
SAVE THE DATE
APR 21 2018
2018
Global Azure
BOOTCAMP

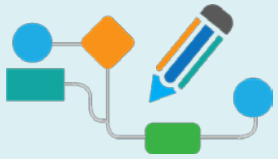
Azure Logic App Integration

Hanh Nguyen

Agenda

- Logic Apps Introduction
- Design and Development of Logic Apps
- Cognitive Services
- Demo: Text Analytics API
- Demo: Computer Vision API
- Demo: Face API

What is Logic Apps?



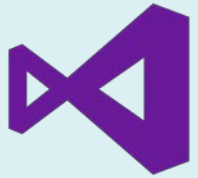
Workflow Engine

Integration Platform

Serverless Technology

Pre-built Connectors

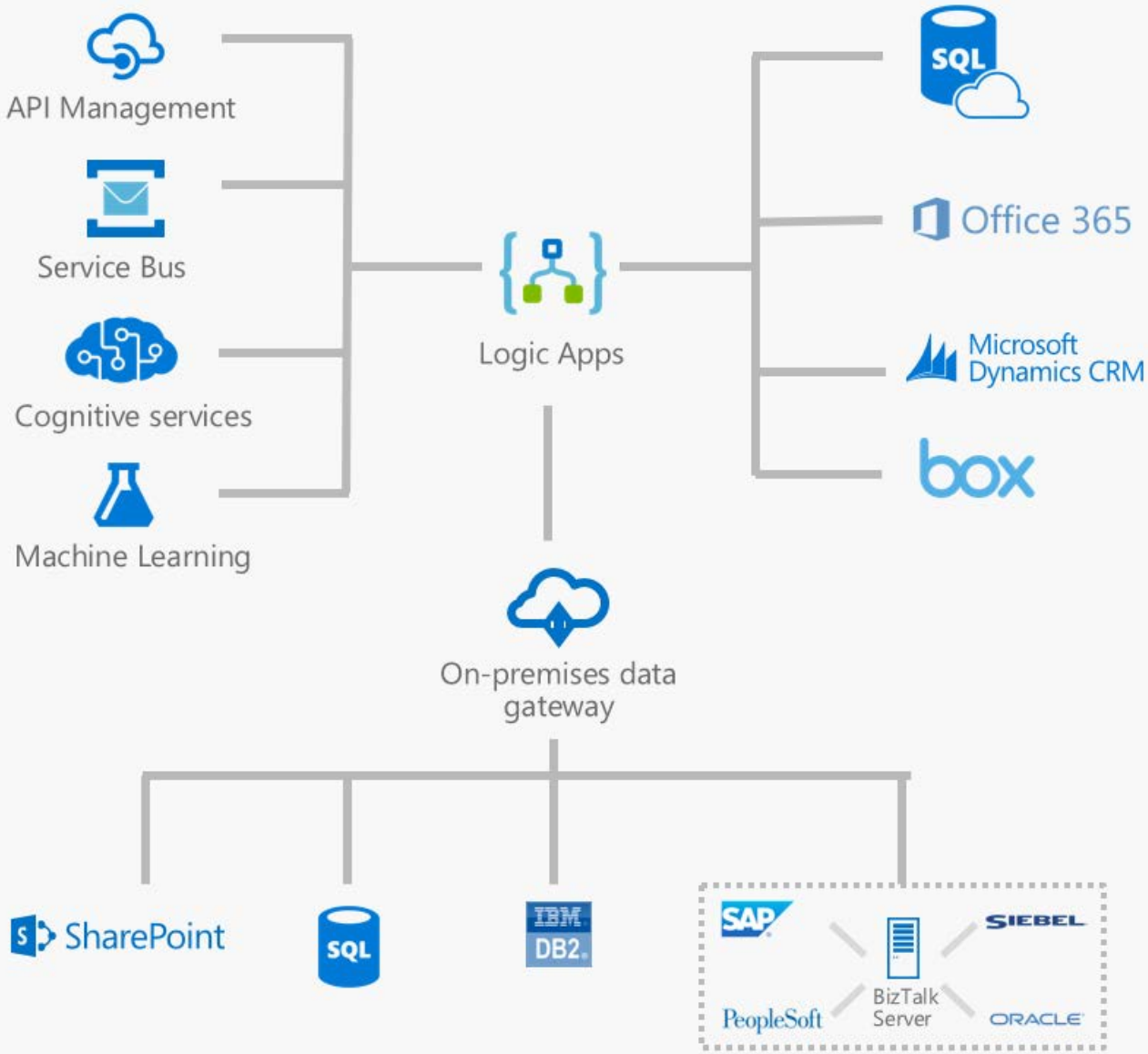
Quick-start Templates



Visual Studio Tooling

Integration Scenarios

- On-premises data gateway
- Azure API Management
- Azure Service Bus
- AI
- SaaS



