



POWERSHELL + DEVOPS  
GLOBAL SUMMIT

# Demystifying Microsoft's Cloud Automation Products

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jaap\_brasser







WELCOME TO CON

Everything you need to be happy.



# Jaap Brassers

**Tweets** @ jaap\_brassers  
**Blogs** @ jaapbrassers.com  
**Works** @ Rubrik.com  
**Does** Blogger, Speaker, Tech Enthusiast  
**Likes** Cloud Automation, Scripting & Security



# Jaap Brasser

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# Agenda

01

What

02

Why

03

How

04

Demos

Because...  
we don't  
have 4 hands



		HOW OFTEN YOU DO THE TASK					
		50/DAY	5/DAY	DAILY	WEEKLY	MONTHLY	YEARLY
HOW MUCH TIME YOU SHAVE OFF	1 SECOND	1 DAY	2 HOURS	30 MINUTES	4 MINUTES	1 MINUTE	5 SECONDS
	5 SECONDS	5 DAYS	12 HOURS	2 HOURS	21 MINUTES	5 MINUTES	25 SECONDS
	30 SECONDS	4 WEEKS	3 DAYS	12 HOURS	2 HOURS	30 MINUTES	2 MINUTES
	1 MINUTE	8 WEEKS	6 DAYS	1 DAY	4 HOURS	1 HOUR	5 MINUTES
	5 MINUTES	9 MONTHS	4 WEEKS	6 DAYS	21 HOURS	5 HOURS	25 MINUTES
	30 MINUTES		6 MONTHS	5 WEEKS	5 DAYS	1 DAY	2 HOURS
	1 HOUR		10 MONTHS	2 MONTHS	10 DAYS	2 DAYS	5 HOURS
	6 HOURS				2 MONTHS	2 WEEKS	1 DAY
	1 DAY					8 WEEKS	5 DAYS

Worth it?

