

# Lab 2 – Azure Functions

# Advanced Integrations Workshop @ EPPC

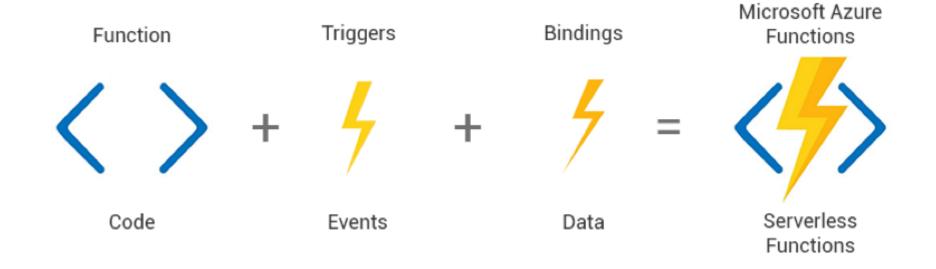
What ever you dream of – in Functions you can build it!

# Azure Functions & Dataverse

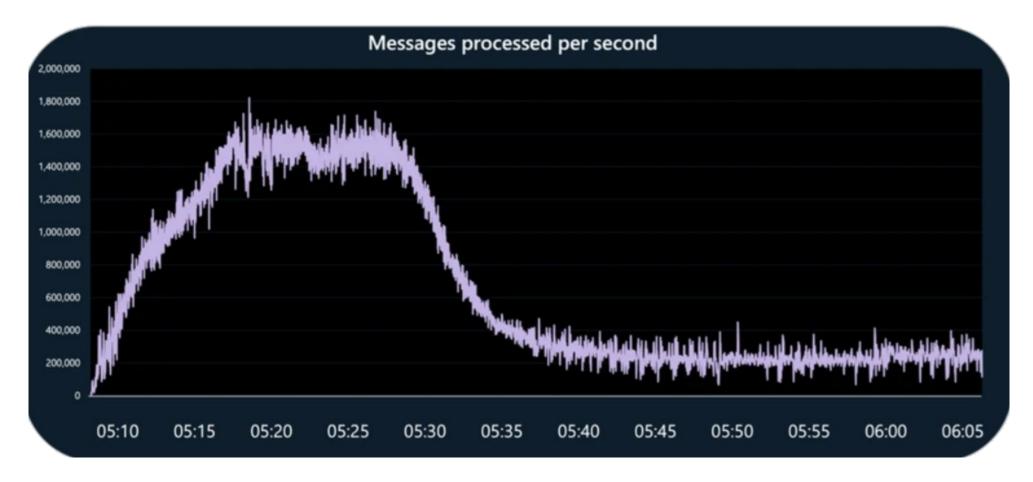




#### **Azure Functions**



#### Performance



"In a recent test, GitHub's new function app processed **1.6 million messages per second** in the Azure Functions Flex Consumption plan"



# **Azure Functions**





#### **Azure Functions are like...**

#### Power Apps Pro-Dev

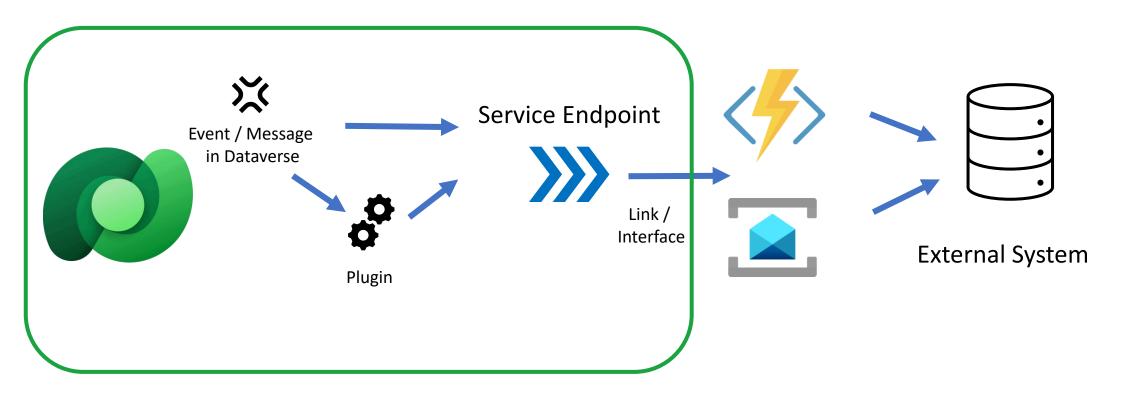
- Plugins run outside of Dataverse
- Plugins run in other languages than C#
- Plugins where you have full control of scale
- Plugins with simple external library support