Designer & Deployment Options

Visual Studio 2015/2017 Plug-in

Web-based Designer with Azure Portal

Promotion using the Web Designer

Azure Resource Manager (ARM) Templates & PowerShell

Connectors

Connectors are pre-built wrappers around systems to greatly simplify interaction with those systems

Built-in Connectors

Standard

- Azure Blob Storage
- Dynamics 365 CRM Online
- Event Hubs
- FTP
- Office 365 Outlook
- Salesforce
- Service Bus
- SharePoint Online
- Azure SQL Database
- Twitter

On-premises

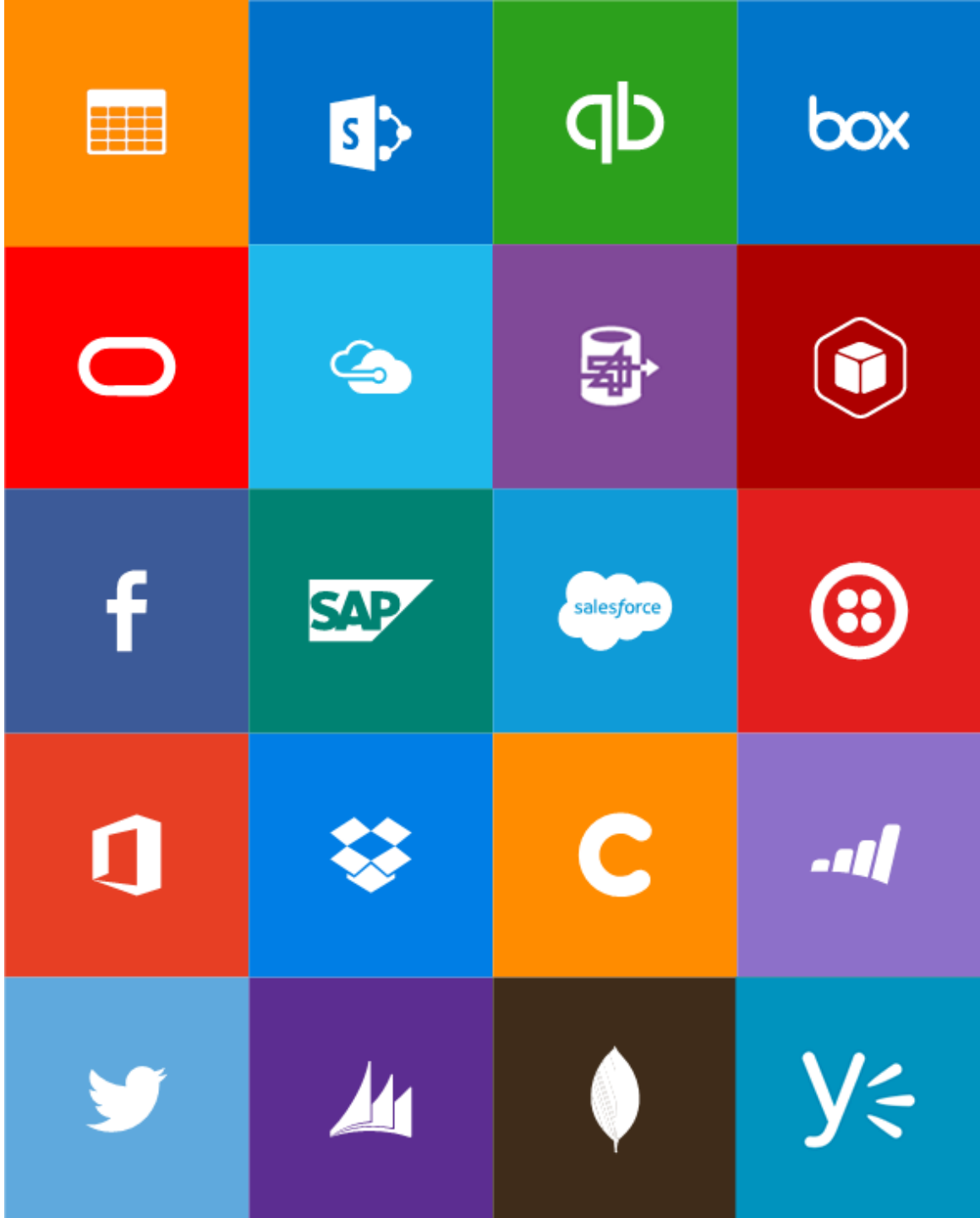
- IBM DB2
- Oracle DB
- SharePoint Server
- File System
- SQL Server
- BizTalk Server

Integration account

- AS2 decoding
- AS2 encoding
- EDIFACT decoding
- EDIFACT encoding
- Flat file decoding
- Flat file encoding
- Integration account
- Transform XML
- X12 decoding
- X12 encoding
- XML validation
- Transform JSON

Enterprise

- MQ
- SAP



Triggers

All logic apps start with a trigger, which specifies the calls that can start a logic app run.

