

**SharePoint Saturday Vienna**

**1.12.2018**

**Fabian Williams**

# **Workflow with Intelligence: A story about Microsoft Flow & Cognitive Services**

# Objective

- Understand what Microsoft Flow is & what it does
- Familiarize yourself with how to use Microsoft Flow
- Understand what Cognitive Services is & what it does
- What use cases can you use Microsoft Flow with Cognitive Services for
- See Microsoft Flow in Action w and w/out Cognitive Services
- ~~Bonus - Just Added: Microsoft Graph Extensions and Azure Functions... You will love this!~~

# Session Flow

What is this  
Microsoft Flow  
you speak of?

What is  
Microsoft Flow  
good for?

Demo  
Microsoft Flow  
In Action

What is  
Cognitive  
Services?

Explore the  
different flavors  
of Cognitive  
Services

Solutions with  
Flow, Cognitive  
Services &  
SharePoint

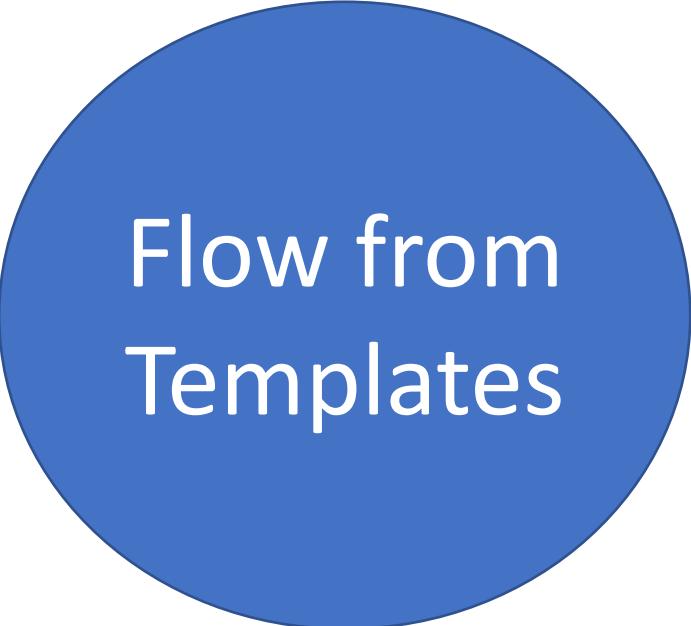
Demos

Q&A

# What is Microsoft Flow?

***Microsoft Flow*** is a service that helps you create **automated workflows** between your favorite apps and services to *synchronize files, get notifications, collect data, and more.*

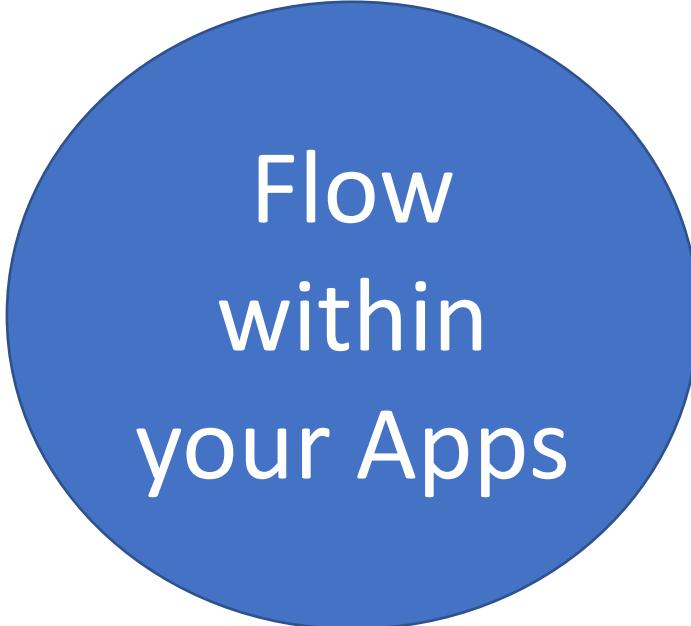
<https://docs.microsoft.com/en-us/flow/getting-started>



Flow from  
Templates



Flow from  
Scratch



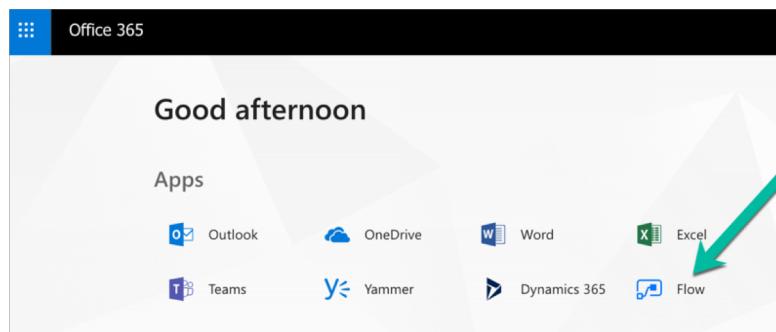
Flow  
within  
your Apps

# How do you get Microsoft Flow

- Flow as an Individual
  - FREE and all that is required is to sign in to <https://flow.microsoft.com>