- Power Apps Low-Code
  - PowerFx outside of Power Apps with lot's of library support
  - Compose actions with complex Power Automate expressions



# **Dataverse Functions**

Underused feature: Service Endpoints + Function as Webhook





## **Dataverse Functions**

Dataverse supports calling external webhooks / service bus – either synchronous or asynchronous

#### Steps

- Register "Service Endpoint"
- Either call via plugin
- Or directly via message

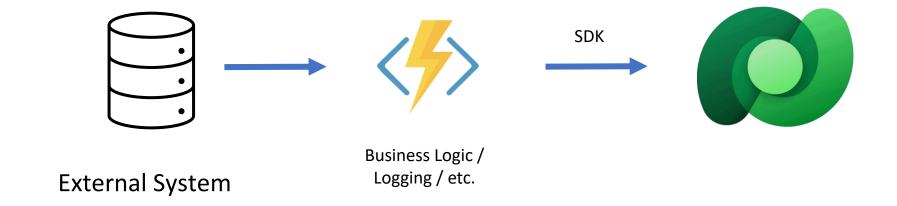
#### **BUT**

- Not a lot improvements
- ALM story not complete



## **Functions Dataverse**

Getting data into Dataverse



# Managed Identities

are better than

# Service Principals / App. Users

are better than

Service Accounts

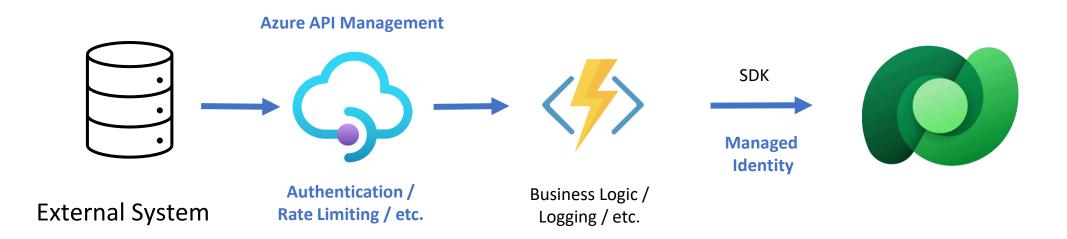
are better than

User / Names Accounts

## **Functions Dataverse**

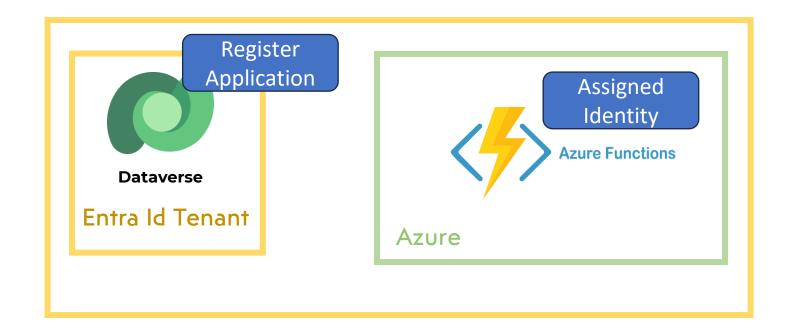


#### Making it secure





## Managed Identities only work in the same tenant



Assigned Identity

Application Registration + Secret – Managed by Microsoft

> Register Application

Same process as with other

App users

+ Assignment of Security Roles

### Managed Identities are simple

.. if set up correctly

```
public void InitializeManagedIdentity
{
    var tokenCredential = new DefaultAzureCredential();

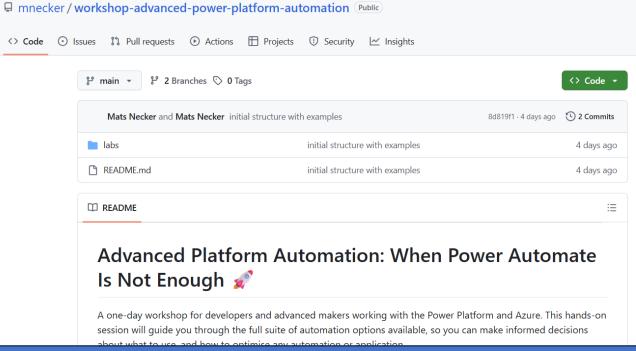
    client = new ServiceClient(
        new Uri(environmentUrl),
        async (string dataverseUri) =>
        {
            dataverseUri = new Uri(dataverseUri).GetComponents(UriComponents.SchemeAndServer, UriFormat.UriEscaped);
            return (await tokenCredential.GetTokenAsync(new TokenRequestContext(new[] { dataverseUri }), default)).Token;
        },
        true);
}
```

# Let's build it!





#### The Lab Material





https://github.com/mnecker/workshop-advancedpower-platform-automation