Common Trigger Types

1

Recurrence

2

Request

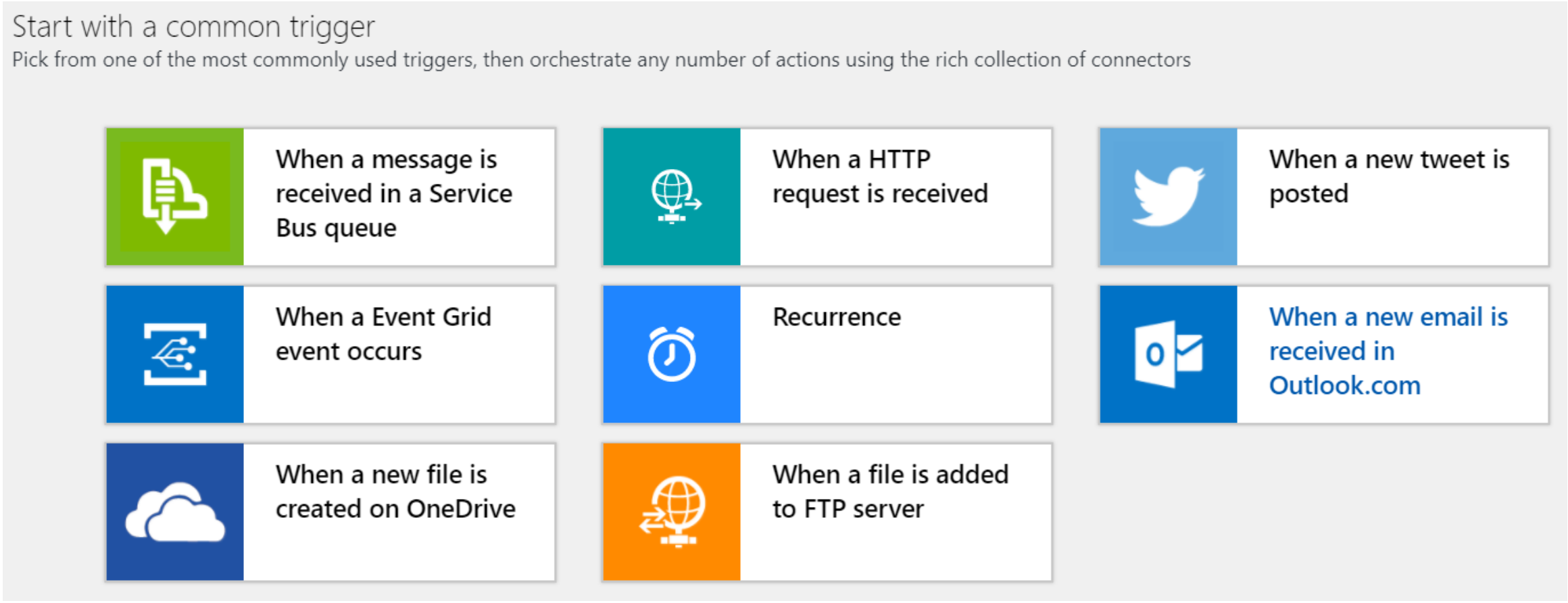
3

HTTP

4

WebHook

Common trigger templates



