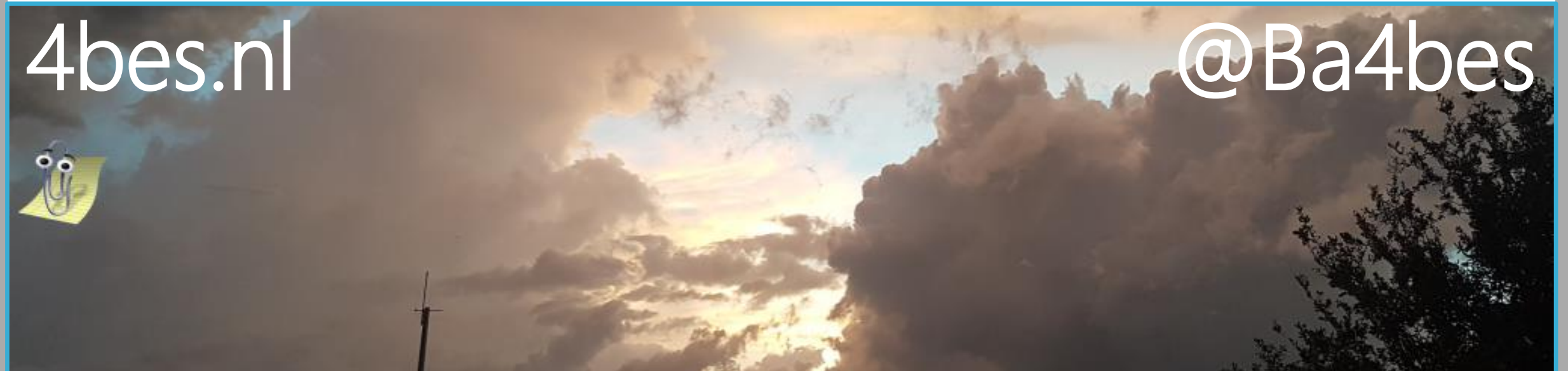
When powers combine:
Azure Function Apps & PowerShell

Barbara Forbes

Azure MVP, MCT

IT Consultant @ SCCT



When Powers Combine

- PowerShell & Azure Function apps
- Deploying function apps
- Show case: a raffle

PowerShell

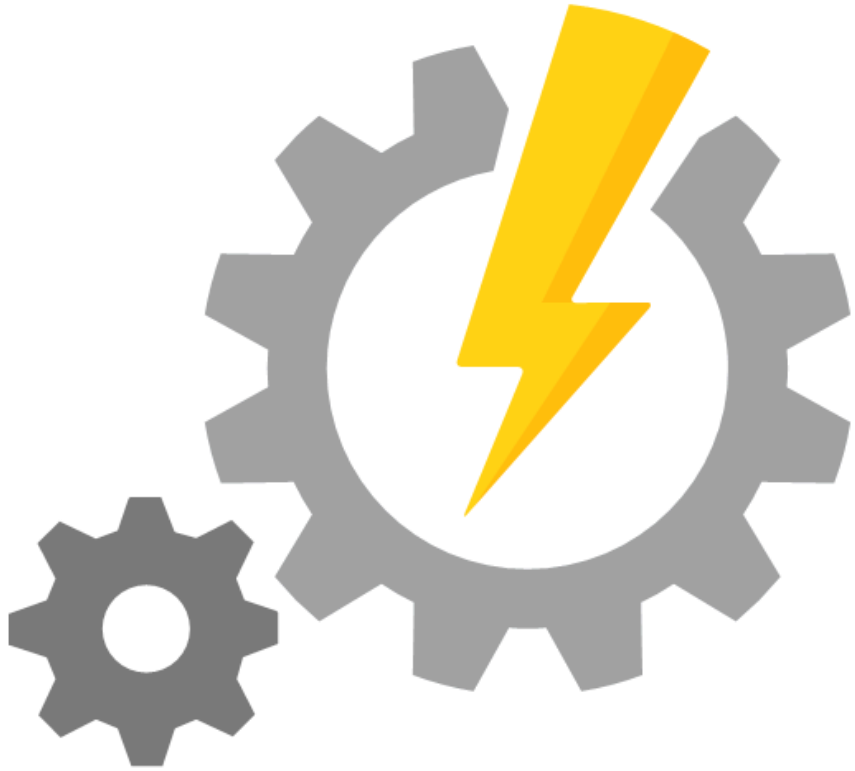
https://github.com/PowerShell/PowerShell

Azure Function apps

- Serverless compute
- Event based triggers
- Connectivity with other Azure services

How about automation accounts?

