<https://d-g.me/zn2k>





## Connect to the systems you're already using

Quickly generate and customize apps based on Excel files, SQL, SharePoint Online lists, Salesforce records and more. You can even connect using custom APIs.

Even connecting to data in your on-premises systems through a common Data Gateway.

Your apps will be able to fully interact with underlying sources and will respect the permissions you've already established in them.

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# Publish apps instantly for web and mobile

Get apps to your team when and where they're needed, whether that's on the web, Windows, iOS or Android—no app store required.



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# Microsoft 365 automation

## SharePoint Modern List integration with Power Apps and Power Automate

The diagram illustrates the integration of Microsoft 365 automation across different devices and applications:

- PowerApps MBI:** A banner at the top left shows the PowerApps interface with a "Create a flow" button and instructions: "Start with a template and create automated tasks between your SharePoint data and other apps. Choosing a template will open the Microsoft Flow site where you'll build out your flow."
- SharePoint Modern List:** A central laptop screen displays a SharePoint list titled "Big Wins" under the "Contoso Operations" site. The list contains columns for "Account Name", "Order date", "Order size", "Operations", and "Full-time staff". The list items include companies like "Fabrikam, Inc.", "Best For You Organics Company", "Tailspin Toys", "Adventure Works Cycles", "Alpine Ski House", "Coho Winery", "First Up Consultants", "School of Fine Art", "VanKerdel, Ltd.", "Woodgrove Bank", "Northwind Electric Cars", "Proseware, Inc.", "Best For You Organics Company", and "Munson's Pickles and Preserves Farm".
- Power Automate Flow:** A tablet on the right shows a "Flow" diagram with steps: "When an item is created", "Get item", "Condition", "Create item", and "Send email".
- Mobile Access:** A smartphone on the left is labeled "Access SharePoint content using Power Apps".
- Integration Callouts:** A purple callout box with a right arrow points to the "Add flow" button in the SharePoint list, stating "Add external content and logic to lists with Microsoft Flow".

<https://d-g.me/zn2k>



# Power Apps Community Plan

- ❖ Learn to build business apps and workflows with the full functionality of Power Apps, Power Automate, and the Common Data Service.
- ❖ Connect to any data source using either the available 100+ out of the box connectors or by creating your own custom APIs.

[powerapps.microsoft.com/CommunityPlan](https://powerapps.microsoft.com/CommunityPlan)

The screenshot shows the Microsoft PowerApps website's 'Community Plan' page. The header includes the Microsoft logo and navigation links for PowerApps, Learn, Support, Partners, Blog, and Pricing. The main heading is 'PowerApps Community Plan' with the subtext 'Get a free environment for individual use'. Below this, three bullet points describe the plan's benefits: learning and developing skills, exploring a full-featured development environment, and building apps on a single view of data with the Common Data Service. A 'Get started free' button is prominently displayed. For existing users, a link to 'Create an individual environment' is provided. The page is divided into three columns, each with an icon and a title: 'Build business apps and workflows' (with a plus icon), 'Free for individual use' (with a plus icon), and 'Build and distribute smart apps' (with a database icon). Each column contains a brief description of the capabilities and a 'Learn more' link. The bottom section, titled 'What's included?', states that the free environment includes premium connectors, the Common Data Service, and custom connections. It lists 'PowerApps' for creating and running unlimited apps with CDS and premium connectors, and 'Microsoft Flow' for automating business processes.

Microsoft PowerApps Learn Support Partners Blog Pricing

## PowerApps Community Plan

Get a free environment for individual use

- Learn and develop your PowerApps and Microsoft Flow skills
- Explore and create in a full-featured environment for development
- Build apps on a single, extensible view of your data with the Common Data Service

[Get started free](#)

Existing user? [Create an individual environment](#)

### Build business apps and workflows

Create apps and flows without writing code. Connect to multiple data sources at the same time with the help of more than 100 built-in connectors.

[Learn more](#)

### Free for individual use

Explore and learn everything about PowerApps, Microsoft Flow and the Common Data Service. This environment has limits on users and data storage.

[Learn more](#)

### Build and distribute smart apps

Apps and flows built on CDS can use existing solutions including Dynamics 365, Office 365, and Active Directory. List your solutions on AppSource to make them available to millions of users.

[Learn more](#)

### What's included?

You get a free environment for individual use with functionality including premium connectors, the Common Data Service (CDS), and custom connections to develop your skills on creating business apps and workflows.