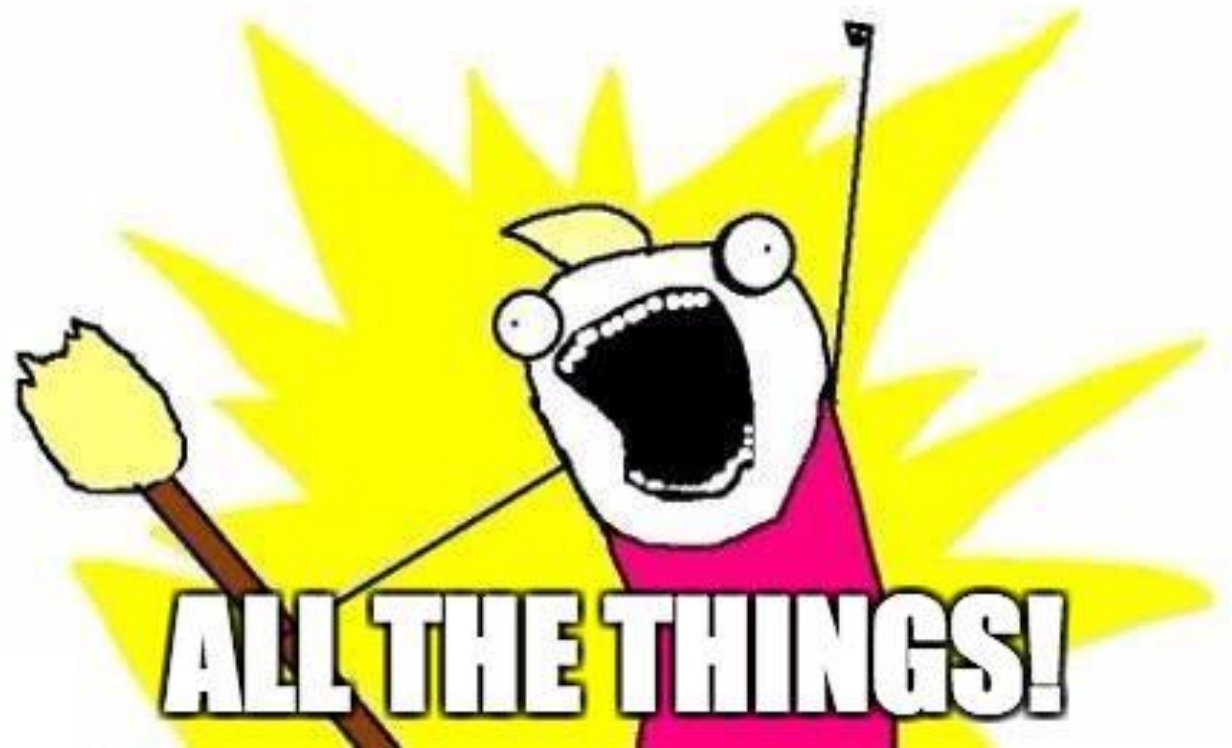


Because...  
we are cool



Because...

**AUTOMATE**





About this Azure thing...



# AI + Machine Learning

[Learn more >](#)

## Azure Bot Service

Intelligent, serverless bot service that scales on demand

## Azure Search

Fully-managed search-as-a-service

## Bing Custom Search

An easy-to-use, ad-free, commercial-grade search tool that lets you deliver the results you want

## Bing Image Search

Search for images and get comprehensive results

## Azure Databricks

Fast, easy, and collaborative Apache Spark-based analytics platform

## Bing Autosuggest

Give your app intelligent autosuggest options for searches

## Bing Entity Search

Enrich your experiences by identifying and augmenting entity information from the web

## Bing News Search

Search for news and get comprehensive results



Cloud Shell



Microsoft Flow



Code

Events + data

Azure Functions





Introducing the cast



# Azure Automation



## Process Automation

Orchestrate processes using graphical, PowerShell, and Python runbooks



## Configuration Management

Collect inventory  
Track changes  
Configure desired state



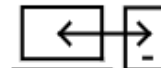
## Update Management

Assess compliance  
Schedule update installation



## Shared capabilities

Role based access control  
Secure, global store for variables, credentials, certificates, connections  
Flexible scheduling  
Shared modules  
Source control support  
Auditing  
Tags



## Heterogenous

Windows & Linux  
Azure and on-premises



# Azure Automation Summary

Automate  
processes

Cross-  
platform conf  
mgmt

Download  
runbooks &  
scripts

Event grid  
integration

Hybrid  
Runbook  
Worker

500 free  
minutes



**Microsoft Flow**





Office 365 Outl...



OneDrive for B...



Office 365 Users



SharePoint



Twitter



Notifications



RSS



Outlook.com

#### Recently added connectors



AtBot Admin



Marketing Cont...



Pitney Bowes T...



Excel Online (B...



