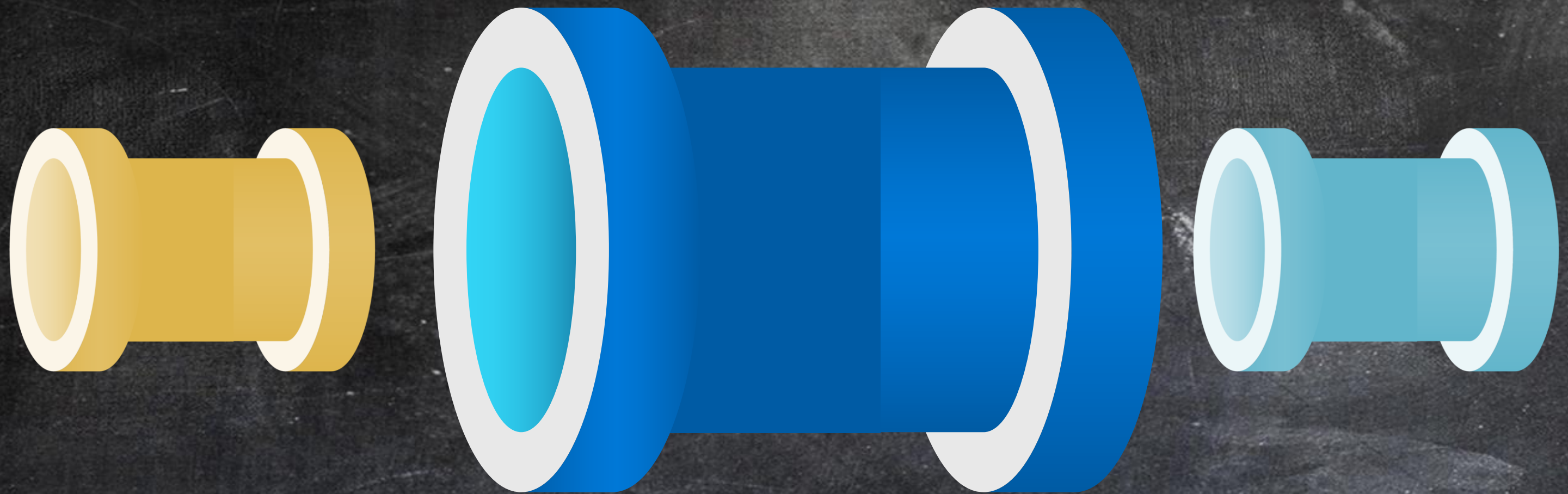


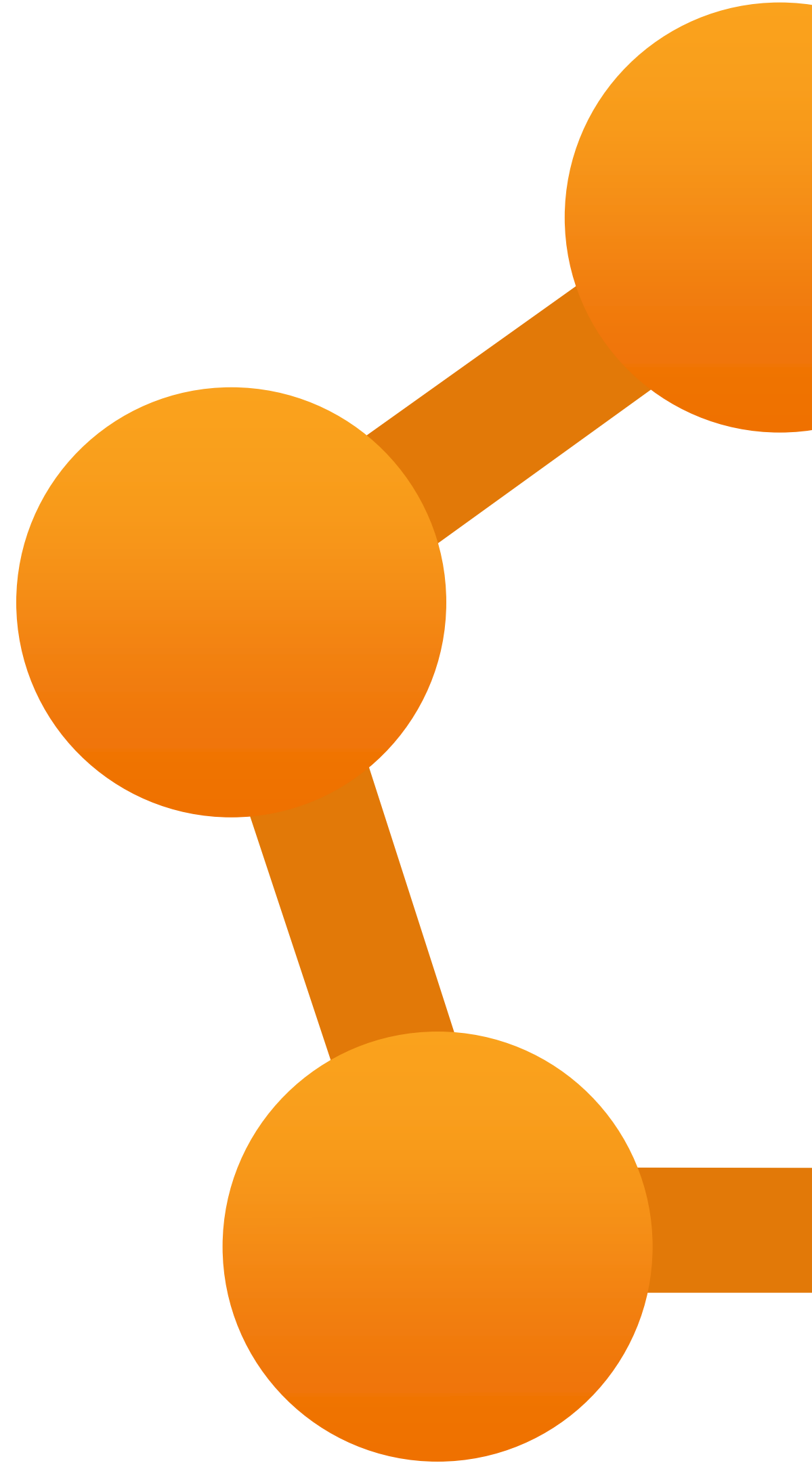
Integration Pipelines



Module 10 – Testing

Development Time Validation

Cloud Formations



Development Time Validation



Microsoft Azure | Data Factory | TrainingFactoryDev

>> / main branch **✓ Validate all** Save all Publish

Factory Resources

Filter resources by name

- Pipeline 15
 - Demo Pipelines 15
 - pipeline1
 - Data Flows 1