- **PowerApps**: Create and run unlimited apps with CDS and premium connectors
- **Microsoft Flow**: Automate business processes and workflows



# Mobile apps

### Bike Sales

OrderQty, Profit, UnitProfit  
BY PRODCATEGORY

ProdCategory	OrderQty	Profit	UnitProfit
Bib-Shorts	5583	23,599.89	\$4.23
	5899	70,521.18	\$11.95
	498	47,586.39	\$95.56
d Ca...	20695	69,139.03	\$3.34
ack...	1598	9,751.68	\$6.10
	1804	11,368.89	\$6.30
	15559	3,763.41	\$0.24
	1361	1,420.16	\$1.04

YTD Revenue, OrderQty  
BY MONTH

● YTD Revenue ● OrderQty

YTD Revenue, OrderQty, Average of UnitPrice  
BY CATEGORY, YEAR

7/9/2017 00:00

12/23/2017 00:00

ProjectedDays

123

ActualDays

### Update Details

\* Title

Cloud-based ERP

PMAssigned

Irvin Sayers

Status

In progress

ProjectedStartDate

7/9/2017 00:00

ProjectedEndDate

12/23/2017 00:00

ProjectedDays

123

ActualDays

AT&T Wi-Fi 1:53 PM 100%

### Flow details

Get feedback from your team for the selected file

Hasn't run recently

Enable flow

Edit flow

Run history

Save as

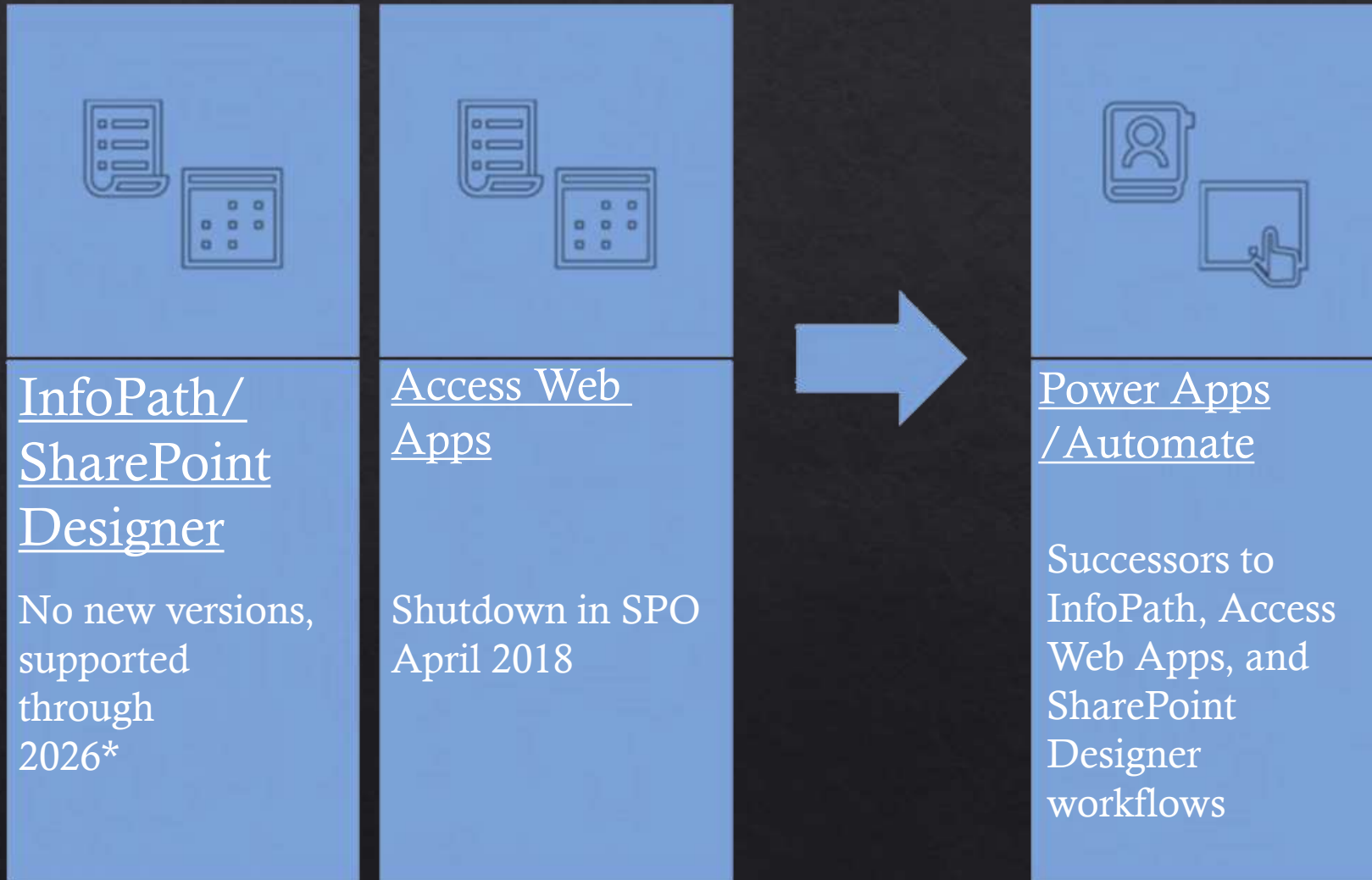
Delete flow

Activity Browse Buttons Flows Account

<https://d-g.me/zn2k>



