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# SIGN UP FOR TODAY'S RAFFLE!

Collabdays Oslo Raffle Registration





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**Joe Griffin**  
MVP | MCT

# **POWER FX DEEP DIVE: FROM NOVICE TO NINJA!**



# POWER FX DEEP DIVE: FROM NOVICE TO NINJA



<https://linktr.ee/joejgriffin>

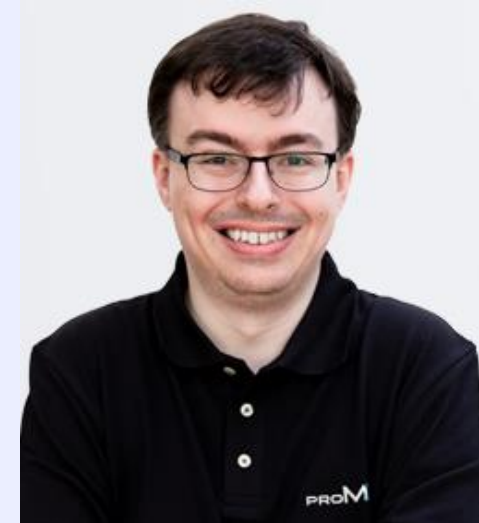
# AGENDA

- Meet the Speaker
- Power Fx:
  - What is it?
  - Where can you use it?
  - Why should you know about it?
- From Novice to Ninja (Demos):
  - Mastering the Basics (Data types, operators and imperative actions)
  - Moving Up a Gear: Real World Scenario (complex formulas, comments, collections and variables)
  - Push it to the Limit: Plug-ins and Copilot Studio
- Additional Resources
- Q&A

# MEET THE SPEAKER

- Joe Griffin – CEO @ proMX UK Limited
- Technologist, trainer, #PowerPlatformFreak, #ProjectOperationsLover, geek, cheesecake consumer

<https://linktr.ee/joejgriffin>



# POWER FX: OVERVIEW



- Power Fx: The Low-Code Language for the Power Platform
- Easy to use for developers and coding newbies
- Build solutions across the Power Platform
- Designed for Power Users
- Similar to Excel formulas for easy learning

```
fx ✓ Right(Input.Text,Len(Input.Text)-  
Find("|",  
Substitute(Input.Text," ","|",  
Len(Input.Text)-Len(Substitute(Input.Text," ","")))))
```

≡ Format text    ≡ Remove formatting



# KEY FEATURES

- Collaborative and Efficient
  - Facilitates teamwork and reuse through source control, libraries, and governance tools
  - Open-source solution for free contribution and understanding
- Scalable and Extensible
  - Enhance solutions using other pro-code capabilities in the platform
  - Code components, Power Apps cards, Adaptive cards and Dataverse plug-ins
- Consistent and Compatible
  - Works (mostly) seamlessly across the Power Platform
  - Leverages the common data model and connectors
- Versatile and Flexible
  - Create custom apps, automations and bots for various scenarios and needs
  - Easy to Learn and Use

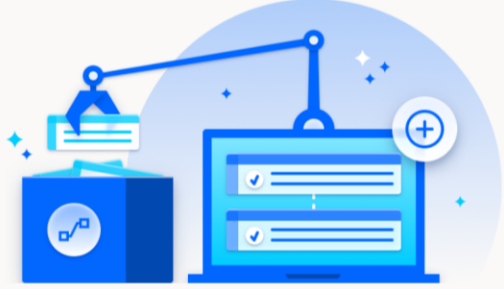
# WHERE CAN WE USE IT?

- Power Fx is used in many different areas of the Power Platform
- Can be leveraged to work with data, UI, and automation
- Power Fx can be used in Power Apps, Microsoft Dataverse, Power Automate Desktop and Copilot Studio



# LET'S BREAK IT DOWN FURTHER

Build a flow



Name your flow and select create to open the flow designer.

