



Using Your On-prem Data in a Cloud World

Daniel Glenn
M365 Chicago

<https://d-g.me/R5K9>

Massive Thanks Go to Our Sponsors!

Conference Sponsor



Track Sponsors





Direct Donation

bit.ly/m365cff

Please join M365 Chicago in supporting Chicago Public Schools through the Children First Fund

Direct Donations Are Welcome

- OR -

Join our 50/50 Raffle

Tickets are \$20 - Split the pot with charity!

Winner & total funds raised will be announced at the end of the conference



*50/50 Raffle
\$20 per entry*

paypal.me/m365chicago



Children First Fund

The Chicago Public Schools Foundation

@ChiFirstFund

ChildrenFirstFund.org

Help Us Improve Our Conference!

Help Our Speakers Improve!



bit.ly/365chicago2020

Agenda

Cloud Benefits

- Power BI
- Power Apps
- Power Automate

Using Our Data in the Cloud

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

[DANIELGLENN.COM/HELLO](https://danielglenn.com/hello)



DanielGlenn.com



@DanielGlenn



/DanielGlenn




/DanielGlenn



<https://d-g.me/R5K9>



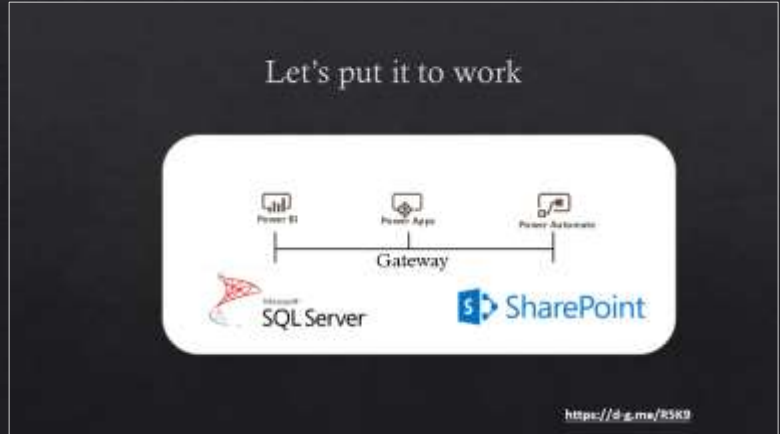
REgarding 365 

Live Show
every Monday!

Subscribe via your favorite
podcast app

URL: MessageCenter.Show







Business Apps Platform

<https://d-g.me/R5K9>

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 white lab coat, is looking at a tablet. The background is a semi-transparent overlay of various data visualization elements, including bar charts, pie charts, and line graphs, all in a light, faded color. The overall tone is professional and data-driven.

Power BI

<https://d-g.me/R5K9>

Microsoft Power BI



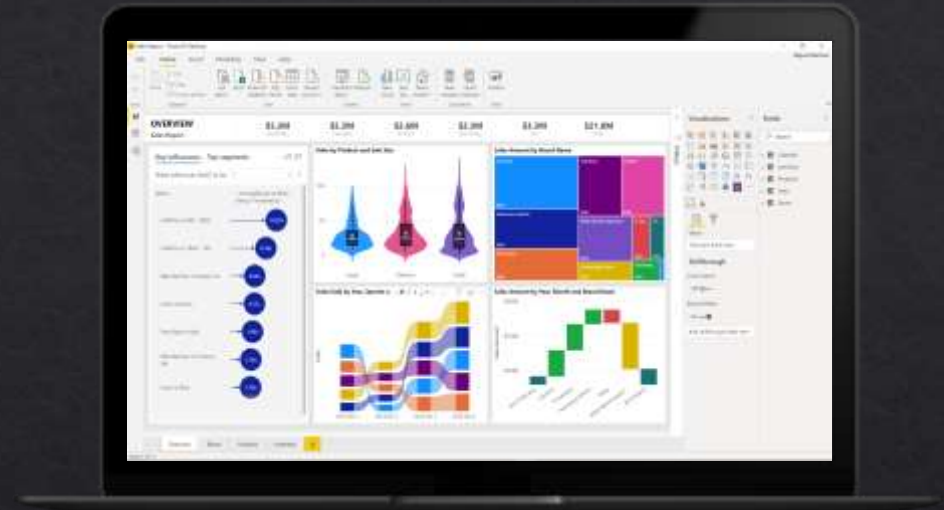
Get Data

Analyze

Visualize

Publish

Collaborate



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

<https://d-g.me/R5K9>

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 light-colored shirt is focused on assembling a LEGO Technic robot. The robot is white and grey, with a motor and various sensors. It is sitting on a grey mat on a table. In the background, there is a laptop displaying a diagram or code, and a red tray containing various LEGO parts. The scene is dimly lit, with a blueish tint.