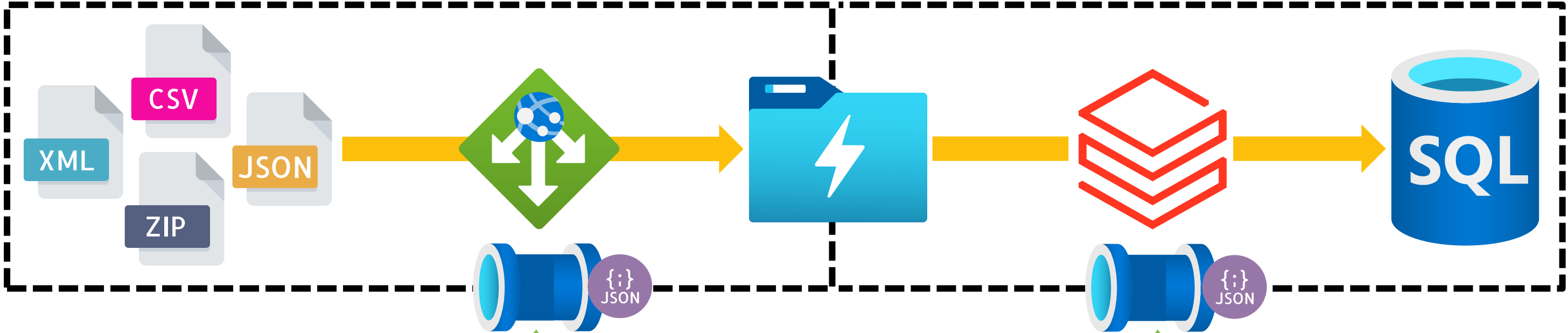
Activities

Search activities

- Move & transform
- Azure Data Explorer
- Azure Function

Saved Save as template **✓ Validate** Debug Add trigger

Integration Pipeline Validation



- 1 Linked Services
- 2 Datasets
- 3 Activities
- 4 Pipelines
- 5 Triggers

JSON

General¹

Variables¹

User properties

Name *

[Learn more](#)

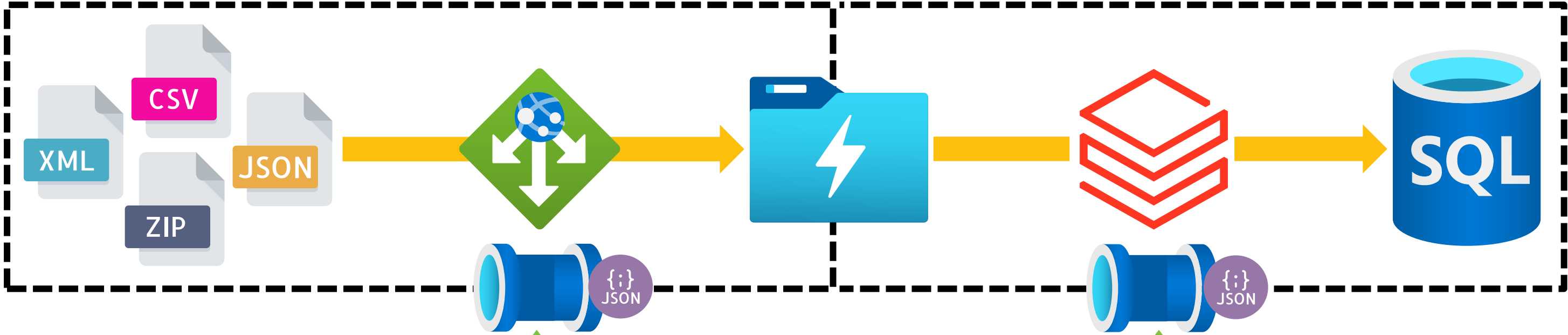
✖

Activity name is required.