Flow name

Test Desktop Flow

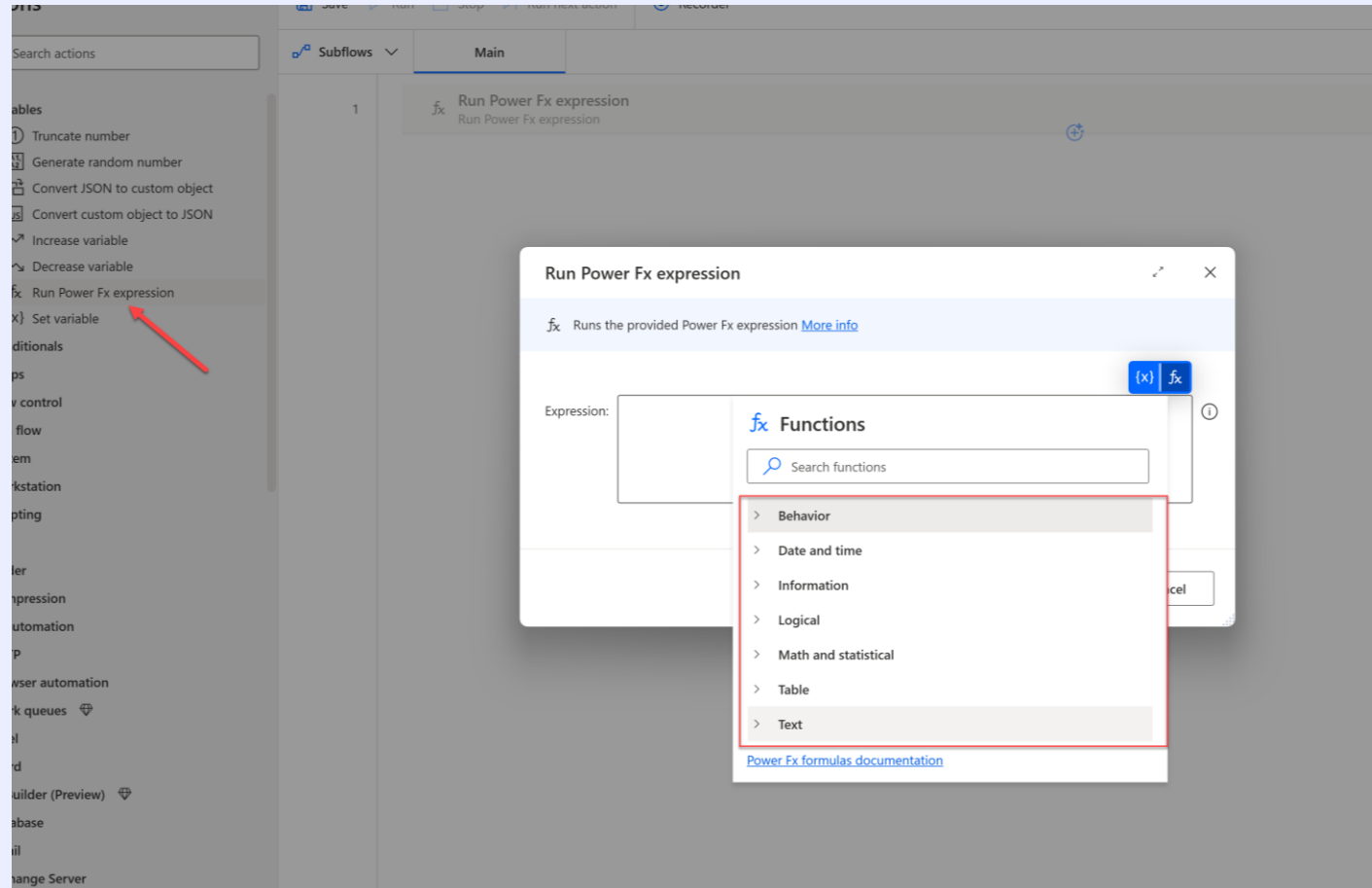
Power Fx enabled (Preview) ☒ ⓘ

Power Fx is Power Platform's official language. It is open-source, inspired by Excel formulas and has simplicity and ease-of-use as its core values.

Create

Cancel

# LET'S BREAK IT DOWN FURTHER





# LET'S BREAK IT DOWN FURTHER

What is your name?

Identify

Person name

Save response as

{x} customerName string

+

{x} Set Variable Value

Set variable

{x} capsName blank

To value

Enter or select a value

Enter formula

Custom System **Formula**

$f_x$  Upper(Text(Topic.customerName))

Type String

Output Upper(Text(Topic.customerName))

# LET'S BREAK IT DOWN FURTHER

**i** This app is in a Developer environment. This is for development and test purposes only.

⋮


Features

🏠 Home

📖 Learn

+ New plug-in ▾ ↻ Refresh

Search




## Dataverse Accelerator

Discover the latest feature set available in Dataverse with more guidance on when and how to use each capability, and get value from Dataverse faster.


This Dataverse feature is in preview. [See terms](#)

### Low Code Plug-ins



#### Create instant plug-in

Reusable logic that can be invoked in apps, flows, or from the Dataverse API when needed.



#### Create automated plug-in

Perform tasks automatically after a designated table event happens in Dataverse.