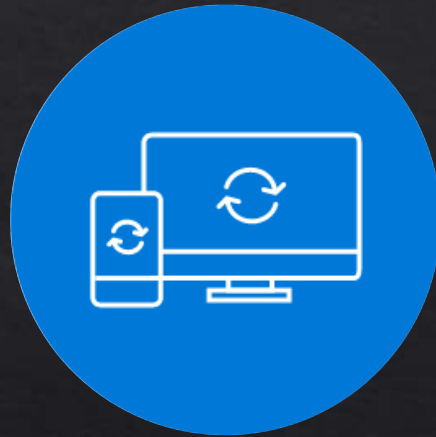
Power Automate

<https://d-g.me/R5K9>

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

The screenshot shows the Microsoft Flow templates gallery. At the top, there is a navigation bar with the 'Flow' logo, 'Preview' button, and tabs for 'My flows', 'Browse', and 'Learn'. A search bar on the right contains the text 'Search templates...'. Below the navigation bar, there are filters: 'Showing All flows' and 'sorted by Popularity'. The main area displays a grid of 16 flow templates, each with a title, a description, and usage statistics. The templates are:

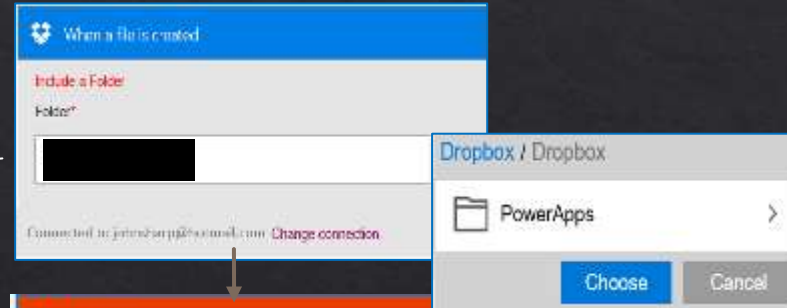
- Create a to-do item in Wunderlist for important emails** (Used 254 times)
- Save my email attachments to a SharePoint document library** (Used 195 times)
- Get daily reminders in Email** (Used 103 times)
- Save tweets to a CSV file in OneDrive** (Used 99 times)
- Translate non-English emails** (Used 56 times)
- Save email attachments to Dropbox** (Used 55 times)
- Send me an email when a new file is added in SharePoint Online** (Used 54 times)
- Get a text notification when you receive an email from your manager** (Used 53 times)
- Copy new files in Dropbox to a specific folder on OneDrive** (Used 51 times)
- Email yourself new Tweets about a certain keyword** (Used 40 times)
- Save tweets to a CSV file in Dropbox** (Used 33 times)
- Copy files between OneDrive and Dropbox** (Used 32 times)
- Send me an email when a new item is added to a SharePoint Online list**
- Post to Yammer if new tweets match with hashtag**
- Get Office 365 email notifications forwarded to Slack channel**
- Share my Tweets on Facebook**

Build your own flows in an easy to use visual designer

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

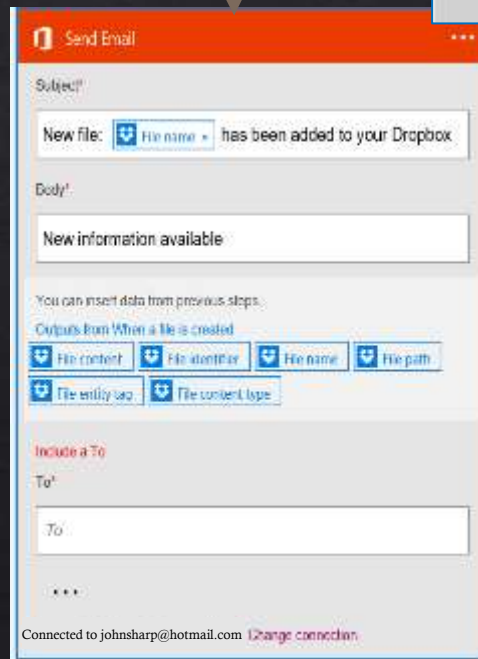
Authenticate to your Dropbox account.