Description

- 1. Mandatory Values
- 2. Value Data Types
- 3. Value Context

Integration Pipeline Validation



1

Linked Services

2

Datasets

3

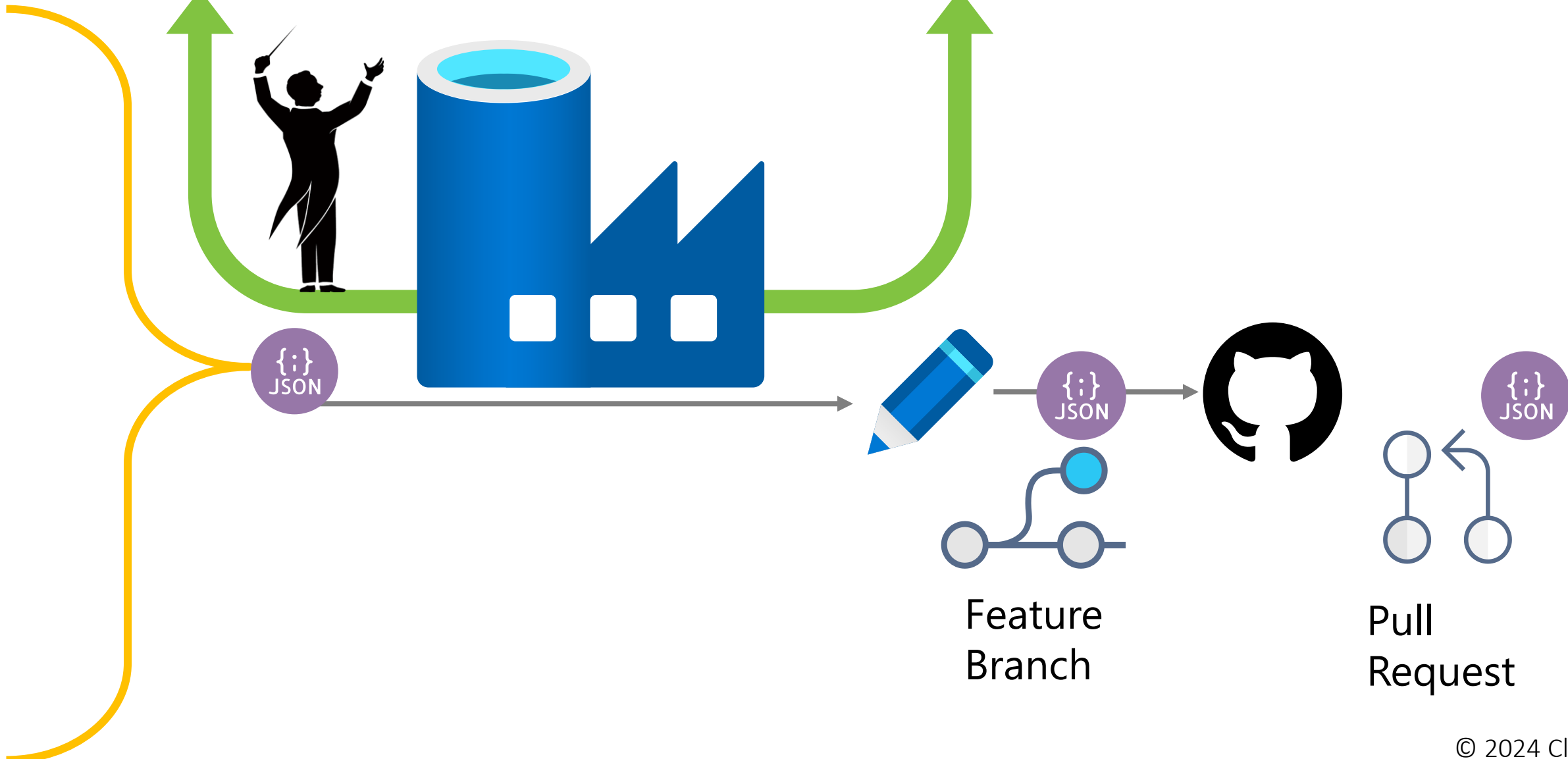
Activities

4

Pipelines

5

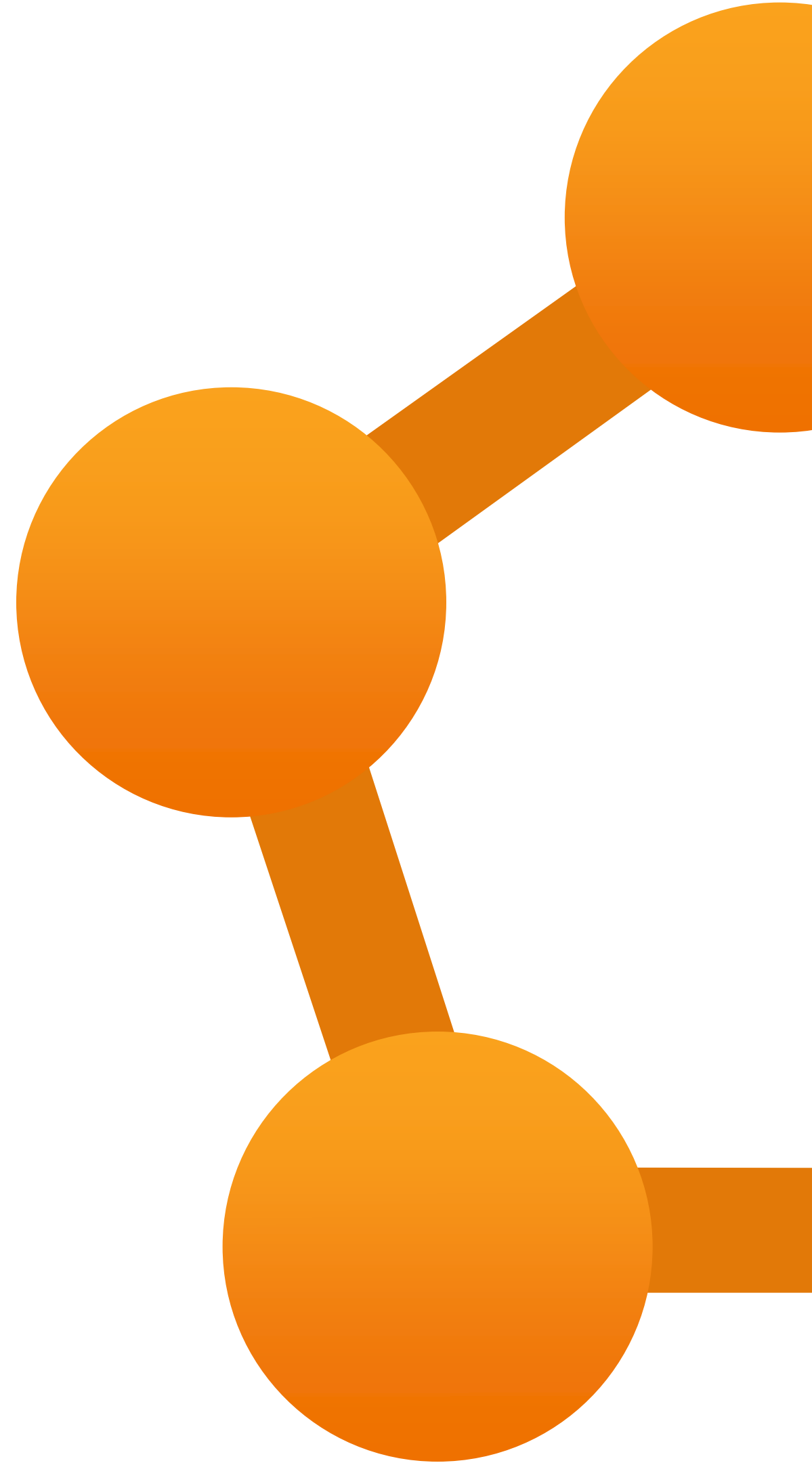
Triggers



Module 10 – Testing

Test Coverage

Cloud Formations



Types of Testing



🔊 **Integration Tests** - A test of a pipeline as-is, without eliminating any effects of external dependencies.

🔊 **Functional Tests** - An isolated test of whether the pipeline is doing things right – is the pipeline producing the desired result?

🔊 **Unit Tests** - An isolated test of whether the pipeline is doing the right things – do the pipeline's activities get executed in the way you expect?