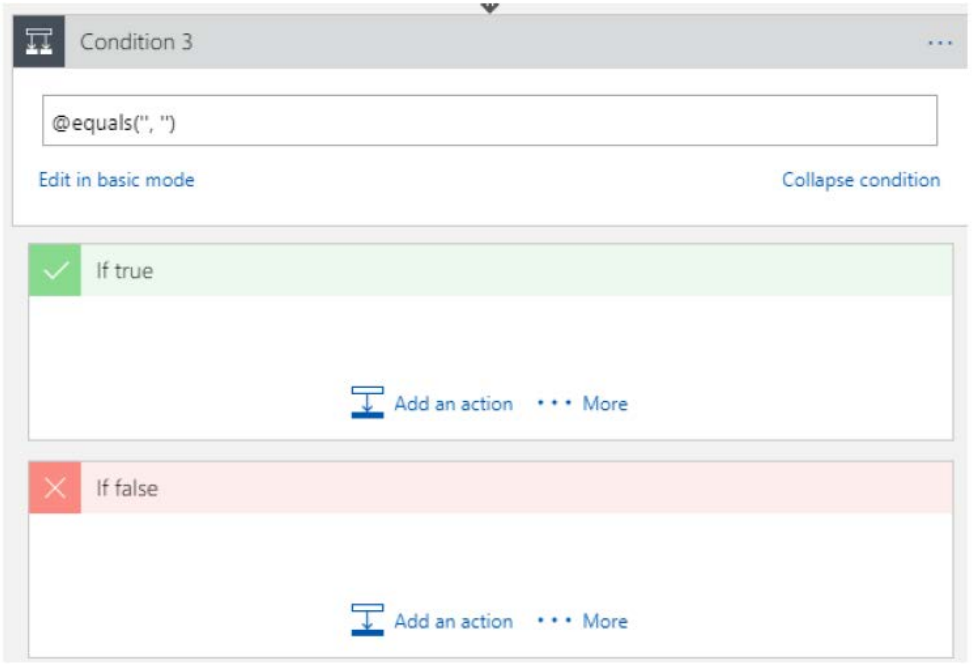
Actions

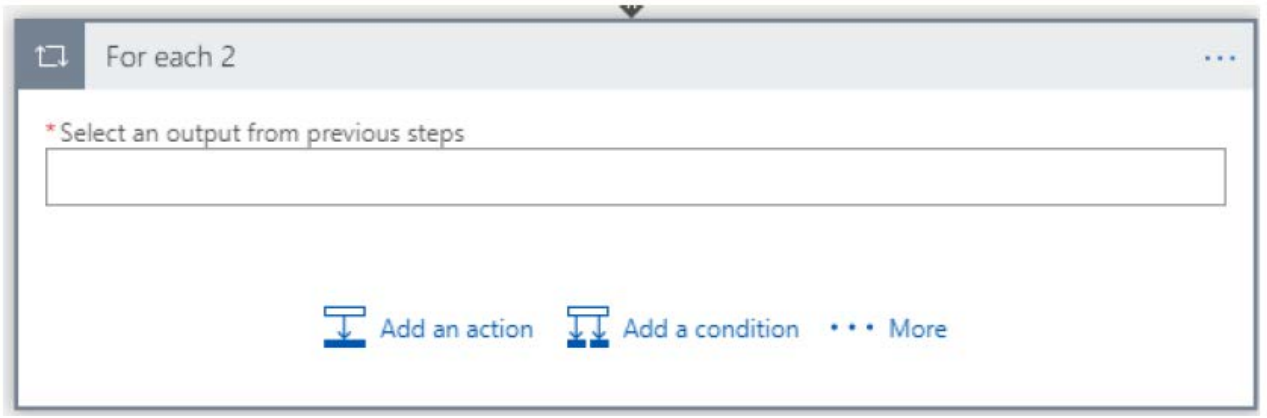
Actions are building blocks of a Logic App. Most Actions are also Connectors