- Flow as an Organization with Office 365 or Dynamics 365



# Session Flow

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Demos

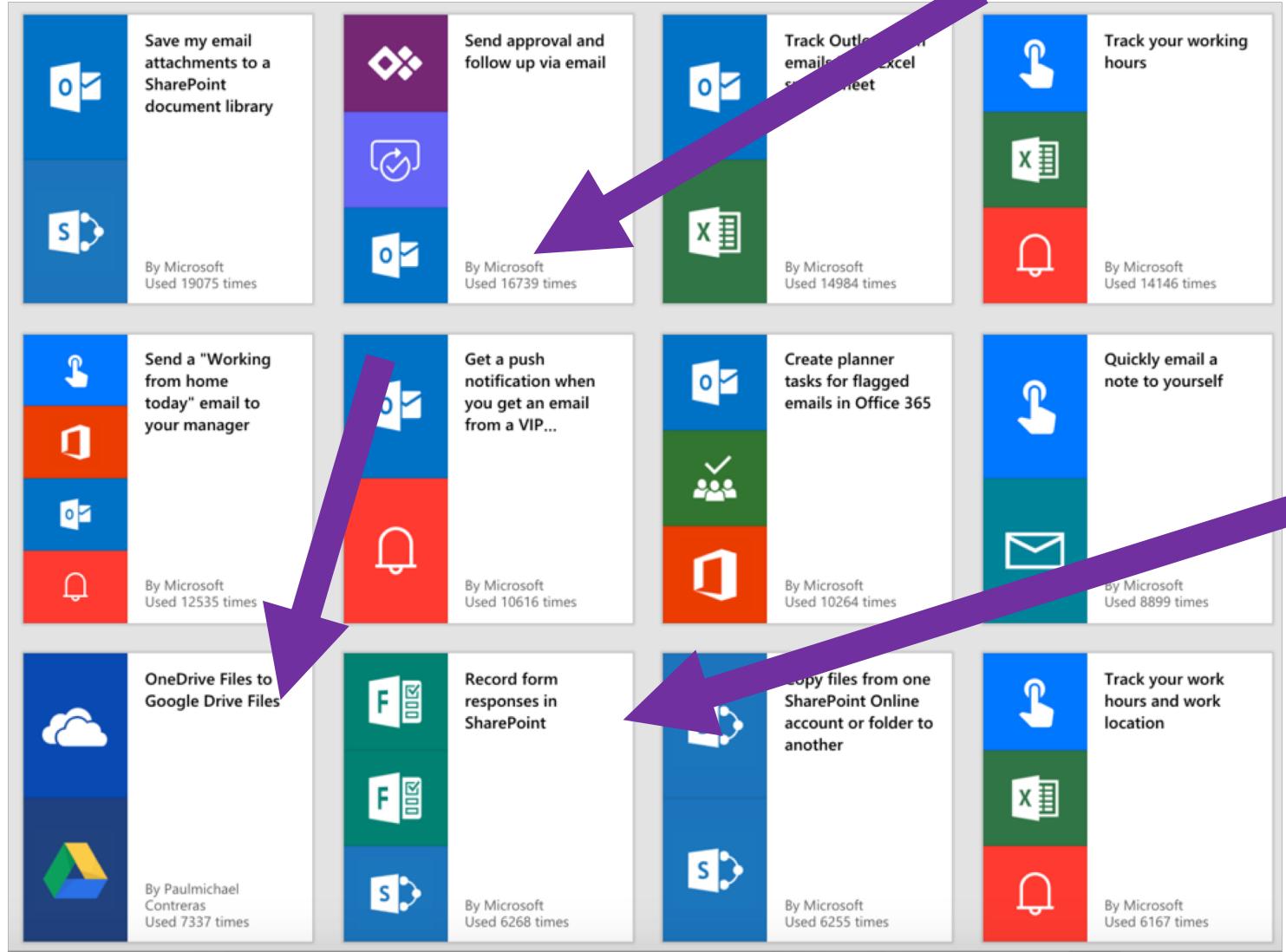
Q&A

# What is Flow Good For?

The image displays a grid of 15 Microsoft Flow templates, each represented by a small card with a blue header and a red body. The cards are arranged in three rows of five. A large purple arrow points diagonally upwards and to the right towards the fourth card in the bottom row.

|  |  |   |   |  |
|--|--|---|---|--|
| Save Office 365 email attachments to OneDrive for Business<br>By Microsoft Used 210646 times | Get a push notification when you receive an email from your...<br>By Microsoft Used 123578 times | Send myself a reminder in 10 minutes<br>By Microsoft Used 91348 times                         | Get today's weather forecast for my current location<br>By Microsoft Used 76825 times |  |
| Save Outlook.com email attachments to your OneDrive<br>By Waleed Ahmed Used 59751 times      | Get a push notification with updates from the Flow blog<br>By Microsoft Used 44782 times         | PowerApps button<br>By Microsoft Used 39596 times   | Start approval when a new item is added<br>By Microsoft Used 24418 times              |  |
| Get updates from the Flow blog<br>By Microsoft Used 22737 times                              | Get a daily digest of the top CNN news<br>By Microsoft Used 21261 times                          | Send a custom email when a new SharePoint list item is added<br>By Microsoft Used 20042 times | Send me a push notification with my current location<br>By Microsoft Used 19538 times |  |