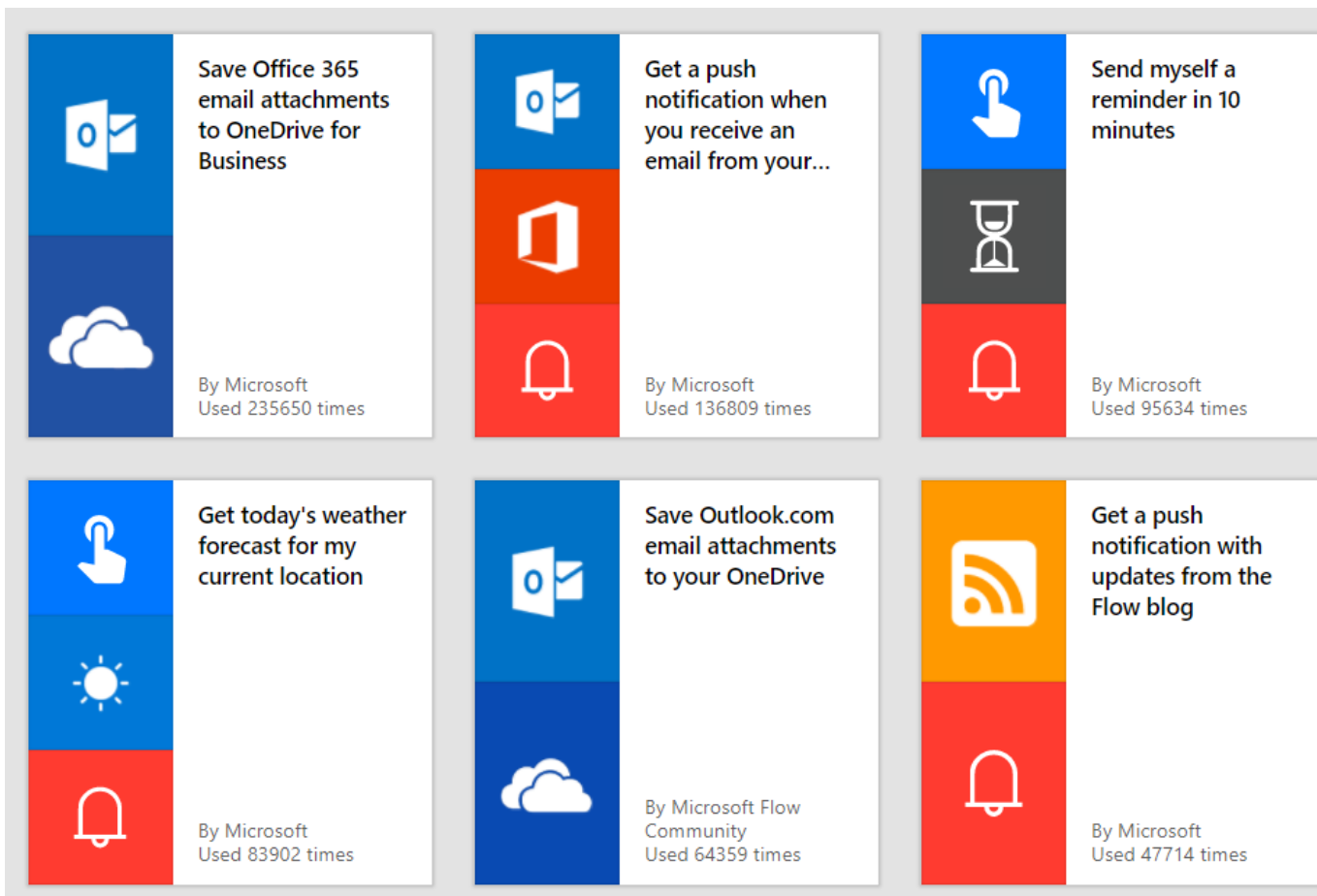
Excel Online (O...



Azure SQL Data...

# Connectors

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# Templates

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# Flow Summary



Use Connectors  
to get data



Create triggers  
based on data



Build workflows



Integrate and  
combine services



Approval flows



Long runtime of  
flows



# demo



**Microsoft Flow**

# Demo Summary



Use connectors



Built on top of  
PowerApps



Free executions




Approval flows



Long running  
tasks

Microsoft Azure

 Search resources, services, and docs

>\_



PowerShell ▾



Azure Cloud

Azure: /

PS Azure:\>



# Cloud Shell Requirements



Azure Subscription



Browser, Extension, App



Storage Account



Shell skills

The background of the slide features a dark, monochromatic image of interlocking mechanical gears. The gears are of various sizes and are partially obscured by a large, semi-transparent blue rectangle that serves as a container for the text.

# Cloud Shell pricing

- ✓ **No** upfront cost
- ✓ **No** termination fees
- ✓ Pay only for what you need

```
> azure: open
```