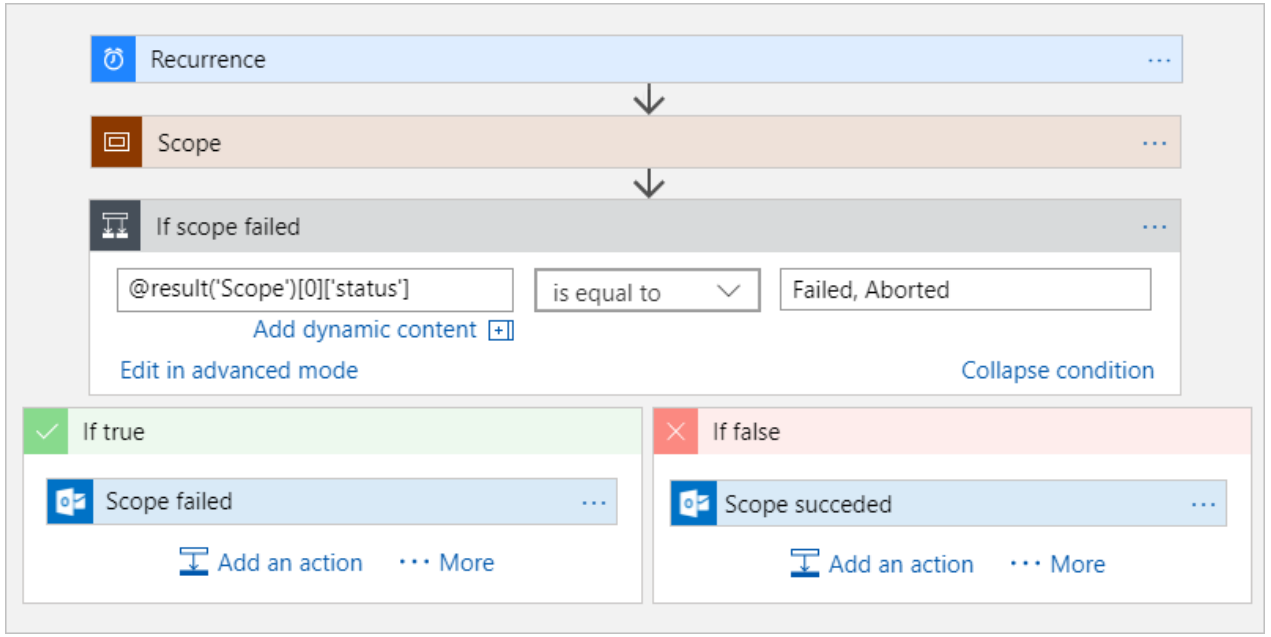
Flow Control

Flow control is used to control the sequence of logic through a Logic App

Some flow controls







Outputs

Outputs specify information that can be returned from a workflow run.

Workflow Definition Language (WDL)

```
{
    "$schema": "<schema-of the-definition>",
    "contentVersion": "<version-number-of-definition>",
    "parameters": { <parameter-definitions-of-definition> },
    "triggers": [ { <definition-of-flow-triggers> } ],
    "actions": [ { <definition-of-flow-actions> } ],
    "outputs": { <output-of-definition> }
}
```

https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-workflow-definition-language

Content Types

- application/json
- text/plain
- type conversion

@json() - casts data to application/json

@xml() - casts data to application/xml

@binary() - casts data to application/octet-stream

@string() - casts data to text/plain

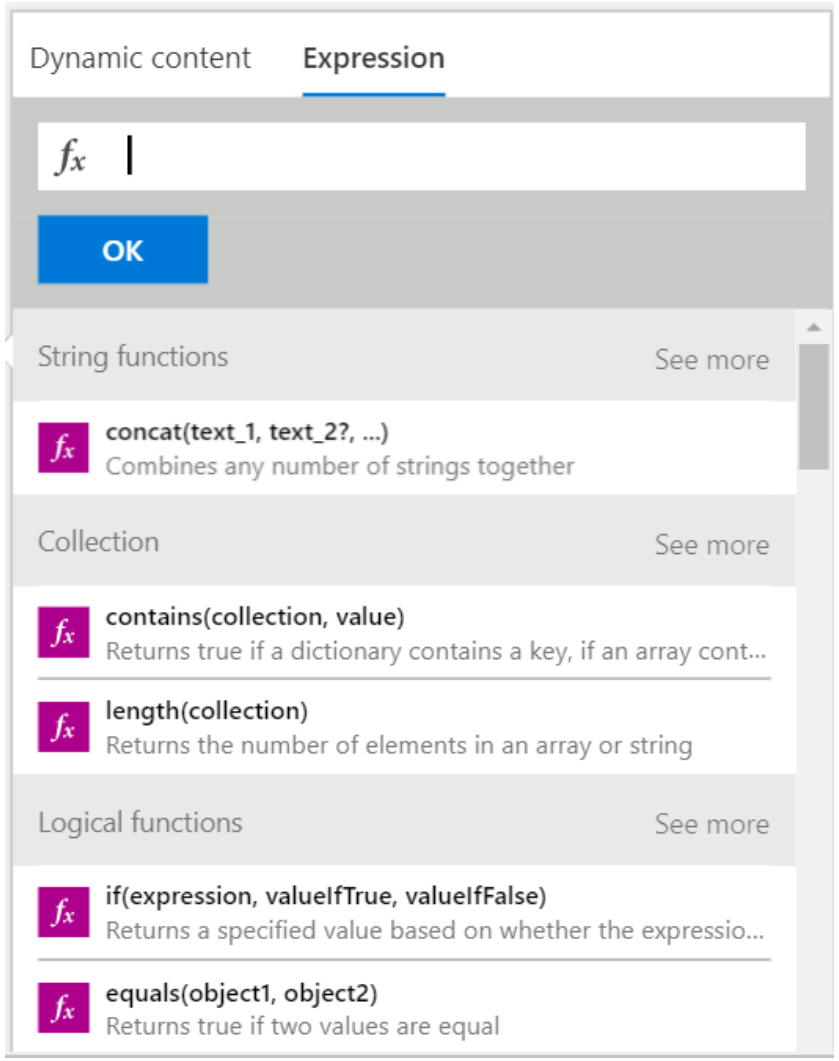
@base64() - converts content to a base64 string