Automation account	Function App
AzureRM	Az
PowerShell 5.1	PowerShell 6/7
Long lasting	Event based
Hybrid worker	Hybrid Connection



Trigger
Input
Output

Triggers

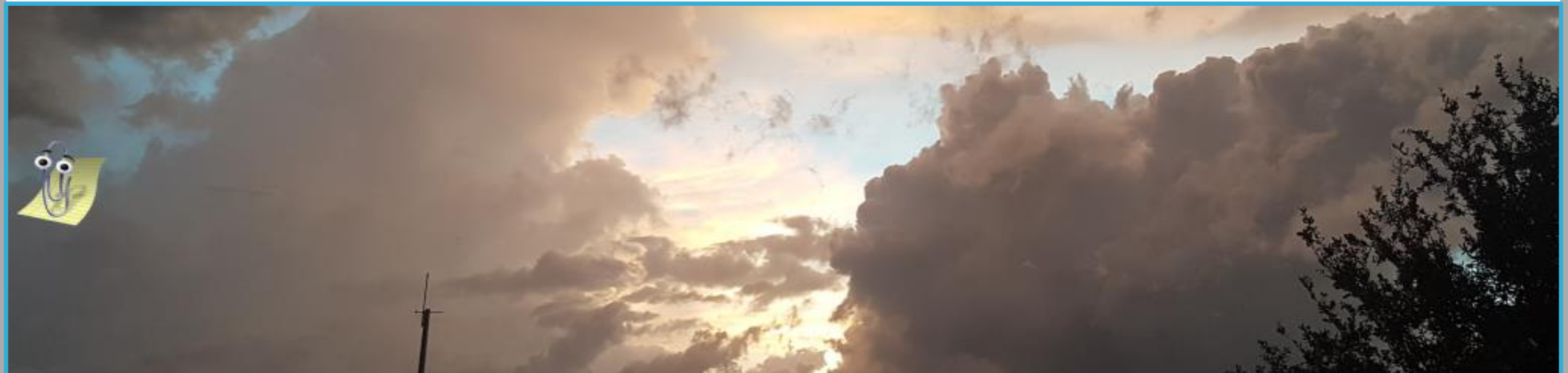
- HTTP/WebHook
- Timer
- Events
- Storage
- Cosmosdb
- Iot Hub
- Service bus

Bindings

Type	1.x	2.x and higher[1]	Trigger	Input	Output
Blob storage	✔	✔	✔	✔	✔
Cosmos DB	✔	✔	✔	✔	✔
Event Grid	✔	✔	✔		✔
Event Hubs	✔	✔	✔		✔
HTTP & webhooks	✔	✔	✔		✔
IoT Hub	✔	✔	✔		✔
Microsoft Graph Excel tables		✔		✔	✔
Microsoft Graph OneDrive files		✔		✔	✔
Microsoft Graph Outlook email		✔			✔
Microsoft Graph events		✔	✔	✔	✔
Microsoft Graph Auth tokens		✔		✔	
Mobile Apps	✔			✔	✔
Notification Hubs	✔				✔
Queue storage	✔	✔	✔		✔
SendGrid	✔	✔			✔
Service Bus	✔	✔	✔		✔
SignalR		✔		✔	✔
Table storage	✔	✔		✔	✔
Timer	✔	✔	✔		
Twilio	✔	✔			✔