Select folder to monitor



Authenticate to your O365 account.

Build email *Subject* and *Body*



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*

A close-up portrait of a man with a beard and mustache, wearing a grey knit beanie and a matching scarf. He is smiling warmly at the camera. The background is dark and out of focus, with some bokeh light spots.

Power Apps

<https://d-g.me/R5K9>

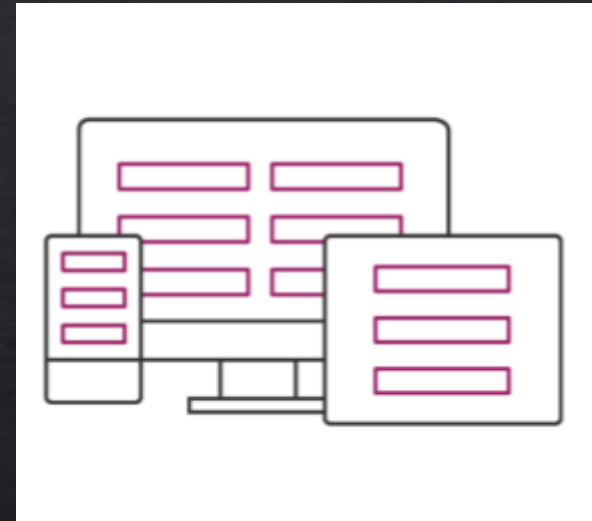
Microsoft Power Apps is a service for creating and using custom business apps across platforms