# What is Flow Good For?



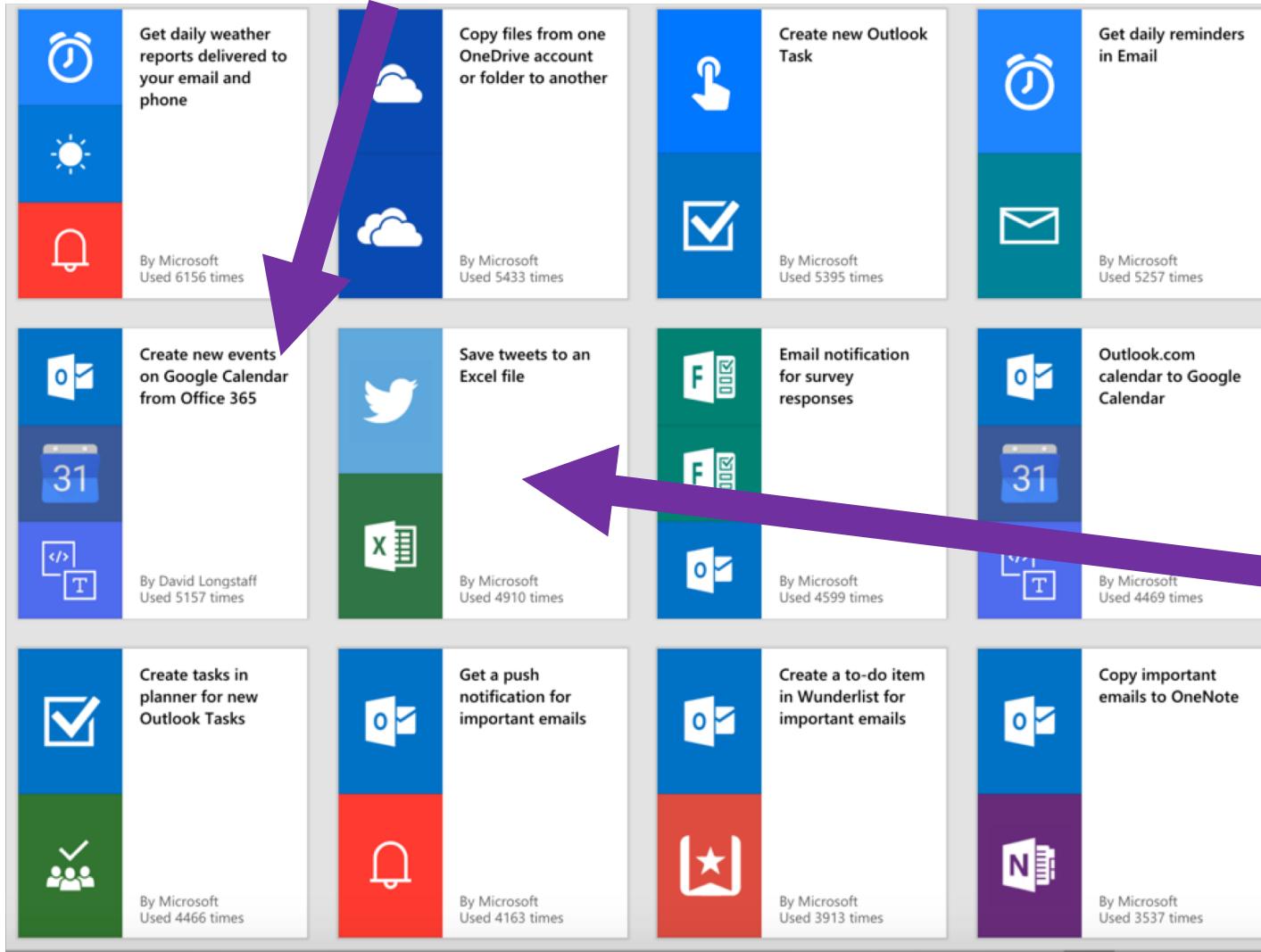
One of our Demos Later

# What is Flow Good For?

The image displays a grid of 15 Microsoft Flow templates, each represented by a colored icon bar and a brief description. A purple arrow points from the top-left template to the second row, third column template.

|  |   |  |  |
|--|---|--|--|
| <p>Trigger a flow with a Power BI data-driven alert</p> <p>By Microsoft<br/>Used 3385 times</p>                | <p>Email me my location</p> <p>By Microsoft<br/>Used 3305 times</p>                                       | <p>Send form responses for approval</p> <p>By Microsoft<br/>Used 3246 times</p>                        | <p>Create a task when an email is flagged</p> <p>By Tommy Murray<br/>Used 3175 times</p>             |
| <p>Start an approval for new file to move it to a different folder</p> <p>By Microsoft<br/>Used 3114 times</p> | <p>Track Facebook wall messages in an Excel table</p> <p>By Microsoft<br/>Used 2793 times</p>             | <p>Copy files between OneDrive for Business and SharePoint</p> <p>By Microsoft<br/>Used 2567 times</p> | <p>Get a daily notification with the weather forecast...</p> <p>By Microsoft<br/>Used 2536 times</p> |
| <p>Create planner tasks for important Office 365 emails</p> <p>By Microsoft<br/>Used 2412 times</p>            | <p>Get a push notification with an update from the Verge</p> <p>By Sunay Vaishnav<br/>Used 2293 times</p> | <p>Copy files between Dropbox and SharePoint</p> <p>By Microsoft<br/>Used 2148 times</p>               | <p>Create Todoist Tasks for Flagged Office 365 emails</p> <p>By Microsoft<br/>Used 2136 times</p>    |

# What is Flow Good For?



We have a version of this in an upcoming Demo which uses Cognitive Services and Creates an Item in a SharePoint List

# How do I pay for it?

| Microsoft Flow for Office 365  | Flow Plan 1   | Flow Plan 2  |
|--|---|--|
| <br><b>Free</b>                       | <br><b>USD \$5.00</b><br>per user/mo | <br><b>USD \$15.00</b><br>per user/mo |
| 2,000 runs per month<br>Unlimited Flow creation<br>5-min checks<br>Connect to embedded Office 365 or Dynamics services | 4,500 runs per month<br>Unlimited flow creation<br>3-minute checks<br>Premium Connectors                                | 15,000 runs per month<br>Unlimited flow creation<br>1-minute checks<br>Premium Connectors<br>Org policy settings         |
|  | <a href="#">Purchase now</a>  | <a href="#">Purchase now</a><br><br>Current Trial<br>-1 Days Remaining   |

# My Flows (or yours)

+ New ▾ Import

Home Approvals My flows Team flows Business process flows

| Name                                       | Modified   |
|--|------------|
| Fabian Work Smarter Not Harder Session     | 37 min ago |
| Record SPeakerSurvey in SharePoint         | 6 mo ago   |
| TestCreationOfBriwareDocSetInDL            | 6 mo ago   |
| DummyFlowWhenItemAdded                     | 7 mo ago   |
| Reward Brainstorm Feasibility SPFestDC2017 | 7 mo ago   |

Flows

My flows

Approvals

Team flows

Business process flows

Home

Templates

Connectors

Data

Learn

New Import

Modified

Name

Fabian Work Smarter Not Harder Session

37 min ago

Record SPeakerSurvey in SharePoint

6 mo ago

TestCreationOfBriwareDocSetInDL

6 mo ago

DummyFlowWhenItemAdded

7 mo ago

Reward Brainstorm Feasibility SPFestDC2017

7 mo ago

# Built in PowerBI Analytics

Analytics for Fabian SPSVB    Analytics for Fabian Work Smarter Not Harder Session    Last refreshed at 4:00 PM

**Usage**    **Errors**    Select range: Last 30 days

Total runs by day

| Date      | Runs |
|-----------|------|
| 2/15/2018 | 0    |
| 2/16/2018 | 0    |
| 2/17/2018 | 0    |
| 2/18/2018 | 0    |
| 2/19/2018 | 0    |
| 2/20/2018 | 0    |
| 2/21/2018 | 0    |
| 2/22/2018 | 0    |
| 2/23/2018 | 0    |

Flow runs trend

Failure Runs    Successful Run

| Date      | Failure Runs | Successful Run |
|-----------|--------------|----------------|
| 2/15/2018 | 0            | 0              |
| 2/16/2018 | 0            | 0              |
| 2/17/2018 | 0            | 0              |
| 2/18/2018 | 0            | 0              |
| 2/19/2018 | 0            | 0              |