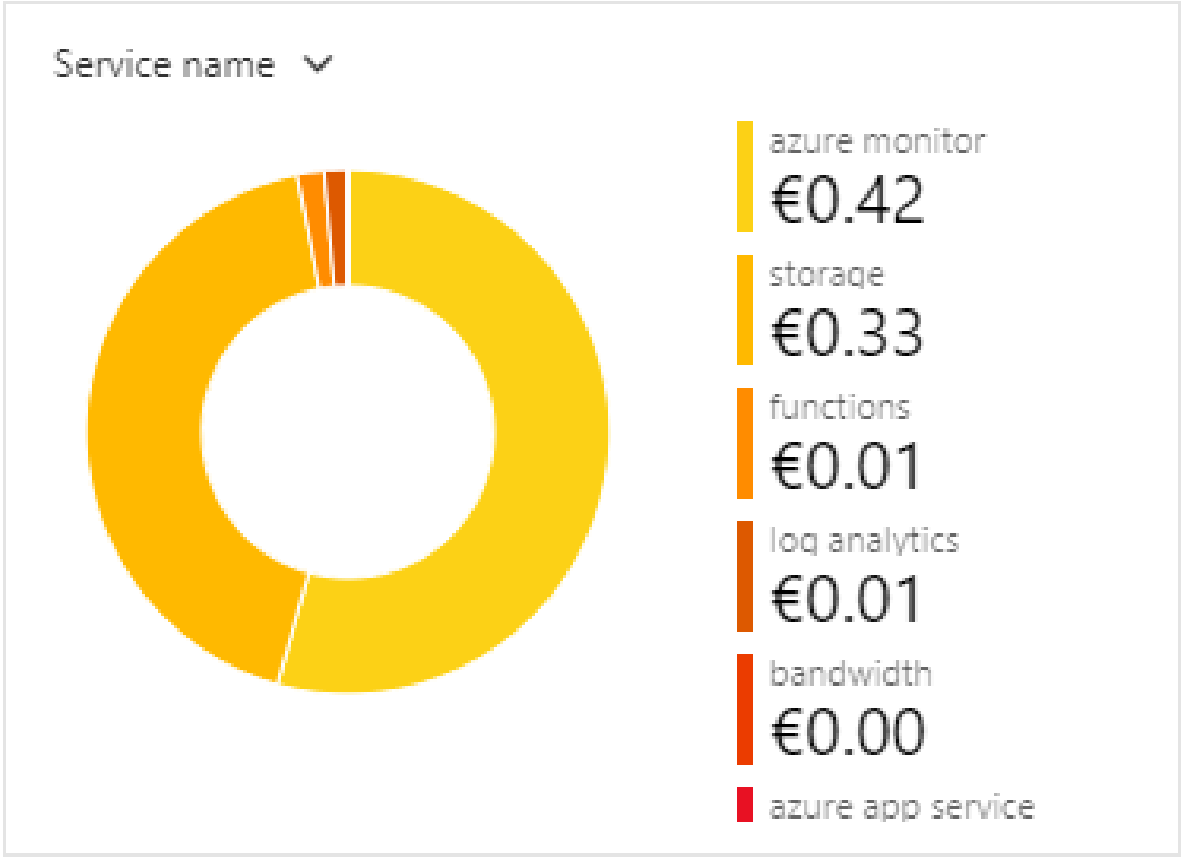
https://docs.microsoft.com/en-us/azure/azure-functions/functions-triggers-bindings

HTTP Trigger

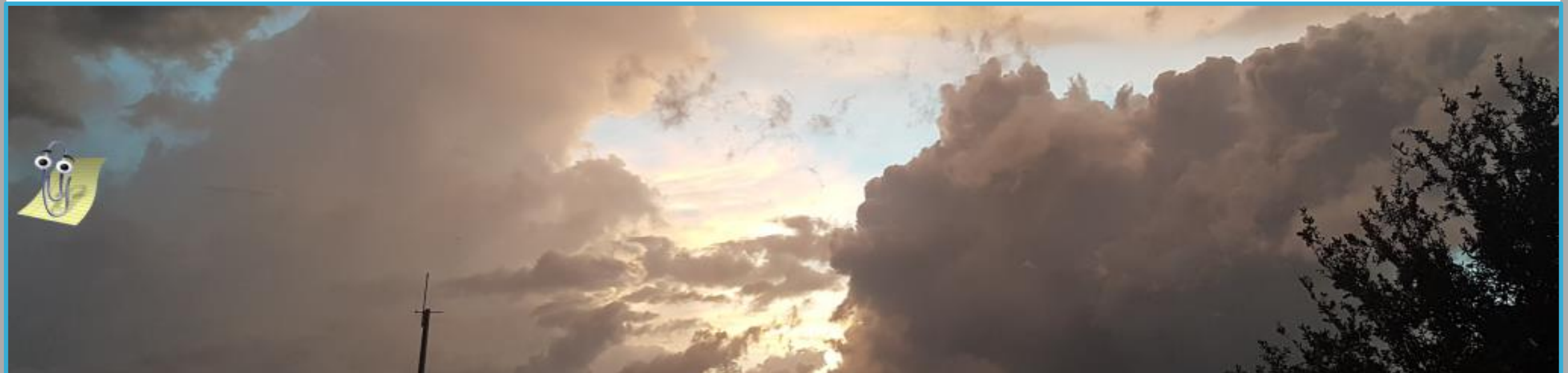


Costs

- Consumption plan
- Premium plan
- App service plan



Deployment



Deploy through the portal

- Get a good understanding of what's going on
- For quick and dirty deployments
- Use as a code generator