# And Another Thing...







# Data Gateway

<https://d-g.me/zn2k>



# What is the Data Gateway



One gateway for all your cloud services



Secured access to data



Import data and set up scheduled refresh



# On-premises data gateway

One gateway for multiple cloud services and experiences

## Cloud services



### Gateway Cloud Service

- Encrypts and stores data source credentials and on-premises data gateway details
- Routes queries and results between cloud services, on-premises data gateway, and data source



### Azure Service Bus



### On-premises data gateway

- Decrypts data source credentials and connects to data source
- Sends queries to data source and returns the results to gateway cloud service

## On-premises data sources



SQL Server



SQL Server  
Analysis Services



Other  
data sources



Files, SharePoint



# Gateway Configuration Steps

Identify

Identify gateway server



Install

Install data gateway



Connect

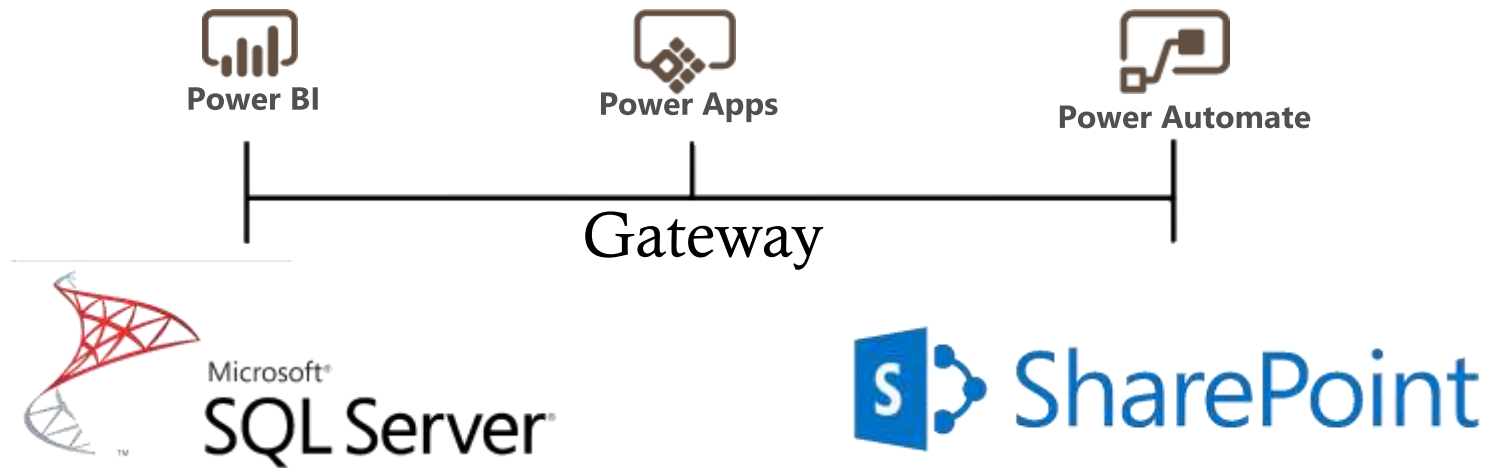
Connect with Azure



# Install Demo



# Let's put it to work





[illegible]



# Questions?



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