**Errors by day**

11/30/2018 Aggregation Date

**Errors by type**

18

Forbidden 50%    ActionFailed 50%

**Action**

- Select All
- Condition
- Post a tweet

**Trigger**

- Select All

**Error details**

| Error Source | Action or Trigger Name | Error Status Code | Error Count | Last Error Occurrence  | Last Error Message                             | Last Error Detail |
|--------------|------------------------|-------------------|-------------|------------------------|--|-------------------|
| Action       | Condition              | ActionFailed      | 9           | 12/01/2018 00:46:37 AM | An action failed. No dependent actions succ... | <a href="#">@</a> |
| Action       | Post a tweet           | Forbidden         | 9           | 12/01/2018 00:46:37 AM | An action failed. No dependent actions succ... | <a href="#">@</a> |

**Error Type**

- Select All
- ActionFailed
- Forbidden

# Custom Connectors

The screenshot shows the Microsoft Flow interface with the 'Custom connectors' tab selected. At the top, there's a navigation bar with icons for 'Flow', 'My flows', 'Approvals', 'Templates', 'Connectors', 'Learn', and several others. Below the navigation bar, the main area has a title 'Custom connectors' and a large cloud icon. To the right of the cloud icon is a button labeled '+ Create custom connector' with four options: 'Create from blank', 'Import an OpenAPI file', 'Import an OpenAPI from URL', and 'Import a Postman collection'. Below the cloud icon, the text 'Your custom connectors will live here' is displayed, followed by instructions: 'Create a custom connector to connect to any existing REST API as long as the API supports at least one of 10+ authentication mechanisms and uses JSON.' A link 'Learn more about custom connectors' is provided. At the bottom left, a note states: 'Effective February 1, 2019, the following capabilities will only be available with PowerApps and Flow Plan 1 and Plan 2:' followed by a bulleted list of three items. At the very bottom, a note says: 'Customers with active users of these features will get an automatic extension until January 31, 2020 or the expiration of their existing Office 365 subscription term (whichever is longer).'

**New Changes Announced:**  
<https://techcommunity.microsoft.com/t5/Office-Retirement-Blog/Updates-to-Microsoft-Flow-and-PowerApps-for-Office-365/ba-p/289589>

# Custom Connectors

Flow My flows Approvals Templates Connectors Learn      

Custom connectors 

| Name   | Actions   |
|--|---|
|  K2 Workflow Api Preview<br>Fabian Williams |  ... |

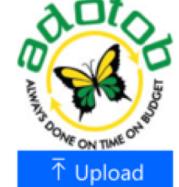
 You must update the connector to test the changes. 

K2 Workflow Api Preview  

General > Security > Definition > Test

General information

Add an icon and short description to your custom connector. Your host and base URL will be automatically generated from the swagger file.

  Upload connector icon  
Supported file formats are PNG and JPG. (< 1MB)

Icon background color

# Admin Center

The screenshot shows the 'Environments' section of the Microsoft Admin Center. On the left, a dark sidebar lists 'Environments', 'Data policies', 'Data integration', and 'Tenant'. The main area is titled 'Environments' with a search bar and a 'New environment' button. A table displays one environment entry:

| NAME              | REGION        | CREATED BY | CREATED    |
|-------------------|---------------|------------|------------|
| Contoso (default) | United States | SYSTEM     | 04/18/2017 |

The screenshot shows the 'Data loss prevention policies' section of the Microsoft Admin Center. On the left, a dark sidebar lists 'Flow', 'Environments', 'Data policies', 'Data integration', and 'Tenant'. The main area is titled 'Data loss prevention policies' with a search bar and a 'New policy' button. A table displays the current state of policies:

| NAME        | ENVIRONMENTS | CREATED BY |
|-------------|--------------|------------|
| No policies |              |            |

# Session Flow

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What is  
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Demo  
Microsoft Flow  
In Action

What is  
Cognitive  
Services?

Explore the  
different flavors  
of Cognitive  
Services

Solutions with  
Flow, Cognitive  
Services &  
SharePoint

Demos

Q&A

# demo

1. Showcase the Flows in MyFlow and Do a Run Through
2. Show Edit Mode
3. Show Users and Share

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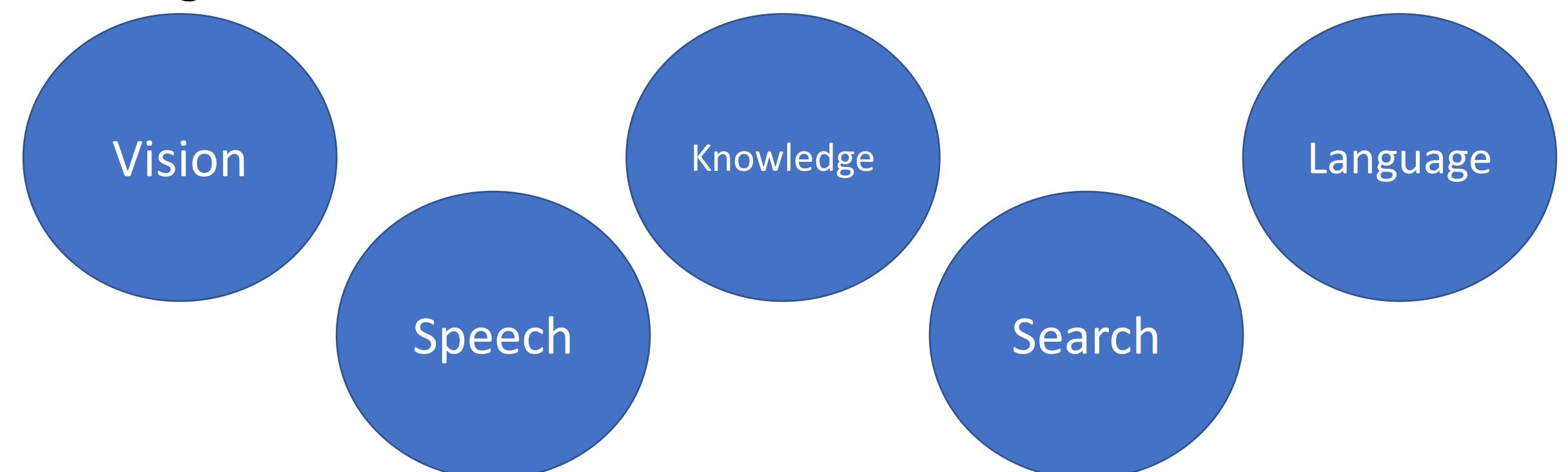
Solutions with  
Flow, Cognitive  
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Q&A

# What is Azure Cognitive Services?

Infuse your apps, websites and bots with intelligent algorithms to see, hear, speak, understand and interpret your user needs through natural methods of communication.