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



Create apps, forms, and workflows without writing code

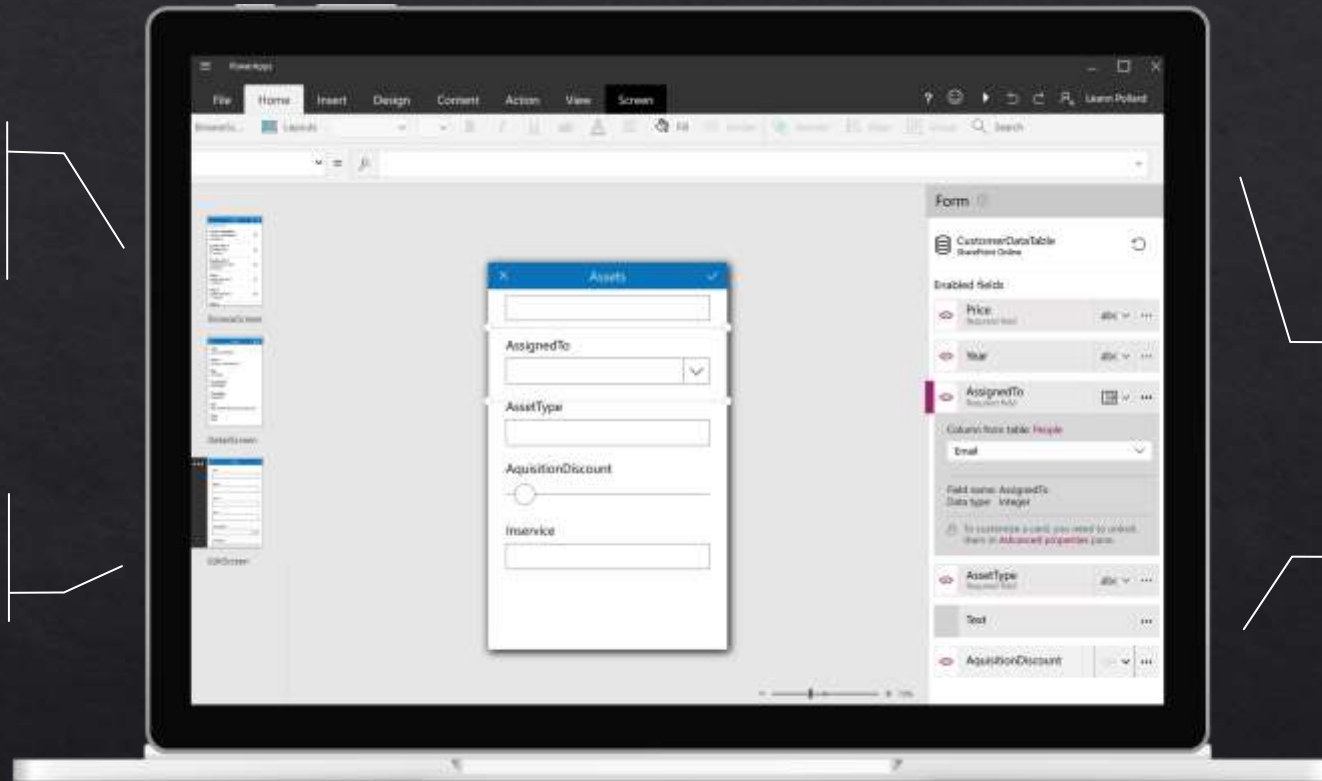


Use apps on web and mobile

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/R5K9>



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.

<https://d-g.me/R5K9>

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.



Microsoft 365 automation

SharePoint Modern List integration with Power Apps and Power Automate

PowerApps
MBI

Create a flow

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 finish creating your flow.

Office 365 Sites

Search New Edit Alert me Export to Excel Add flow

Contoso Operatio... Big Wins

Account Name	Order date	Order size	Comments	Fulfillment Stat
Fabrikatt, Inc	1/18/2016			
Best For You Organics Company	9/22/2016			
Tallpin Toys	4/8/2016			
Adventure Works Cycles	3/16/2016			
Alpine Ski House	3/18/2016			
Coho Winery	9/25/2016			
First Up Consultants	4/4/2016			
School of Fine Art	3/18/2016			
VanArndel, Ltd.	9/25/2016			
Woodgrove Bank	4/4/2016			
Northwind Electric Cars	9/27/2016			
Proseware, Inc.	3/14/2016			
Best For You Organics Company	1/31/2016			
Mumson's Pickles and Preserves Farm				

Access SharePoint content using Power Apps

Add external content and logic to lists with Microsoft Flow

Flow

```
graph TD; A[When an item is added] --> B[Get item]; B --> C[Condition]; C --> D[Create item]; C --> E[Send email];
```

Feedback

<https://d-g.me/R5K9>

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

The screenshot shows the Microsoft PowerApps website for the Community Plan. The page has a purple header with the Microsoft logo and navigation links for Learn, Support, Partners, Blog, and Pricing. The main heading is "PowerApps Community Plan" with the sub-heading "Get a free environment for individual use". Below this, there are three bullet points: "Learn and develop your PowerApps and Microsoft Flow skills", "Explore and create in a full-featured environment for development", and "Build apps on a single, extensible view of your data with the Common Data Service". A prominent "Get started free" button is visible. Below the button, it says "Existing user? Create an individual environment." The page is divided into three columns, each with an icon and a title: "Build business apps and workflows" (with a document icon), "Free for individual use" (with a plus icon), and "Build and distribute smart apps" (with a database icon). Each column contains a short paragraph of text and a "Learn more" link. At the bottom, there is a section titled "What's included?" which states: "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." Below this, there are two bullet points: "PowerApps: Create and run unlimited apps with CDS and premium connectors" and "Microsoft Flow: Create and run unlimited flows with premium connectors and actions." The bottom right corner shows a partial view of a mobile app interface.

Mobile apps

Bike Sales

OrderQty, Profit, UnitProfit
BY PRODCATEGORY

ProdCategory	OrderQty	Profit	UnitProfit
Rib-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