Source: Richard Swinbank richardswinbank.net

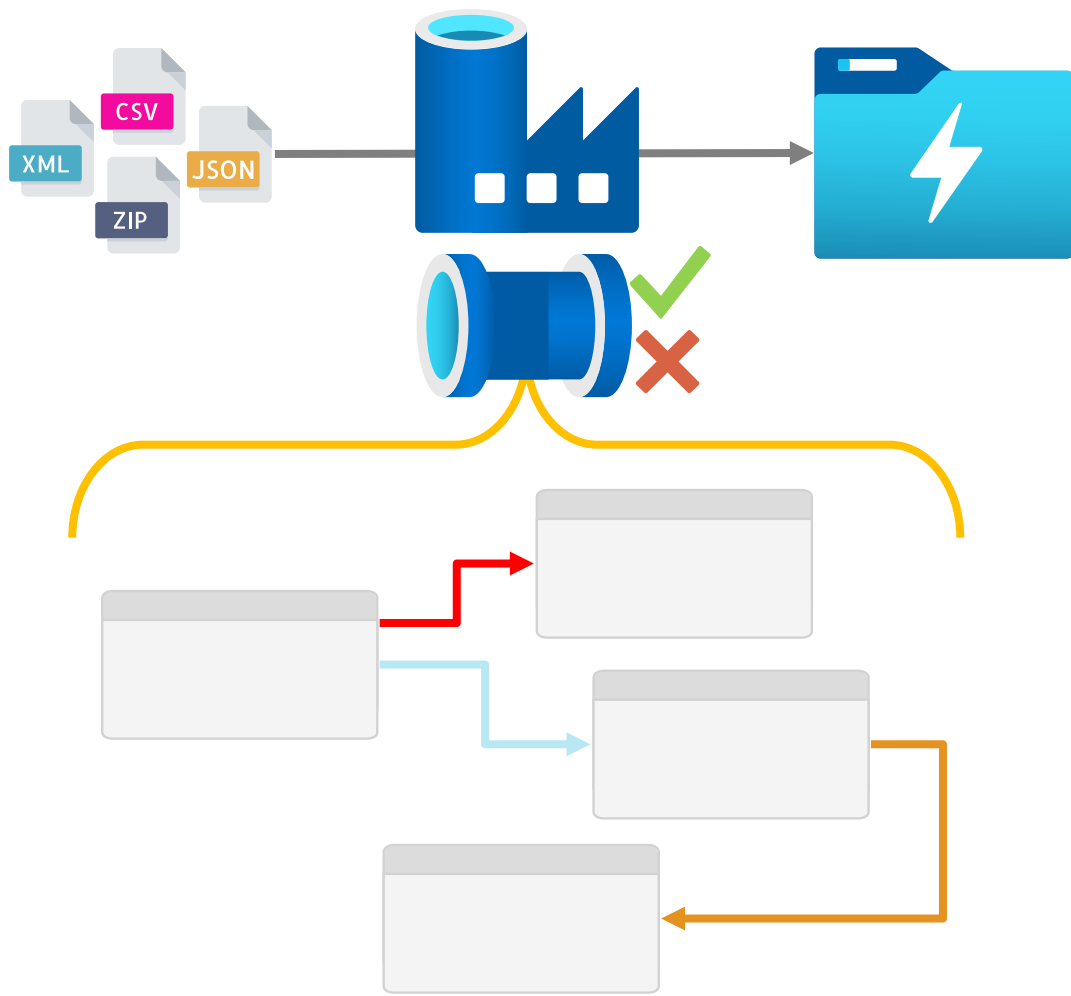


Types of Testing

What do they mean in our pipelines?