Vision

Knowledge

Language

Speech

Search

# Vision



## Computer Vision API

Distill actionable information from images

[Try Computer Vision API](#) | [Use with an Azure subscription](#)



## Face API

Detect, identify, analyze, organize, and tag faces in photos

[Try Face API](#) | [Use with an Azure subscription](#)



## Content Moderator

Automated image, text, and video moderation

[Use with an Azure subscription](#)



## Emotion API PREVIEW

Personalize user experiences with emotion recognition



## Custom Vision Service PREVIEW

Easily customize your own state-of-the-art computer vision models for your unique use case



## Video Indexer PREVIEW

Unlock video insights

# Speech



## Translator Speech API

Easily conduct real-time speech translation with a simple REST API call

[Use with an Azure subscription](#)



## Bing Speech API

Convert speech to text and back again to understand user intent



## Speaker Recognition API PREVIEW

Use speech to identify and authenticate individual speakers

[Try Speaker Recognition API](#) | [Use with an Azure subscription](#)



## Custom Speech Service PREVIEW

Overcome speech recognition barriers like speaking style, background noise, and vocabulary

# Session Flow

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Cognitive  
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# Language



## Language Understanding (LUIS)

Teach your apps to understand commands from your users

[Try Language Understanding \(LUIS\)](#) | Use with an Azure subscription



## Text Analytics API

Easily evaluate sentiment and topics to understand what users want

[Try Text Analytics API](#) | Use with an Azure subscription



## Bing Spell Check API

Detect and correct spelling mistakes in your app

[Try Bing Spell Check API](#) | Use with an Azure subscription



## Translator Text API

Easily conduct machine translation with a simple REST API call

[Use with an Azure subscription](#)



## Web Language Model API PREVIEW

Use the power of predictive language models trained on web-scale data



## Linguistic Analysis API PREVIEW

Simplify complex language concepts and parse text with the Linguistic Analysis API

# Text Analytics

## Sentiment analysis

The API returns a numeric score between 0 and 1. Scores close to 1 indicate positive sentiment, and scores close to 0 indicate negative sentiment.



Fabian Williams @fabianwilliams · 10h  
Hey all my T#weeps that usually are so kind to help me on these Tests.. may I ask if you can send some #tweets my way. Looking for some positive feedback and negative feedback BUT it MUST use the hashtag #FabianInVienna . This is for my demo so keep it PG plz

10 2 4

Tashas[E]v  
@TashasEv  
Replying to @fabianwilliams

Following

Hope your demo goes great, Fabian!  
#FabianInVienna

5:52 PM - 30 Nov 2018

1 Like

1 2 1 1

Fabian Williams @fabianwilliams · 10h  
Hey all my T#weeps that usually are so kind to help me on these Tests.. may I ask if you can send some #tweets my way. Looking for some positive feedback and negative feedback BUT it MUST use the hashtag #FabianInVienna . This is for my demo so keep it PG plz

10 2 4

Daniel Glenn  
@DanielGlenn  
Replying to @fabianwilliams

I have faith in you Fabian! #FabianInVienna

6:01 PM - 30 Nov 2018

1 Like

1 2 1 1

Martina Grom  
@magrom  
Replying to @fabianwilliams @modery

already curious what #FabianInVienna will show us today at #SPSVie

2:49 AM - 1 Dec 2018

1 Like

1 2 1 1

Fabian Williams @fabianwilliams · 10h  
ad7f301d-cd26-4df3-8f6e-152ebfe27752 with a score of 0.9856361746788020.985636174678802 was captured. (TEST ONLY) Thanks for that great feedback on my session at #SPSVie in #Vienna #Austria #SharePoint #OfficeDev from Tashas[E]v aka TashasEv

1 2 1 1

Fabian Williams @fabianwilliams · 1h  
Score of 0.854579985141754 was captured. (TEST ONLY) Thanks for feedback on my session at #SPSVie in #Vienna #Austria #SharePoint #OfficeDev from Martina Grom aka magrom & location is: by magrom lets see what you look like while were here pbs.twimg.com/profile\_images...

1 2 1 1

**Fabian Williams** @fabianwilliams · 10h  
Hey all my T#weeps that usually are so kind to help me on these Tests.. may I ask if you can send some #tweets my way. Looking for some positive feedback and negative feedback BUT it MUST use the hashtag #FabianInVienna . This is for my demo so keep it PG plz

10 2 4

**Markus Hintner** @MarkusHintner Following

Replies to @fabianwilliams

Let me be the bad guy: #FabianInVienna was really pissed

3:12 AM - 1 Dec 2018

1 Like

1 Comment

← Fabian Work Smarter Not Harder Session

Resubmit Edit flow

If yes Create item 1s

If no Post a tweet 0s

INPUTS

Site Address https://fwilliams.sharepoint.com/spsvb2018

| Title                         | Tweep             | Created              | TweepHandle   | ActualTweet   | SentimentValue     |
|-------------------------------|-------------------|----------------------|---------------|---|--------------------|
| Tweet From: Markus Hintner    | Markus Hintner    | 32 minutes ago       | MarkusHintner | @fabianwilliams Let me be the bad guy: #FabianInVienna was really pissed about the ride in the morning  | 0.0279607176780701 |
| Tweet From: Martina Grom      | Martina Grom      | About an hour ago    | magrom        | @fabianwilliams @modery already curious what #FabianInVienna will show us today at #SPSVie  | 0.5                |
| Tweet From: Jasper Oosterveld | Jasper Oosterveld | About an hour ago    | jasoosterveld | @fabianwilliams FAKE NEWS #FabianInVienna   | 0.5                |
| Tweet From: Patrick Heemskerk | Patrick Heemskerk | Yesterday at 3:15 PM | JustPHIT      | Damn it why doesn't people follow this great guy @fabianwilliams ... He needs more feedback but is it positive or does the AI recognize it negative because of the shit load of bad words... #FabianInVienna #SPVie | 0.152309775352478  |
| Tweet From: Daniel Glenn      | Daniel Glenn      | Yesterday at 3:04 PM | DanielGlenn   | @fabianwilliams I'm not sure about this - it could go terribly wrong. #FabianInVienna   | 0.0414116084575653 |
| Tweet From: Daniel Glenn      | Daniel Glenn      | Yesterday at 3:02 PM | DanielGlenn   | @fabianwilliams I have faith in you Fabian! #FabianInVienna   | 0.718637943267822  |
| Tweet From: Daniel Glenn      | Daniel Glenn      | Yesterday at 3:02 PM | DanielGlenn   | @fabianwilliams I'm not sure about this - it could go terribly wrong. #FabianInVienna   | 0.0414116084575653 |