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

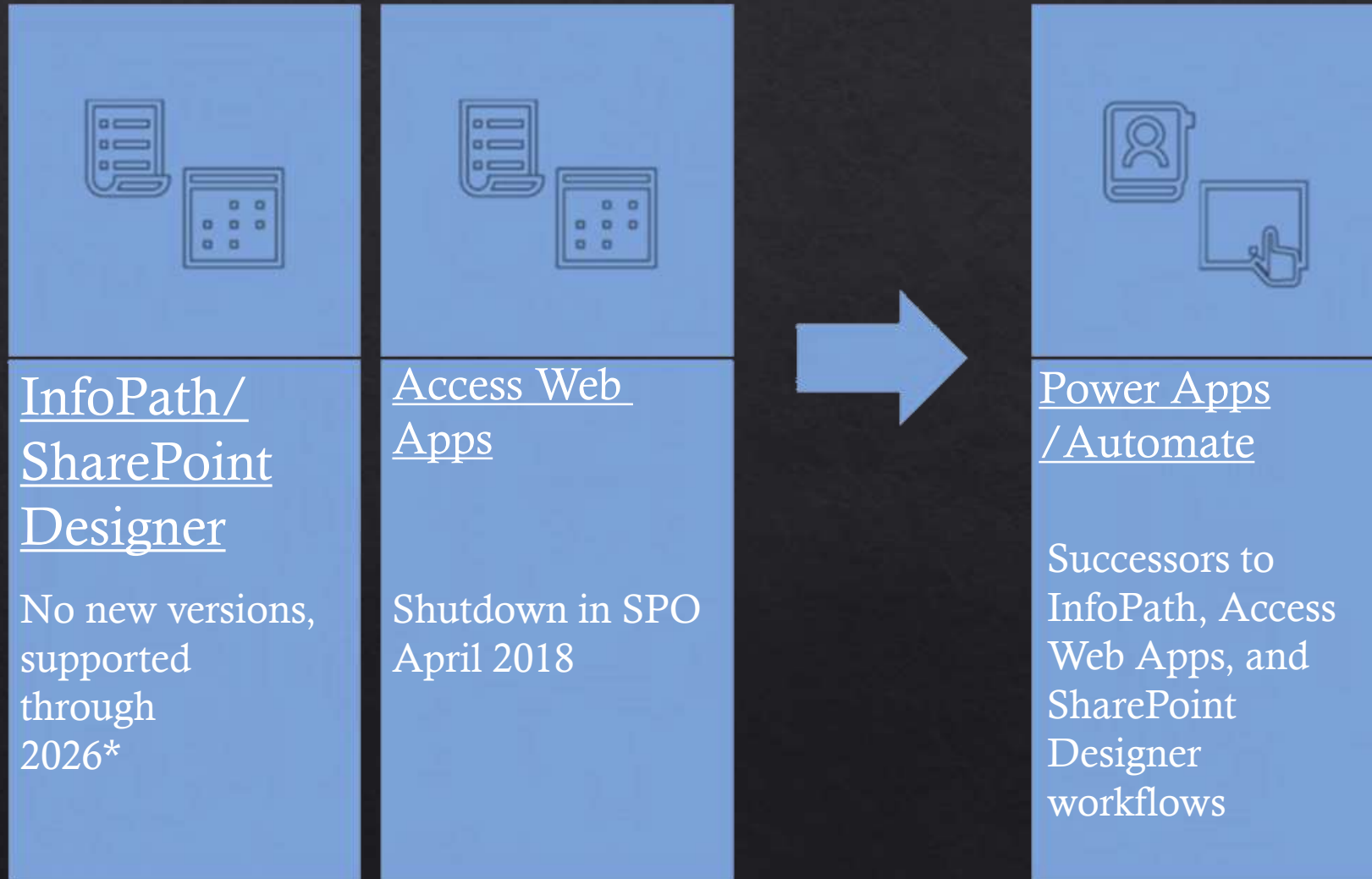
Run history

Save as

Delete flow

Activity Browse Buttons Flows Account

And Another Thing...





Data Gateway

<https://d-g.me/R5K9>

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

On-premises data gateway installation

Getting ready to install the on-premises data gateway.

Please review [minimum requirements](#) for installing the On-premises data gateway. Not meeting these requirements may result in performance bottlenecks.

Install to:

C:\Program Files\On-premises data gateway

I accept the [terms of use](#) and [privacy statement](#).

Install

Close

On-premises data gateway installation

Installing your on-premises data gateway.

Please wait



Cancel

Data Gateway Install

Data Gateway Install

On-premises data gateway

Almost done.