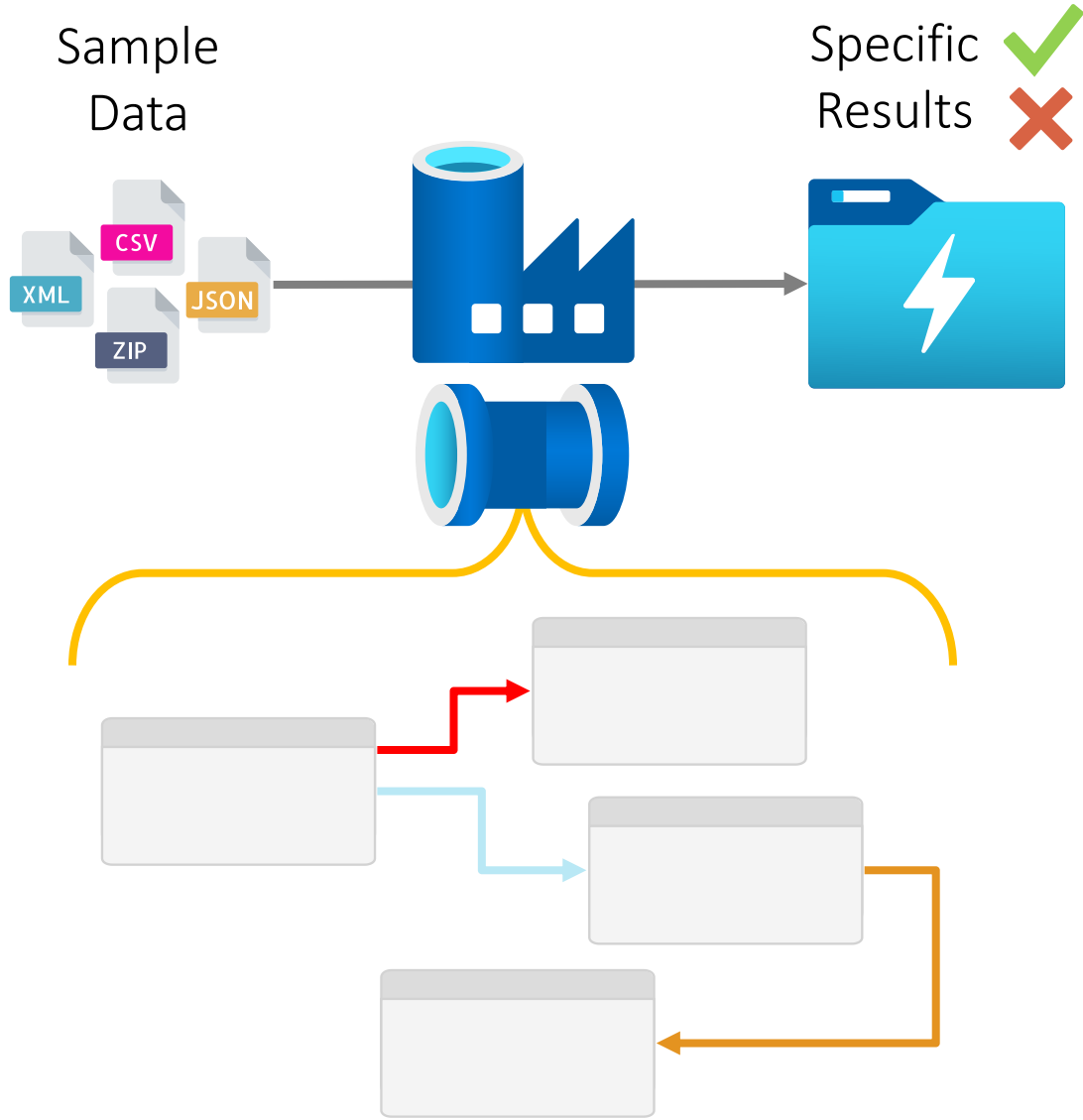
Integration Tests

Simple Run Outcome



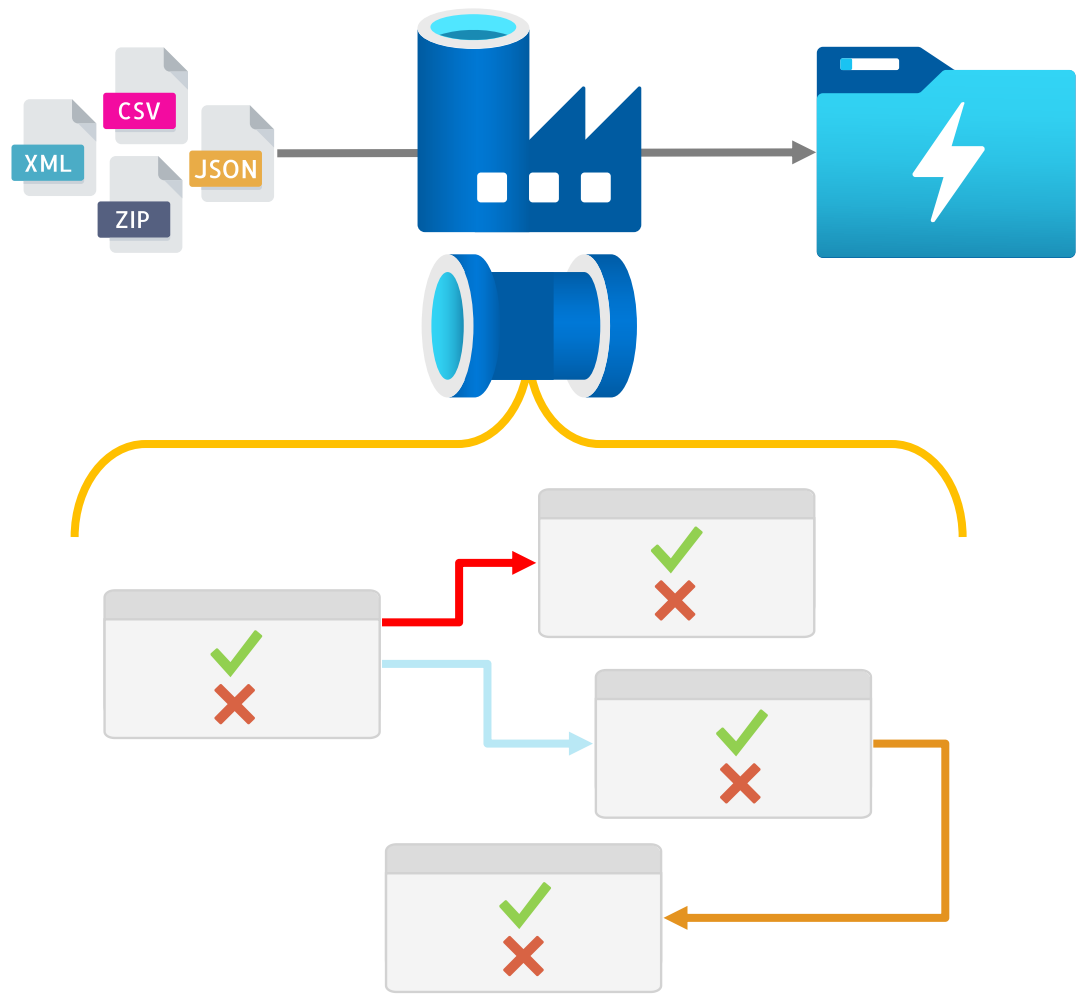
Functional Tests

Sample Data
Specific Results



Unit Tests