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# Flow, Cognitive Services, SharePoint Use Case



**Unsolicited Feedback from the general public that can affect corporate or individual brand**

Flow name: Fabian SPSVB 2018 Level1 Session

✓ Update flow    X Close

Detect Sentiment (Preview)

Text: Tweet text

Show advanced options

Condition

Score is less than 0.7

If yes:

Create item

\* Site Address: https://fwilliams.sharepoint.com/spsvb2018

\* List Name: SPSVB2018Session2

\* Title: Tweet From: Name

Tweep: Name

TweepHandle: User name

TweetLink: Link to the Tweet

ActualTweet: Tweet text

SentimentValue: Score

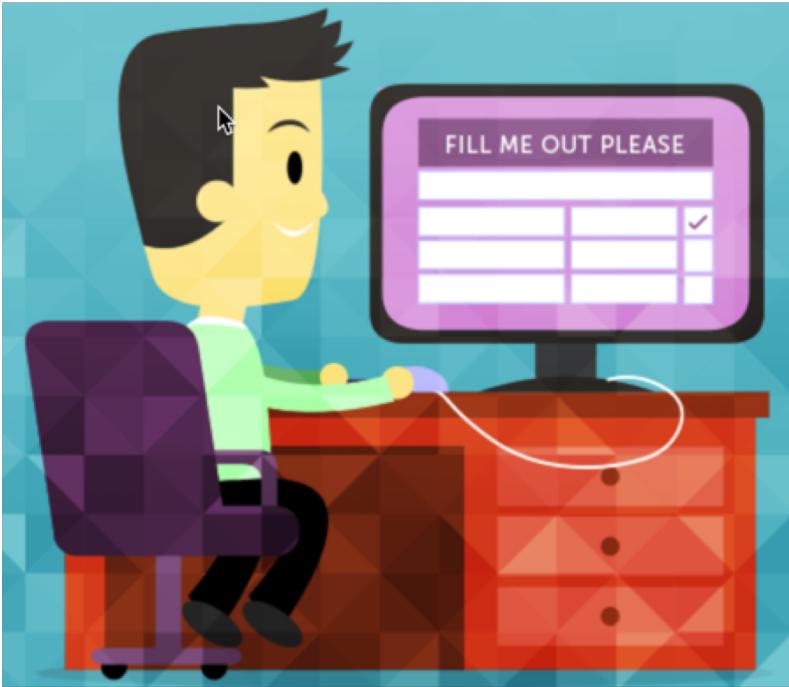
If no:

Post a tweet

Request ID with a score of Score was captured. (TEST ONLY) Thanks for that great feedback on my session at #spsvb2018 #spsvb from Name aka Tweeted by

Add an action    More

# Flow, Cognitive Services, SharePoint Use Case



A means to engage External Users  
into your Internal SharePoint /  
Office 365 Environment at scale  
with AI as your policeman

SharePoint Saturday VaBeach SimpleReview

Just a poll to see what kind of folks that attend my session do in the Office365, Azure, SharePoint Space

Your response is anonymous.

\* Required

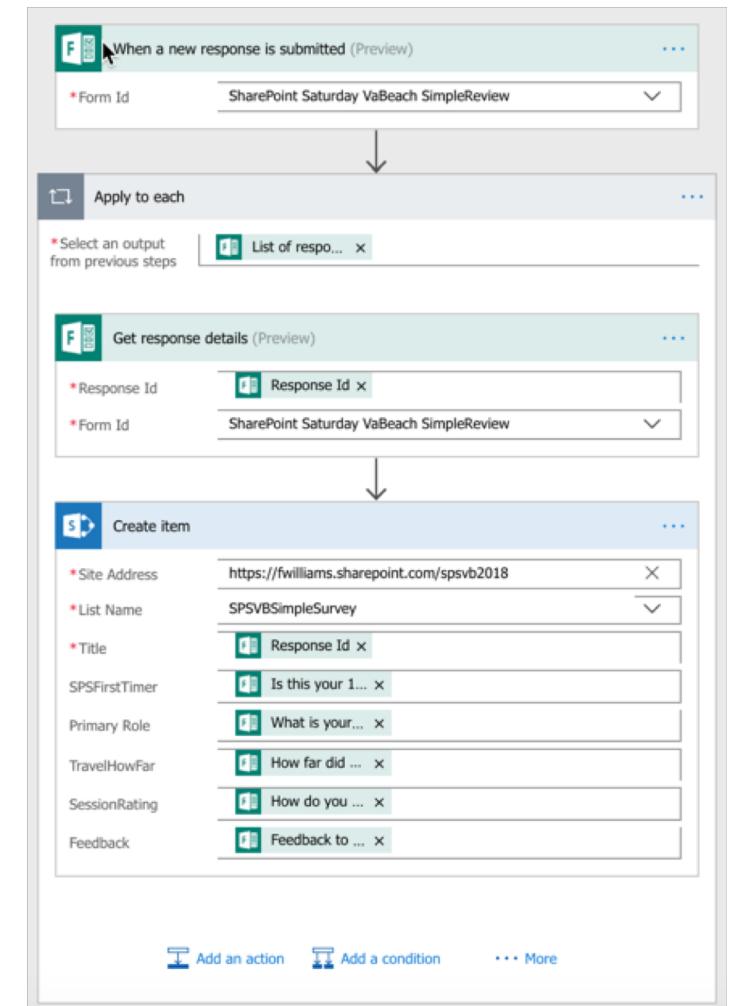
1. Is this your 1st SharePoint Saturday? \*

Yes  
 No

2. What is your Primary role in your Office365, SharePoint, Azure life? \*

IT Professional  
 Developer  
 Business Analyst  
 Power User  
 Tester  
 End User  
 Other

3. How far did you travel to get here \*  
 1 to 10 miles



[https://forms.office.com/Pages/ResponsePage.aspx?id=J3kIGWyTTUqs3iT5bu8rPkCRWJ7hOwVCK7p\\_7vObwXdUQURMTURFQU9FRlo4V0IPVjNKT1hLWUdSTS4u](https://forms.office.com/Pages/ResponsePage.aspx?id=J3kIGWyTTUqs3iT5bu8rPkCRWJ7hOwVCK7p_7vObwXdUQURMTURFQU9FRlo4V0IPVjNKT1hLWUdSTS4u)

# Save the Earth, use Flow, Planner, and vCards

Step 1: Trigger is "When a new response is submitted on Forms"

Step 3: Create a new item in the SharePoint list and capture the fields from the Form there

Step 5: Send email to person asking for contact details and attach your vCard

Step 7: Create a task in Planner to remind you to follow up with the new contact.