# LET'S BREAK IT DOWN FURTHER

The screenshot displays a software interface for configuring a command. At the top, a toolbar includes options like 'Back', 'New', 'Duplicate', 'Hide', and 'Delete'. Below this, a dropdown menu shows 'OnSelect' with a formula bar containing 'true'. A red arrow points to the formula bar. On the left, a 'Commands' panel lists various actions, with 'My Awesome Button' selected. The main workspace shows a toolbar with 'Save', 'My Awesome Button', 'Mark Complete', 'Save & Close', 'New', 'Summarize', 'Activate', and 'Deactivate'. Below this, a row of icons includes 'Connect', 'Assign', 'Email a Link', 'Delete', 'Open Active Stage', 'Export to PDF', 'Check Access', and 'Refresh'. A second row of icons includes 'Close {EntityLogicalNa...', 'Process', 'Add to Queue', 'Queue Item Details', 'View Hierarchy', and 'Share'. On the right, a 'Command' panel for 'My Awesome Button' shows configuration options: 'Label' (My Awesome Button), 'Icon' (No Icon), 'Action' (Run formula), 'Visibility' (Show), 'Tooltip title', 'Tooltip description', and 'Accessibility text'. The 'Action' and 'Visibility' sections are highlighted with red boxes.

OnSelect = `true`

Commands

- Save
- My Awesome Button
- Mark Complete
- Save & Close
- New
- New
- Summarize
- Activate
- Deactivate
- Connect
- Assign
- Email a Link
- Delete
- Open Active Stage
- Export to PDF
- Check Access
- Refresh
- Close {EntityLogicalNa...

Command: My Awesome Button

Label: My Awesome Button

Icon: No Icon

Action: Run formula

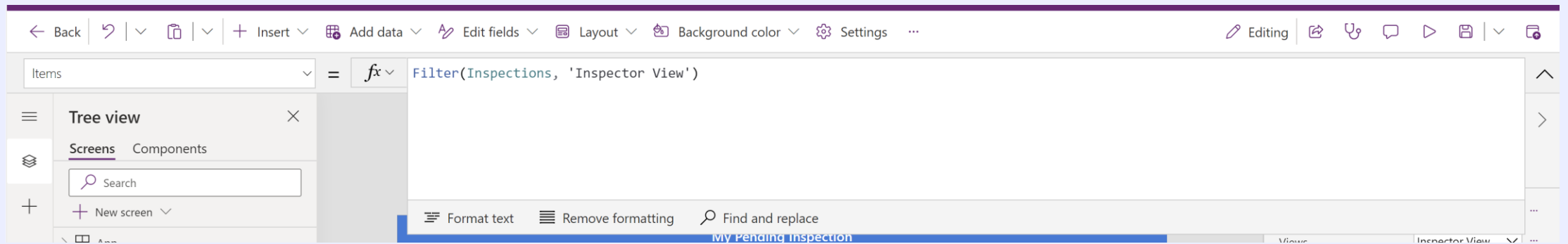
Visibility: Show

Tooltip title:

Tooltip description:

Accessibility text:

# LET'S BREAK IT DOWN FURTHER





# WHY SHOULD YOU CARE?

- Transform your way of creating and customizing applications
  - Automate workflows and build intelligent copilots
- Bridge between Excel formulas and full-fledged programming language
  - Become a versatile creator in the low-code world
- Turn ideas into reality with precision and speed
  - Embrace the mindset of continuous learning and innovation



# THE BENEFITS FOR YOU



- Easy to Use
  - Similar to writing Excel formulas
  - Declarative language
- Flexible and Scalable
  - Usable across different platforms and services
  - Extendable with custom connectors
- Dynamic and Expressive
  - Capable of complex logic and data manipulation
  - Rich set of functions and operators

TIME TO GO DEEP!

# ADDITIONAL RESOURCES

- GitHub Repository for Power Fx:
  - <https://github.com/microsoft/Power-Fx>
- Microsoft Power Platform CLI (recommend VS Code option):
  - <https://learn.microsoft.com/en-us/power-platform/developer/cli/introduction?tabs=windows>
- Power Fx Formula Reference:
  - <https://learn.microsoft.com/en-us/power-platform/power-fx/formula-reference>
- Matt Collins Jones – Using Power Fx in Modern Commanding and Custom Pages:
  - <https://www.youtube.com/playlist?list=PL9aOTzghr-xvXNkLK1VMuj3gmdRx8s48K>



# CLOSING THOUGHTS

- Ignore Power Fx at your peril
- Learn once, re-use again...and again...and again
- Powerful and flexible for both low and pro code users
- Devote time to exploring new preview capabilities involving Power Fx as and when they arise
  - Reconsider future investments into classic real-time workflows and calculated columns in Microsoft Dataverse

Q&A

# THANKS FOR LISTENING



<https://linktr.ee/joejgriffin>