Sample Data
Specific Activity Inputs & Outputs

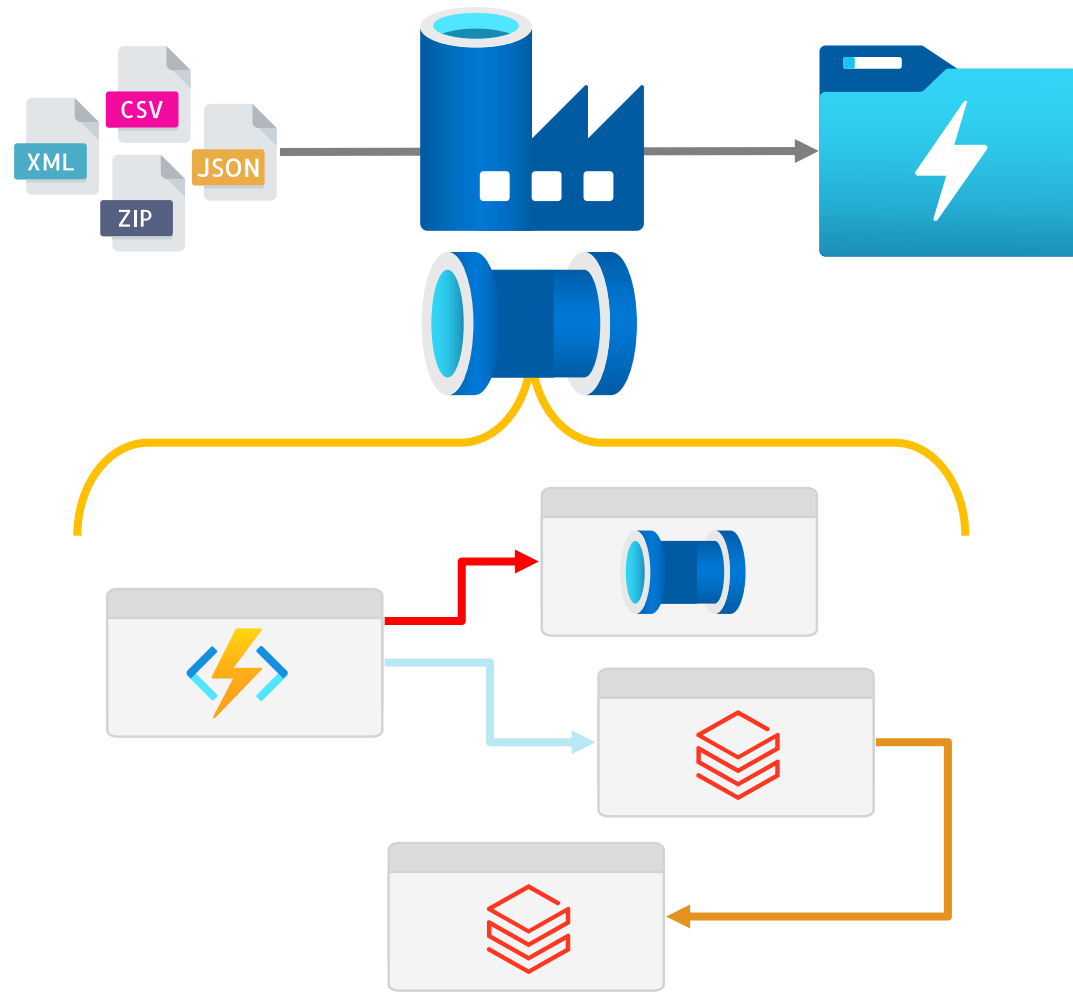


Types of Testing

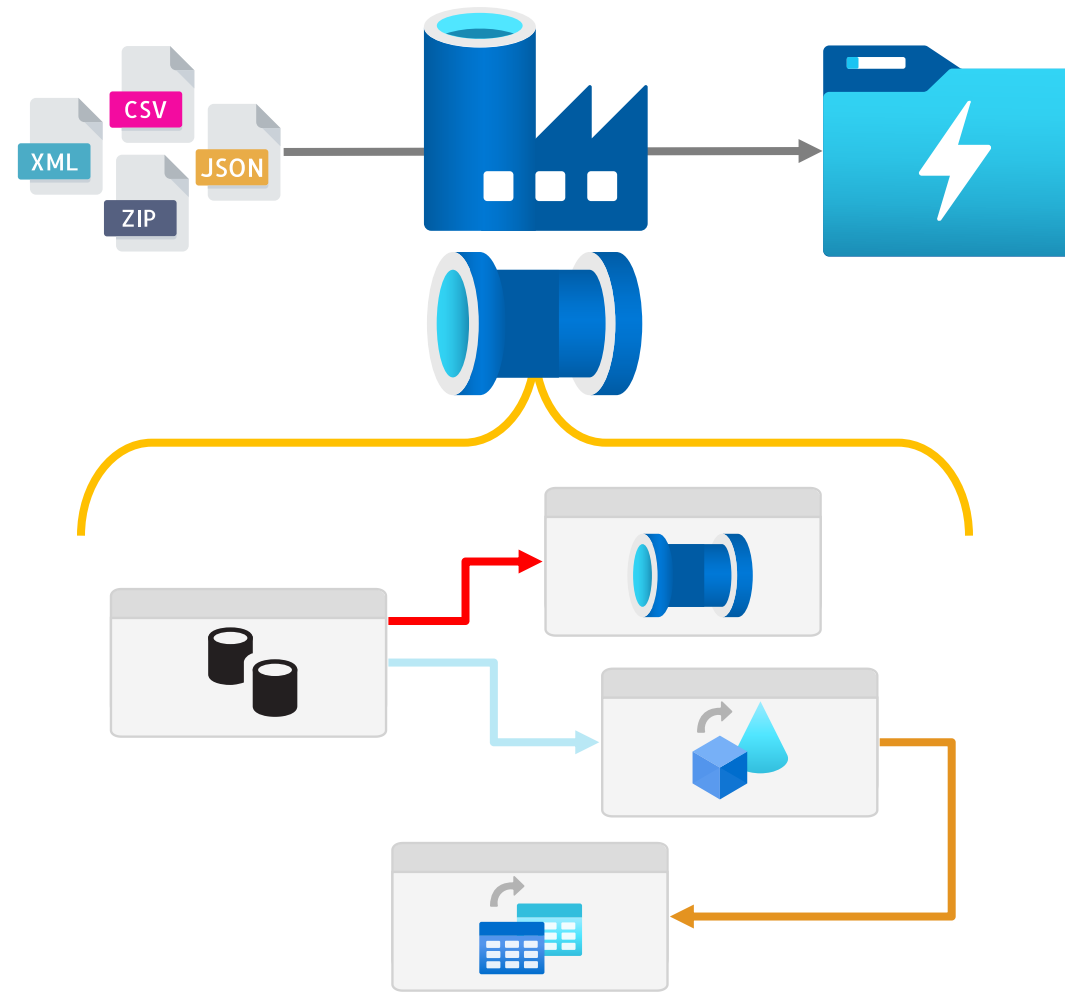


Does it depend on external resources?