@base64toString() - converts a base64 encoded string to text/plain

@base64toBinary() - converts a base64 encoded string to application/octet-stream

@encodeDataUri() - encodes a string as a dataUri byte array

@decodeDataUri() - decodes a dataUri into a byte array

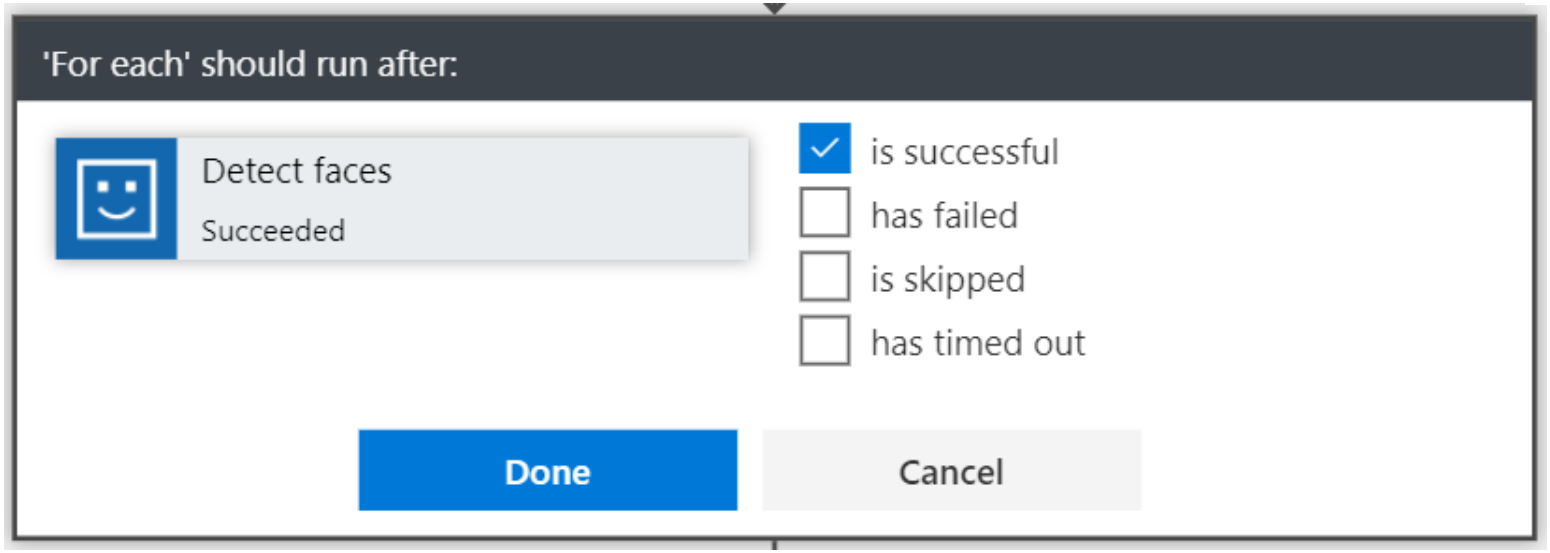


Internal Functions

Internal functions are shortcuts for working with collections, strings, logical operators, conversion, math an dates

Exception Handling

- Retry Policies
- Run After



Retry Policy

A retry policy applies to intermittent failures, characterized as HTTP status codes 408, 429, and 5xx, in addition to any connectivity exceptions. The default is an exponential interval policy set to retry 4 times.

Type: Fixed Interval

* Count: Specify a retry count from 1 to 90

* Interval: Example: PT20S

Cognitive Services

Vision

- Computer Vision
- Content Moderator
- Custom Vision Service PREVIEW
- Emotion API PREVIEW
- Face API
- Video Indexer PREVIEW