**Azure: Open** Bash in Cloud Shell

**Azure: Open** PowerShell in Cloud Shell

# Run Cloud Shell from VSCode



**Azure Account** 0.6.2

A common Sign-In and Subscription

Microsoft

# demo



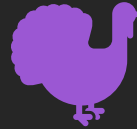
**Cloud Shell**



# Demo Summary



Login to Cloud  
Shell



pwsh & bash



Cloud Drive



Drag & Drop



Launch from  
vscode



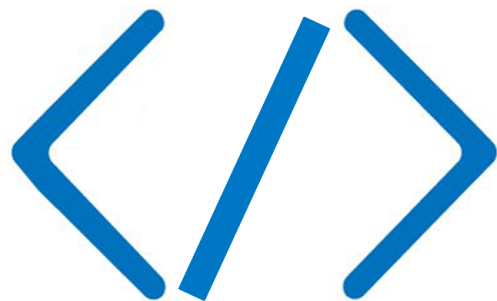
All the tools

HELLO BEAUTIFUL

MADAMENOIRE

**WAIT A MINUTE**

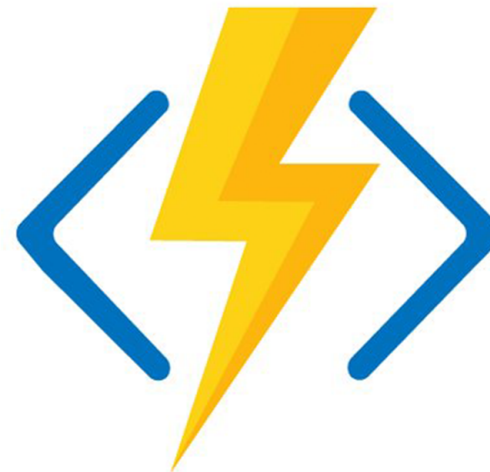
Code



Events + Data



Azure Functions



Azure Functions... V2!!!

# Thanks PowerShell Team

## Public Preview of PowerShell in Azure Functions 2.x



Joey

April 29th, 2019

Over the last six months, we've been hard at work integrating PowerShell Core with [Azure Functions 2.x](#). Today, I'm happy to announce that [we're releasing public preview of PowerShell support for Azure Functions 2.x for Windows \(Consumption, Premium, and App Service pricing plans\)](#).