Deploy through Visual Studio Code

- No Azure subscription needed
- Quick debugging
- Direct connection

Prerequisites

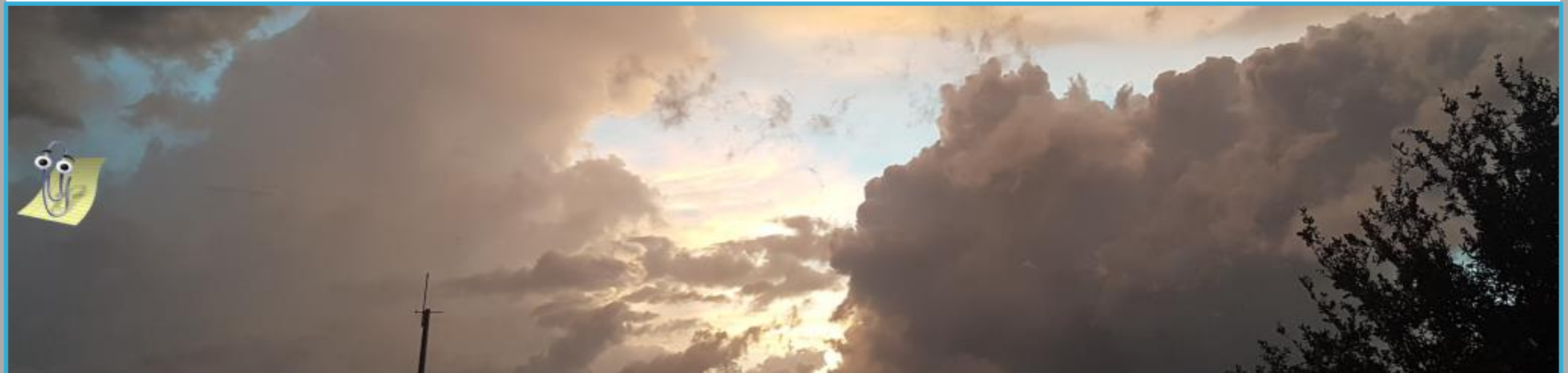
- Install PowerShell Core
- Install Visual Studio Code on one of the supported platforms.
- Install PowerShell extension for Visual Studio Code.
- Install .NET Core SDK 2.2+ (required by Azure Functions Core Tools and available on all supported platforms).
- Install version 2.x of the Azure Functions Core Tools.
- You also need an active Azure subscription.

If you don't have an Azure subscription, create a free account before you begin.

Deploy through Azure DevOps

- Professional deployment process
- Full Deployment pipeline
- Default tasks

Show case: A raffle



A raffle

- Create a frontend where people can enter their name
- Create a function to get a random winner

… Challenge accepted!

HTTP

HTTP

HTTP HTTP

HTTP HTTP

CosmosDB CosmosDB

CosmosDB

What does that look like?

Sources

https://4bes.nl/category/serverless/	Deploy through the portal Prepare for VSCode Deploy through Azure DevOps
https://docs.microsoft.com/en-us/azure/azure-functions/functions-create-first-function-powershell	Deploy through VSCode
https://ServerlessLibrary.net	Examples
https://github.com/Ba4bes/25daysofserverless	(bad) Examples

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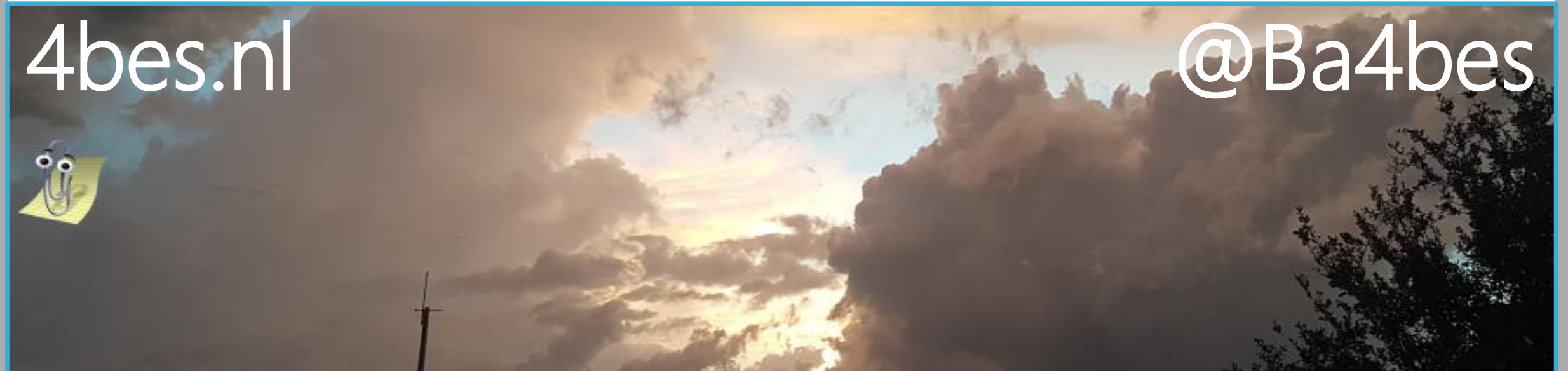
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