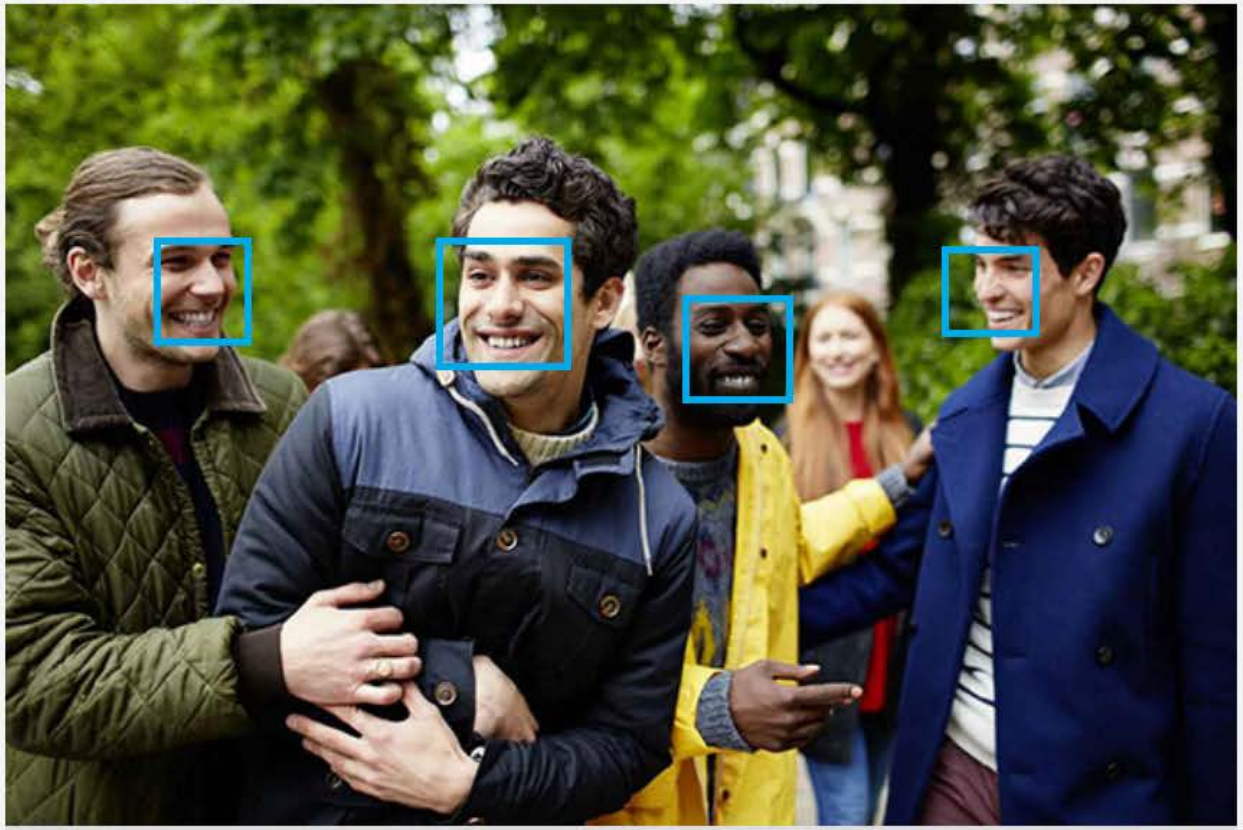
Speech

- Bing Speech Service
- Custom Speech Service PREVIEW
- Speaker Recognition PREVIEW
- Translator Speech

Language

- Bing Spell Check
- Language Understanding (LUIS)
- Linguistic Analysis PREVIEW
- Text Analytics
- Translator Text
- Web Language Model PREVIEW

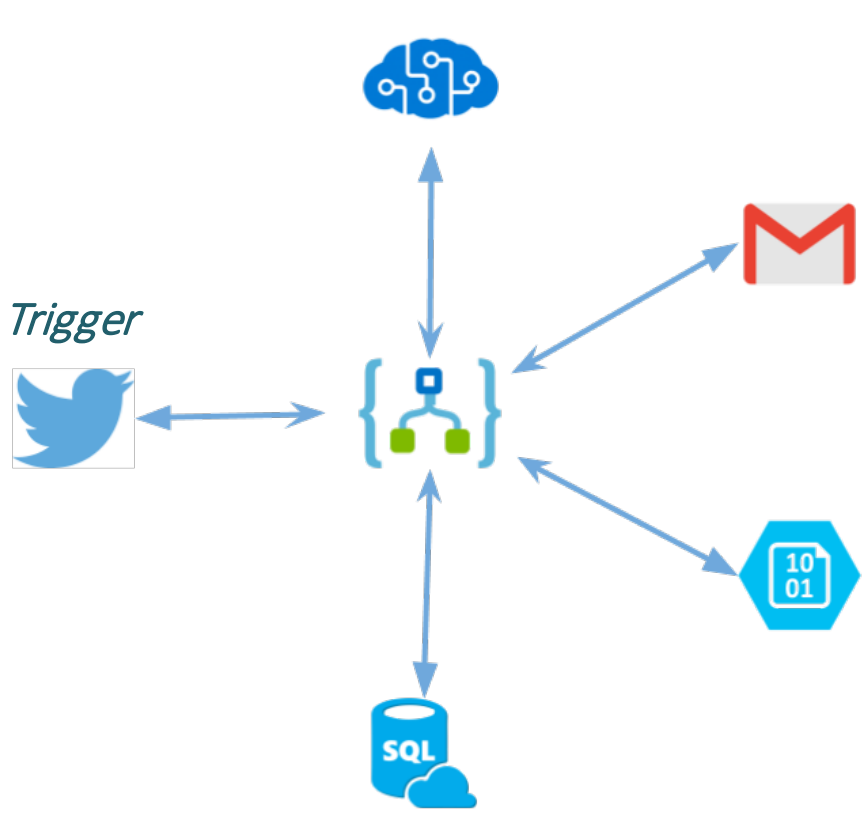
Emotion Examples



```
Detection result:
4 faces detected

 JSON:
 [
  {
    "faceRectangle": {
      "top": 114,
      "left": 212,
      "width": 65,
      "height": 65
    },
    "scores": {
      "anger": 1.0570484E-08,
      "contempt": 1.52679547E-09,
      "disgust": 1.60232943E-07,
      "fear": 6.00660363E-12,
      "happiness": 0.9999998,
      "neutral": 9.449728E-09,
      "sadness": 1.23025981E-08,
      "surprise": 9.91396E-10
    }
  },
```