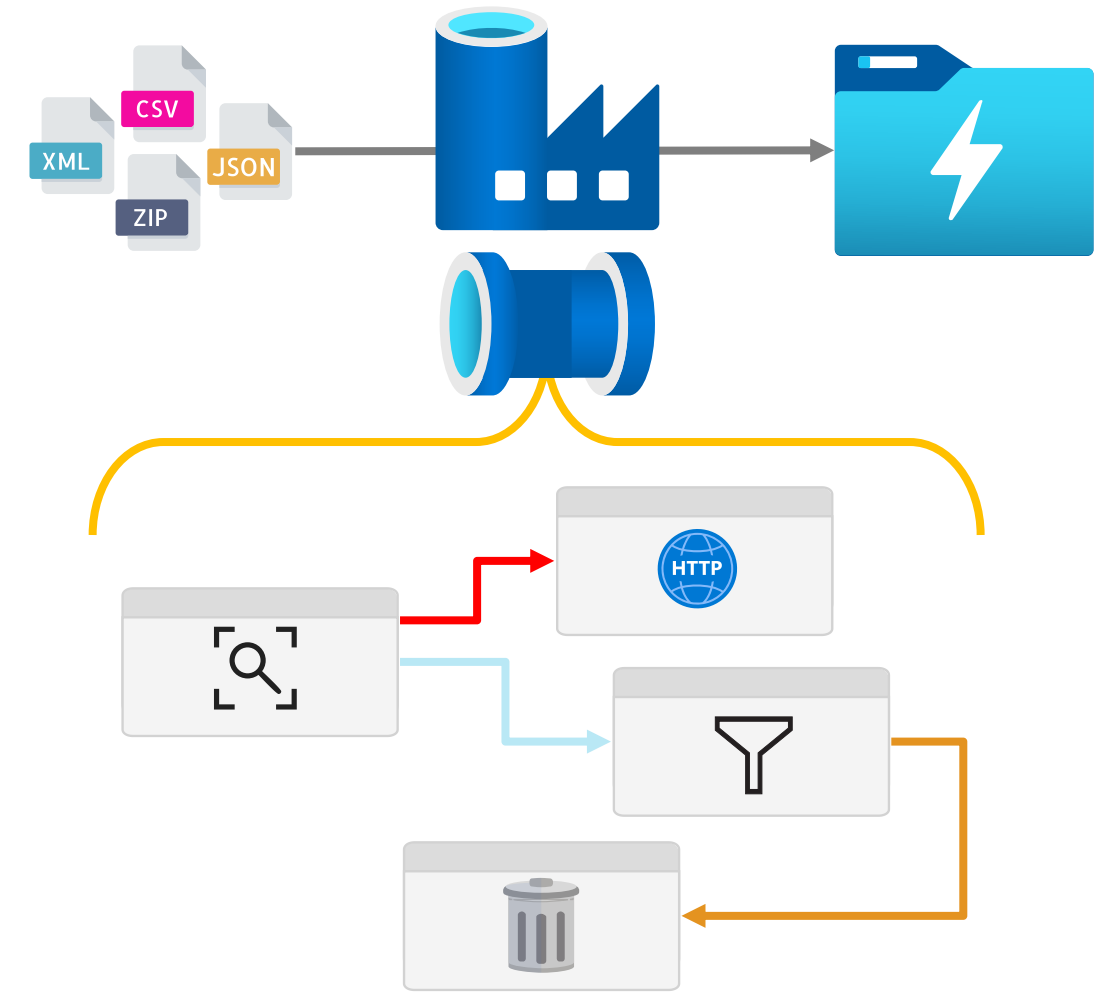
Integration Tests



Functional Tests



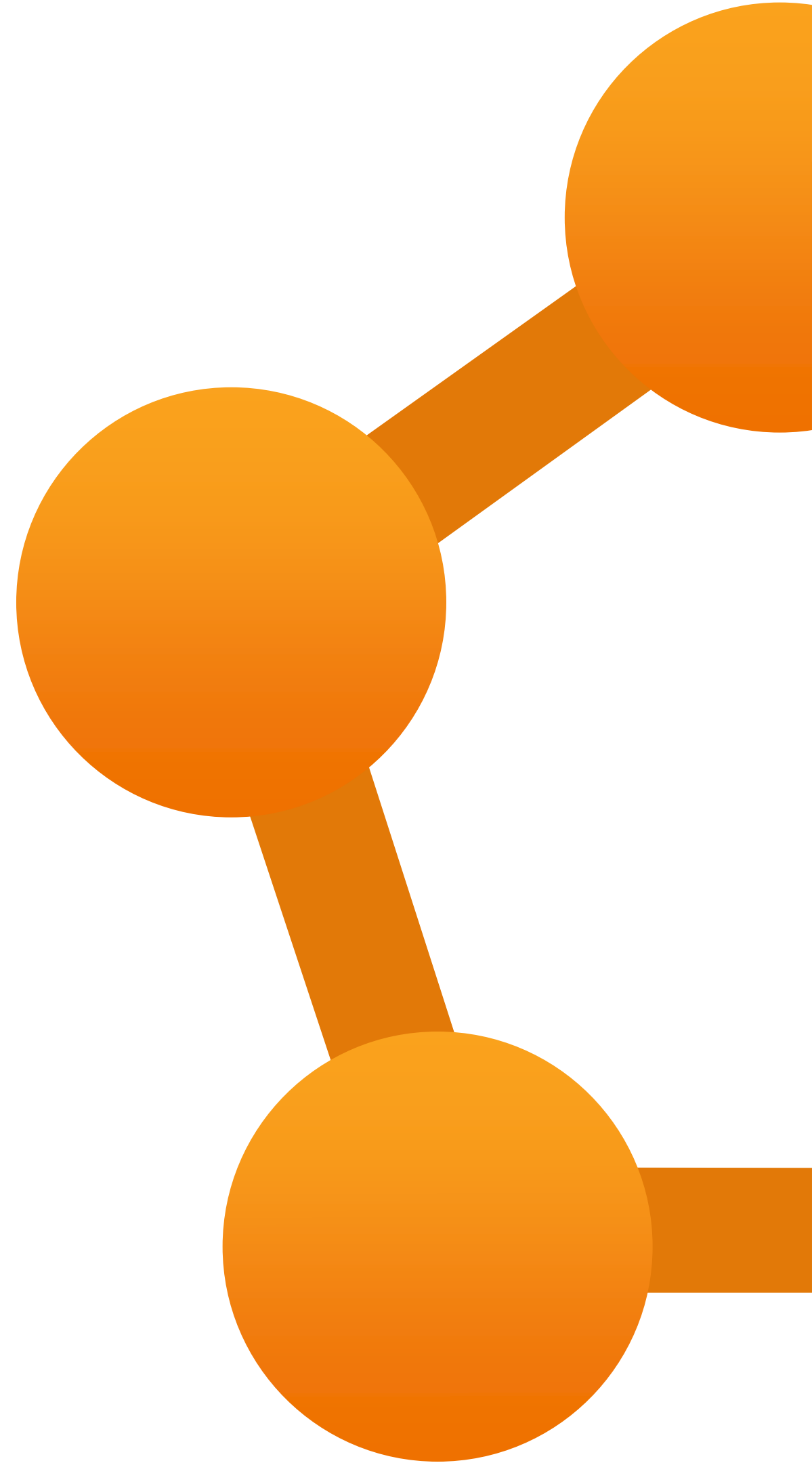
Unit Tests



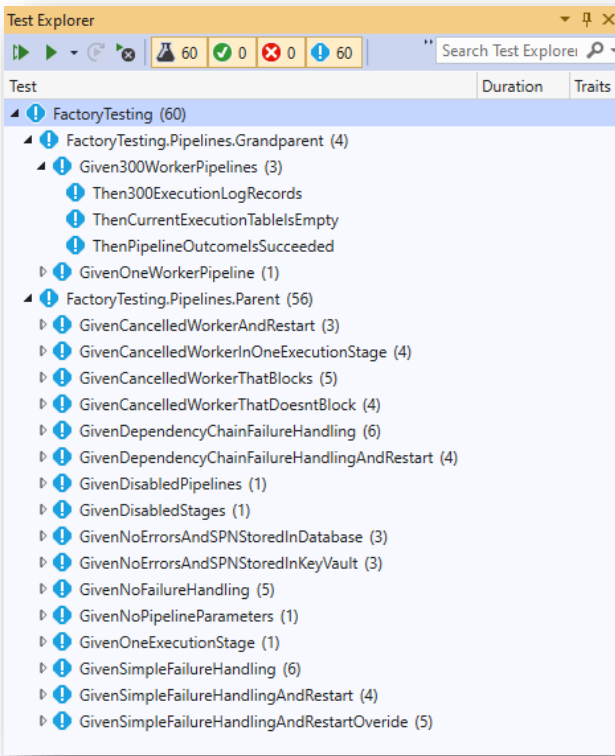
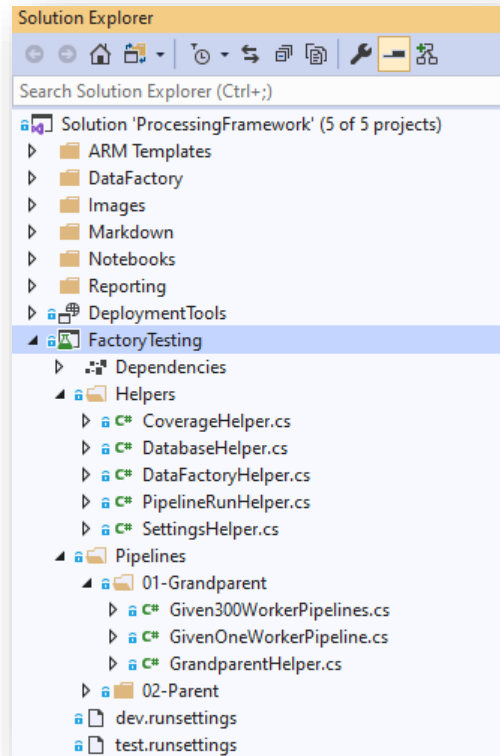