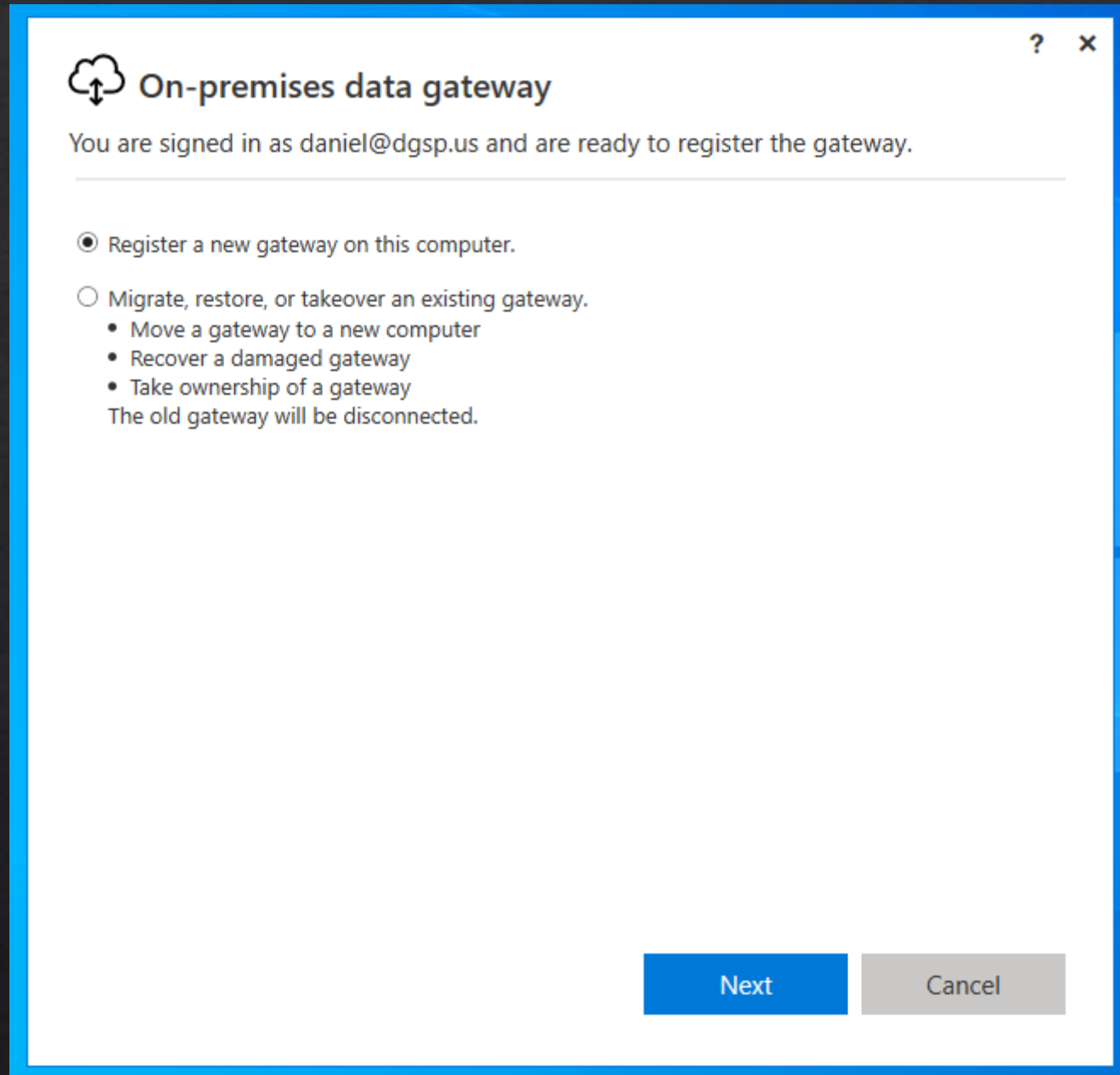
Installation was successful!

Email address to use with this gateway:


Next, you need to sign in to register your gateway.

Sign in Cancel

Data Gateway Install



Data Gateway Install

 **On-premises data gateway** ? x

You are signed in as daniel@dgsp.us and are ready to register the gateway.

New on-premises data gateway name

Add to an existing gateway cluster [Learn more](#)

Recovery key (8 character minimum)

i This key is needed to restore the gateway and can't be changed. Record it in a safe place.