Flow name Form >

SharePoint - Create item

Post message (Preview)

Create a task (Preview)

Get vCard

Mail - Send an email notification

Planner - Create a task

Flow My flows Approvals

Create item

Site Address Team Guid Stuff - https://[REDACTED]  
List Name Contact  
Name and Surname Name & Surna...  
Company Company  
Telephone Number Telephone Nu...  
Email Address Email Address  
Twitter handle Twitter handle...

Hi Team! We have a new contact! Keep your eye out for: Name and Sur...

Plan Id Team Guid Stuff  
Title Name and Sur...  
Bucket Id [REDACTED]  
Start Date Time Created  
Due Date Time Follow up  
Assigned User Id [REDACTED]

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# demo

## 1. Demo To Do

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BONUS  
Azure Funct's &  
Graph  
Extensions

# What is Azure Functions and Why should you Care?



- Serverless Computing
- Flexible Coding Options (Browser IDE, or Visual Studio)
- Consumptive Plan (Pay as you Go, or App Service)
- Multiple Coding Language
- Seamless Azure Integration through Triggers and Bindings
  - Azure Blob, Queue & Table Storage
  - Azure Event Hub
  - Azure Cosmos DB
  - Bot Framework
- External Dependency Integration (NuGet & NPM)

# Microsoft Graph Bindings with Extensions

Ok... So...  
What do you Get?

IMO the Most  
Versatile of  
them all

The Microsoft Graph extension provides the following bindings:

- An [auth token input binding](#) allows you to interact with any Microsoft Graph API.
- An [Excel table input binding](#) allows you to read data from Excel.
- An [Excel table output binding](#) allows you to modify Excel data.
- A [OneDrive file input binding](#) allows you to read files from OneDrive.
- A [OneDrive file output binding](#) allows you to write to files in OneDrive.
- An [Outlook message output binding](#) allows you to send email through Outlook.
- A collection of [Microsoft Graph webhook triggers and bindings](#) allows you to react to events from the Microsoft Graph.

# Azure Functions Setup

Home > fwspcnabeta

## fwspcnabeta

Function Apps

Search:

All subscriptions: fwspcnabeta

Function Apps:

| fwspcnabeta                     | Actions |
|---------------------------------|---------|
| aa_ReadFromODFBExcelFileviaT... |         |
| a_(disabled)_ReadFromODFBExc... |         |
| b_TokenToGetMyGraphProfilePic   |         |
| c_SendEmail                     |         |
| d_ReadMyODFBTextResume          |         |
| e_WriteToMyODFBTextResume       |         |
| f_OutlookWebhookHandler         |         |
| zz_FabsGenericTester            |         |
| z_Webhook_Subscriber_Graph      |         |

Overview Platform features

Status: Running

Subscription: FabiansWorld-Pay-As-You-Go

Resource group: spcna

URL: <https://fwspcnabeta.azurewebsites.net>

Subscription ID: e74ae6e4-f3e5-4add-848f-52c6c889bab1

Location: East US 2

App Service plan / pricing tier: EastUS2Plan (Consumption)

### Configured features

- Function app settings
- Application settings
- Authentication

# Azure Functions Setup

The screenshot shows the Azure Functions Overview page. A teal callout labeled '1' points to the 'Platform features' tab at the top of the page. Another teal callout labeled '2' points to the 'Networking' section under the 'GENERAL SETTINGS' heading.

**GENERAL SETTINGS**

- Function app settings
- Application settings
- Properties
- Backups
- All settings

**CODE DEPLOYMENT**

- Deployment options
- Deployment credentials

**DEVELOPMENT TOOLS**

- Logic Apps
- Console
- Advanced tools (Kudu)
- App Service Editor
- Resource Explorer
- Extensions

**NETWORKING**

- Networking
- SSL
- Custom domains
- Authentication / Authorization
- Managed service identity (Preview...)
- Push notifications

**MONITORING**

- Diagnostic logs
- Log streaming
- Process explorer
- Metrics

**API**

- API definition
- CORS

**APP SERVICE PLAN**

- App Service plan
- Scale up
- Quotas

**RESOURCE MANAGEMENT**

- Diagnose and solve problems
- Activity log
- Access control (IAM)
- Tags
- Locks
- Automation script

# Azure Functions Setup

ta > Authentication / Authorization > Azure Active Directory Settings

## Authentication / Authorization

Save Discard

### Authentication / Authorization

Anonymous access is enabled on the App Service app. Users will not be prompted for login.

App Service Authentication: **Off** **On**

Action to take when request is not authenticated: Allow Anonymous requests (no action) **1**

### Authentication Providers

- Azure Active Directory: Configured (Express : Existing App) **>**
- Facebook: Not Configured **>**
- Google: Not Configured **>**
- Twitter: Not Configured **>**
- Microsoft: Not Configured **>**

### Advanced Settings

Token Store: **Off** **On**

ALLOWED EXTERNAL REDIRECT URLs

...