# Advantages of Azure Functions



Pay for what you use



No Infrastructure to  
manage



No maintenance of  
servers



Can be placed in  
existing subscriptions

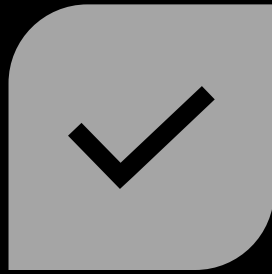


Simplify code writing

# What are we trying to solve?



RE-USING EXISTING  
SKILLS



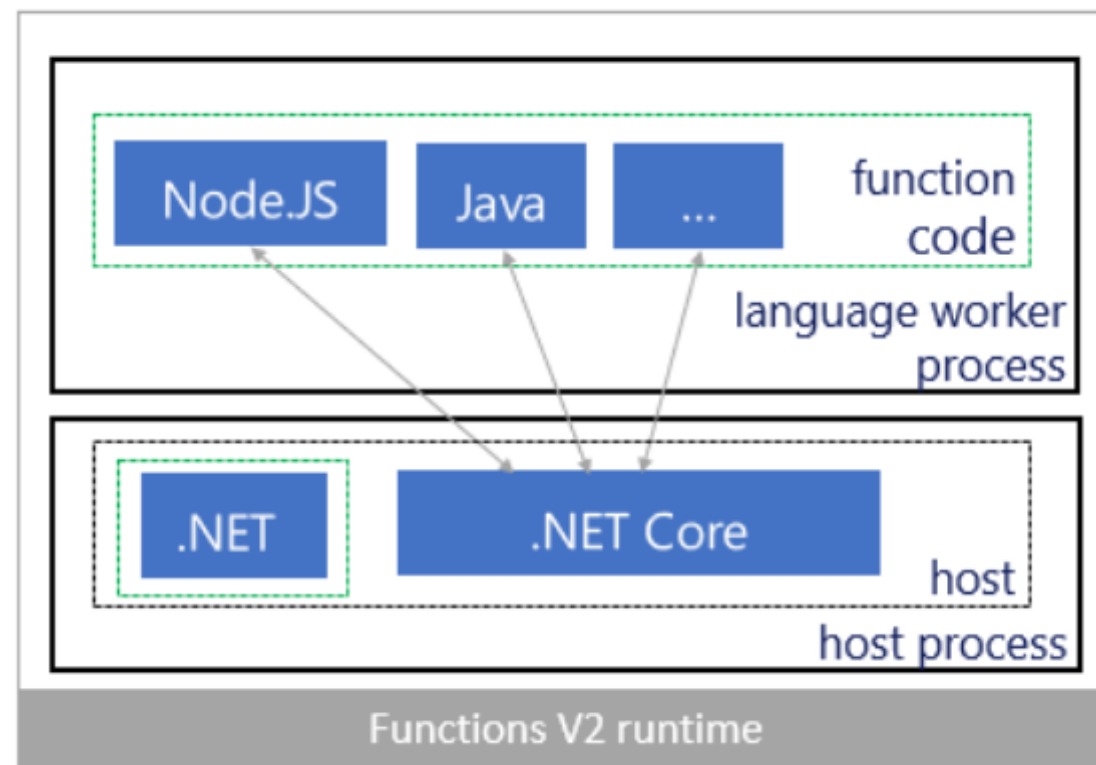
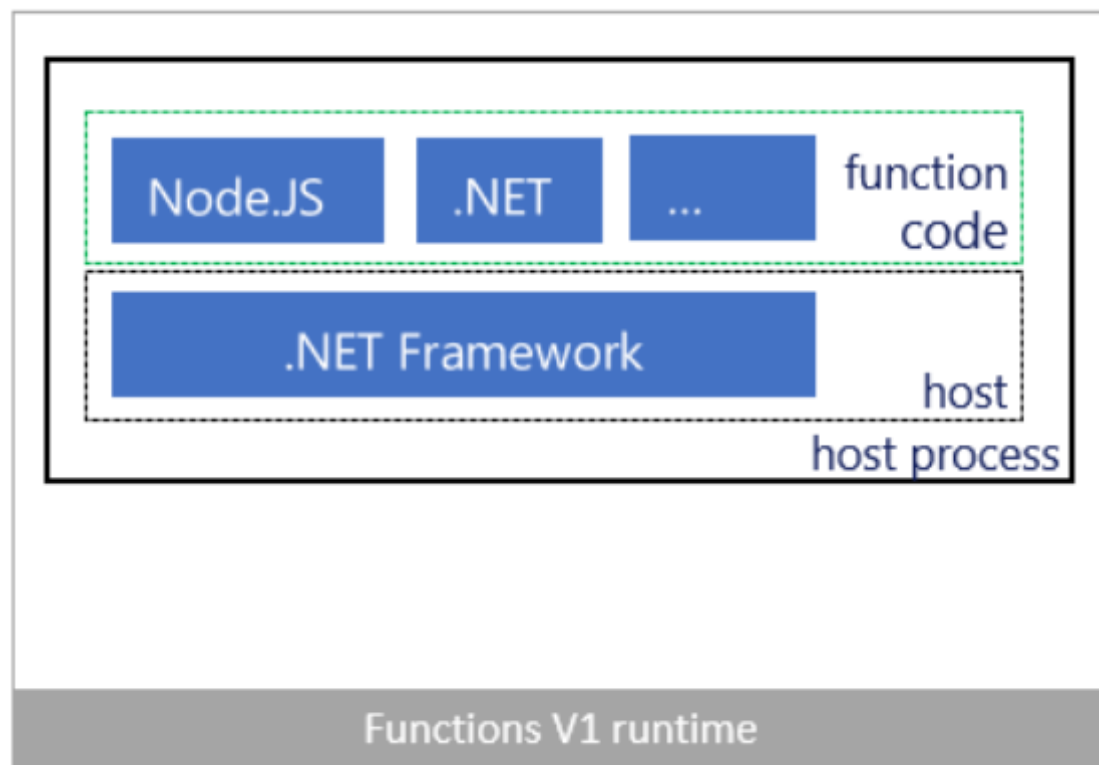
RE-USING EXISTING  
CODE / SCRIPTS



FASTER  
DEPLOYMENT



CLOUD NATIVE



# demo



**Azure Functions**



# Questions?



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