Confirm recovery key

We'll use this region to connect the gateway to cloud services: North Central US [Change Region](#)
[Provide relay details](#) By default, Azure Relays are automatically provisioned

[<< Back](#) [Configure](#)

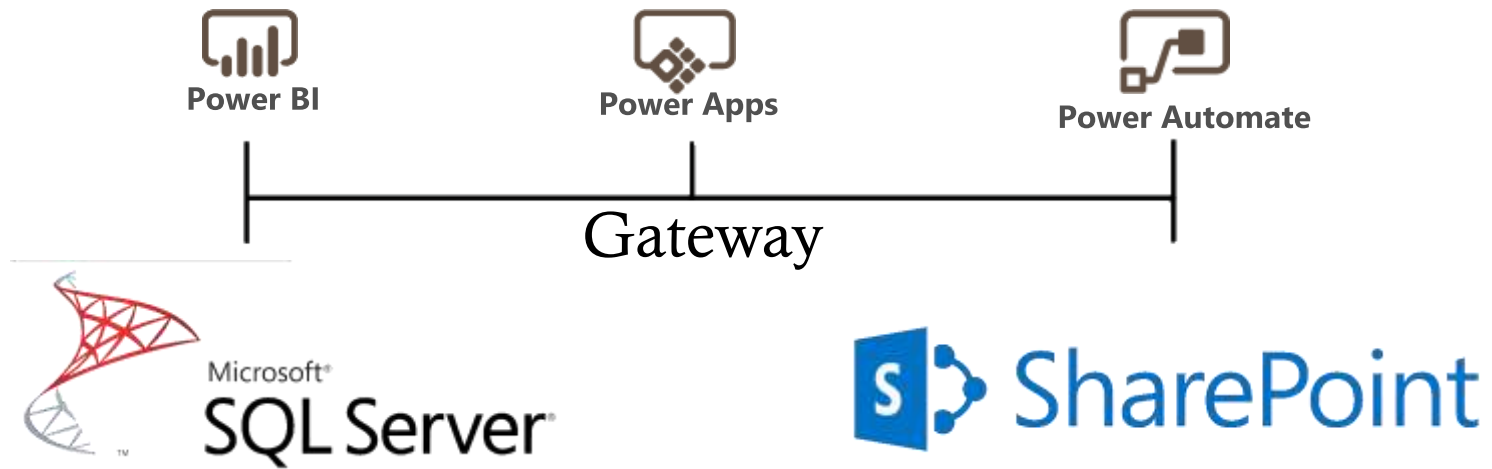
Data Gateway Install

The screenshot shows the 'On-premises data gateway' status window. The window title is 'On-premises data gateway' with a cloud icon and window control buttons. The left sidebar contains navigation options: Status (selected), Service Settings, Diagnostics, Network, Connectors, and Recovery Keys. The main content area displays the following information:

- Status:** A green checkmark icon followed by the text: 'The gateway Daniel Glenn Data Gateway is online and ready to be used.'
- Usage Information:** A checked checkbox followed by the text: 'Help us improve the on-premises data gateway by sending usage information to Microsoft.' Below this is a link: '[Read the privacy statement online](#)'.
- Logic Apps, Azure Analysis Services:** A light blue box containing the text 'Logic Apps, Azure Analysis Services' and 'North Central US' on the left, and a link '[Create a gateway in Azure](#)' on the right.
- Power Apps, Power Automate:** A light blue box containing the text 'Power Apps, Power Automate' and 'North Central US' on the left, and a green checkmark icon followed by the text 'Ready' on the right.
- Power BI:** A light blue box containing the text 'Power BI' and 'Default environment' on the left, and a green checkmark icon followed by the text 'Ready' on the right.

A 'Close' button is located at the bottom right of the window.

Let's put it to work



شكراً جزيلاً
ngiyabonga
tesekkür ederim
danke 謝謝
спасибо
спасибі
blagodaram
dank je
gracias
mochchakkeram
go raibh maith agat
arigatō
merci
obrigado
dziękuję
sukriya
kop khun krap
terima kasih
감사합니다
xiexie
ευχαριστώ
dank you
gracias
mochchakkeram
go raibh maith agat
arigatō
merci
obrigado
dziękuję
sukriya
kop khun krap
terima kasih
감사합니다
xiexie
ευχαριστώ

Questions?

[DANIELGLENN.COM/HELLO](https://danielglenn.com/hello)



DanielGlenn.com



@DanielGlenn



/DanielGlenn



/DanielGlenn



<https://d-g.me/R5K9>