## Azure Active Directory Settings

### Active Directory Authentication

These settings allow users to sign in with Azure Active Directory. Click here to learn more. [Learn more](#)

Management mode: **Off** **Express** **Advanced**

Express mode allows user select an existing AD application on your current Active Directory. Create operation is allowed once per app. **i** **2**

Current Active Directory: fabians world **>**

\* Azure AD App: fwspcnabeta **>**

### Manage Azure Active Directory Application

Manage the entire Active Directory Application, gives granular control over editing manifest, changing reply URLs, keys etc. Manage the Azure Active Directory Application's permission to allow your app to talk to other application. **3**

**Manage Permissions** **Manage Application**

OK

# Azure Functions Setup

beta > Authentication / Authorization > Azure Active Directory Settings > Required permissions > Enable Access

### Required permissions

[+ Add](#) [Grant Permissions](#)

| API  | APPLICATION PERMIS... | DELEGATED PERMIS... |
|--|-----------------------|---------------------|
| Microsoft Graph  | 0                     | 8                   |
| Windows Azure Active Directory (Microsoft.Azure.Act... | 0                     | 1                   |

### Enable Access

Microsoft Graph

[Save](#) [Delete](#)

| Requester permission  | Grant               |
|---|---------------------|
| <input checked="" type="checkbox"/> Sign in and read user profile       | <a href="#">No</a>  |
| Read and write access to user profile                                   | <a href="#">No</a>  |
| Read all users' basic profiles  | <a href="#">No</a>  |
| Read all users' full profiles   | <a href="#">Yes</a> |
| Read and write all users' full profiles                                 | <a href="#">Yes</a> |
| Read all groups   | <a href="#">Yes</a> |
| Read and write all groups   | <a href="#">Yes</a> |
| Read directory data   | <a href="#">Yes</a> |
| Read and write directory data   | <a href="#">Yes</a> |
| Access directory as the signed in user                                  | <a href="#">Yes</a> |
| <input checked="" type="checkbox"/> Read user mail                      | <a href="#">No</a>  |
| <input checked="" type="checkbox"/> Read and write access to user mail  | <a href="#">No</a>  |
| <input checked="" type="checkbox"/> Send mail as a user                 | <a href="#">No</a>  |
| Read user calendars   | <a href="#">No</a>  |
| Have full access to user calendars                                      | <a href="#">No</a>  |
| Read user contacts  | <a href="#">No</a>  |
| Have full access to user contacts                                       | <a href="#">No</a>  |
| <input checked="" type="checkbox"/> Read user files                     | <a href="#">No</a>  |
| <input checked="" type="checkbox"/> Have full access to user files      | <a href="#">No</a>  |
| <input checked="" type="checkbox"/> Read all files that user can access | <a href="#">No</a>  |

# Azure Functions Setup

beta > Authentication / Authorization > Azure Active Directory Settings > Required permissions > Enable Access

### Required permissions

[+ Add](#) [Grant Permissions](#)

| API  | APPLICATION PERMIS... | DELEGATED PERMIS... |
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[Save](#) [Delete](#)

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| <input checked="" type="checkbox"/> Have full access to user files      | <a href="#">No</a>  |
| <input checked="" type="checkbox"/> Read all files that user can access | <a href="#">No</a>  |

# Azure Functions Setup

⚠ You're using a prerelease version of Azure Functions. Thanks for trying it out!

Advanced editor

| Triggers                      | Inputs      | Outputs      |
|-------------------------------|-------------|--------------|
| Microsoft Graph webhook (msg) | + New Input | + New Output |

---



Azure Blob Storage



Auth token



Excel table



OneDrive file



O365 Webhook Handler


Orchestration Client

**Select** **Cancel**

# Azure Functions Setup

The screenshot illustrates the setup of an Azure Function named `aa_ReadFromODFBEexcelfileviaToken`. The interface is divided into two main sections: the Azure Functions portal and the function's local editor.

**Top Section (Azure Functions Portal):**

- Inputs:** A list of inputs for the function. One input, `Auth token (graphToken)`, is highlighted with a green speech bubble labeled **1**.
- Outputs:** A list of outputs for the function, including `HTTP ($return)`.
- Trigger:** An `HTTP (req)` trigger is listed under Triggers.

**Bottom Section (Function Editor):**

- 1**: The function's name, `aa_ReadFromODFBEexcelfileviaToken`, is highlighted with a green speech bubble.
- 2**: The function's code editor shows the C# script (`run.csx`). The code uses the `HttpClient` class to make a GET request to the Microsoft Graph API endpoint `https://graph.microsoft.com/v1.0/me/drive/items/016FDAVA5HBADWFXYRRDICP6M4`. A green speech bubble labeled **2** points to the URL.
- 3**: A green speech bubble labeled **3** points to the `</> Get function URL` button, which generates the function's public endpoint.

```
1 using System.Net;
2 using System.Net.Http;
3 using System.Net.Http.Headers;
4
5 public static async Task<HttpResponseMessage> Run(HttpRequestMessage req, string graphToken, TraceWriter log)
6 {
7     HttpClient client = new HttpClient();
8     client.DefaultRequestHeaders.Authorization = new AuthenticationHeaderValue("Bearer", graphToken);
9     return await client.GetAsync("https://graph.microsoft.com/v1.0/me/drive/items/016FDAVA5HBADWFXYRRDICP6M4");
10 }
11
```

# Azure Functions Setup

The screenshot shows the Azure Functions portal interface. The left sidebar lists various function apps under the 'fwspcnabeta' subscription. The 'c\_SendEmail' function app is selected, indicated by a blue background. The main content area displays the 'run.csx' code for this function. The code defines a C# method 'Run' that takes an 'HttpRequest' and returns a 'Message' object. It sets the subject and body of the message to specific values and includes two class definitions for 'Message' and 'Recipient'.

```
1 using System.Net;
2
3 public static void Run(HttpRequest req, out Message message, TraceWriter log)
4 {
5     string emailAddress = req.Query["to"];
6     message = new Message(){
7         subject = "Greetings Attendees at Fabians SPCNA 2018 Session",
8         body = "Sent from Azure Functions to Attendees at SPCNA 2018",
9         recipient = new Recipient() {
10             address = "fabian@adotob.com"
11         }
12     };
13 }
14
15 public class Message {
16     public String subject {get; set;}
17     public String body {get; set;}
18     public Recipient recipient {get; set;}
19 }
20
21 public class Recipient {
22     public String address {get; set;}
23     public String name {get; set;}
}
```

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PLATIN



GOLD



SILVER



# SESSION FEEDBACK

# TELL ME DON'T BE SHY

SharePoint Saturday Vienna  
1.12.2018



Fabian Williams, MVP, MCSD, MCDBa, MCSE  
Practice Director  
**Withum Digital**

 [www.fabiangwilliams.com](http://www.fabiangwilliams.com)

 @FabianWilliams

 [linkedin.com/in/fabiangwilliams](https://linkedin.com/in/fabiangwilliams)

 [fabian@adotob.com](mailto:fabian@adotob.com)





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# SESSION FEEDBACK

TELL ME  
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