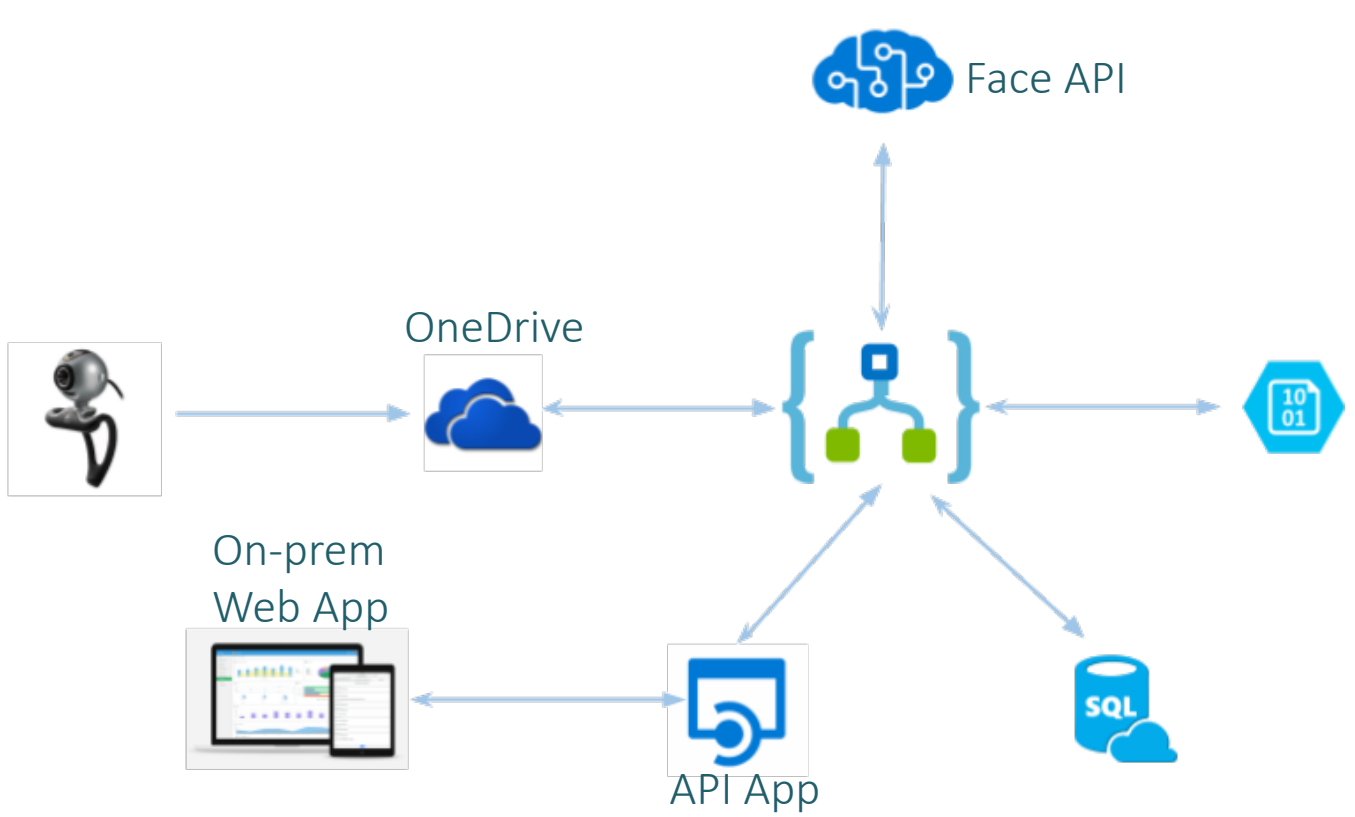
Demo



Getting Logic App works with Text Analytics API

- ✓ Sentiment analysis
- ✓ Key phrase extraction
- ✓ Detect Languages

Demo



Realtime Face detection with Face API and Logic App

- ✓ Face recognition

Code samples: https://github.com/ndhanh/logicapp


it's
Q&A
TIME!