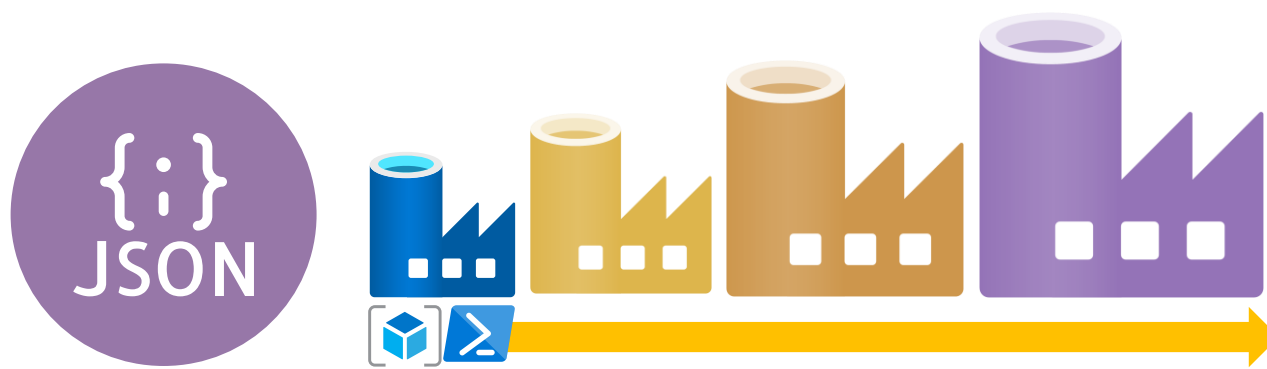
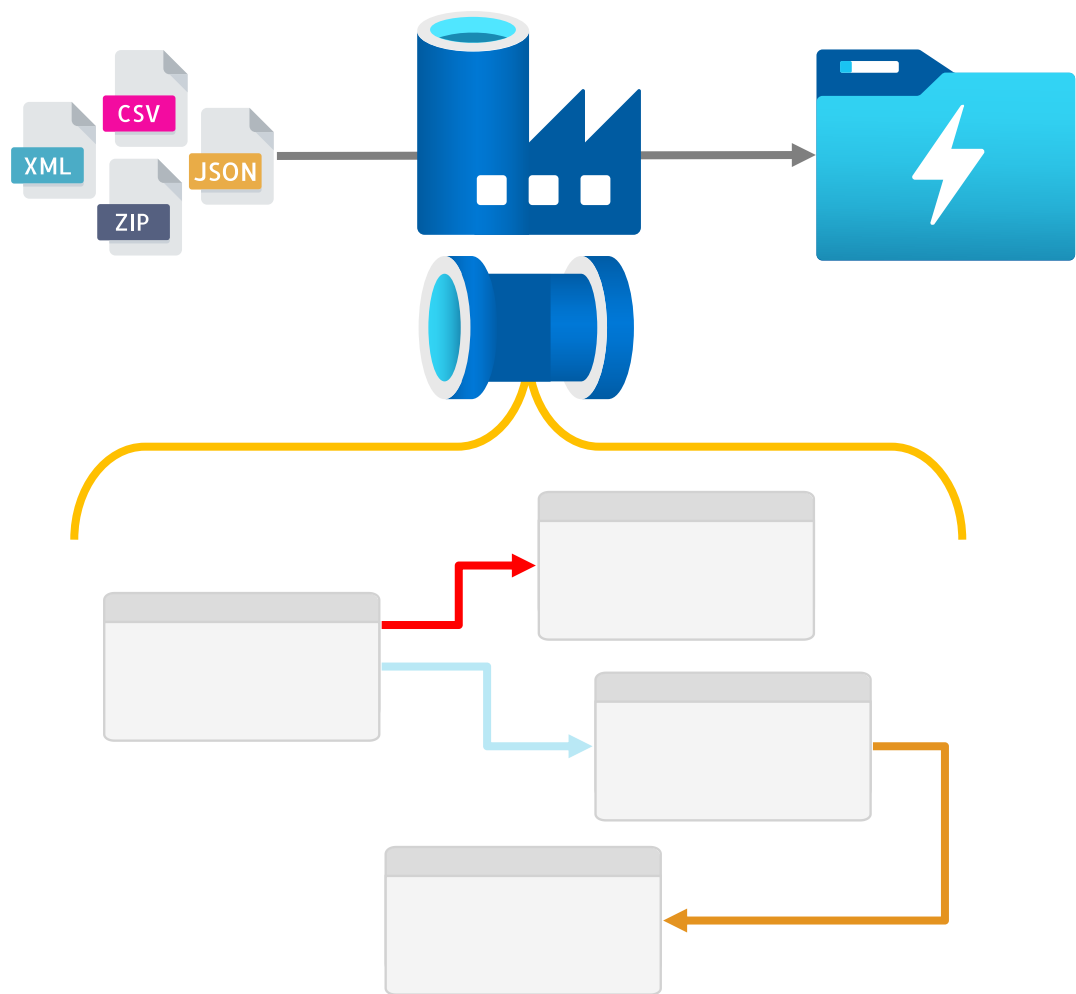
Module 10 – Testing

NUnit Tests

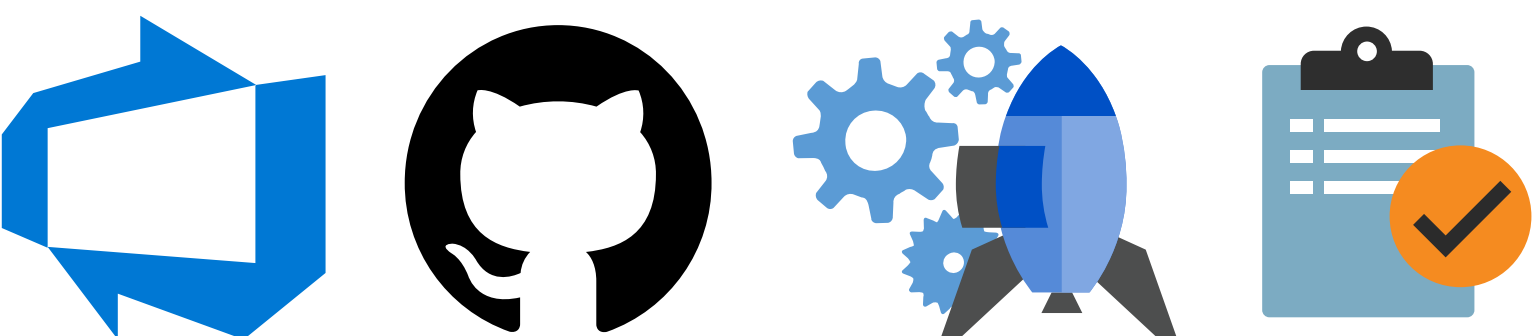
Cloud Formations



How To Run & Automate Tests



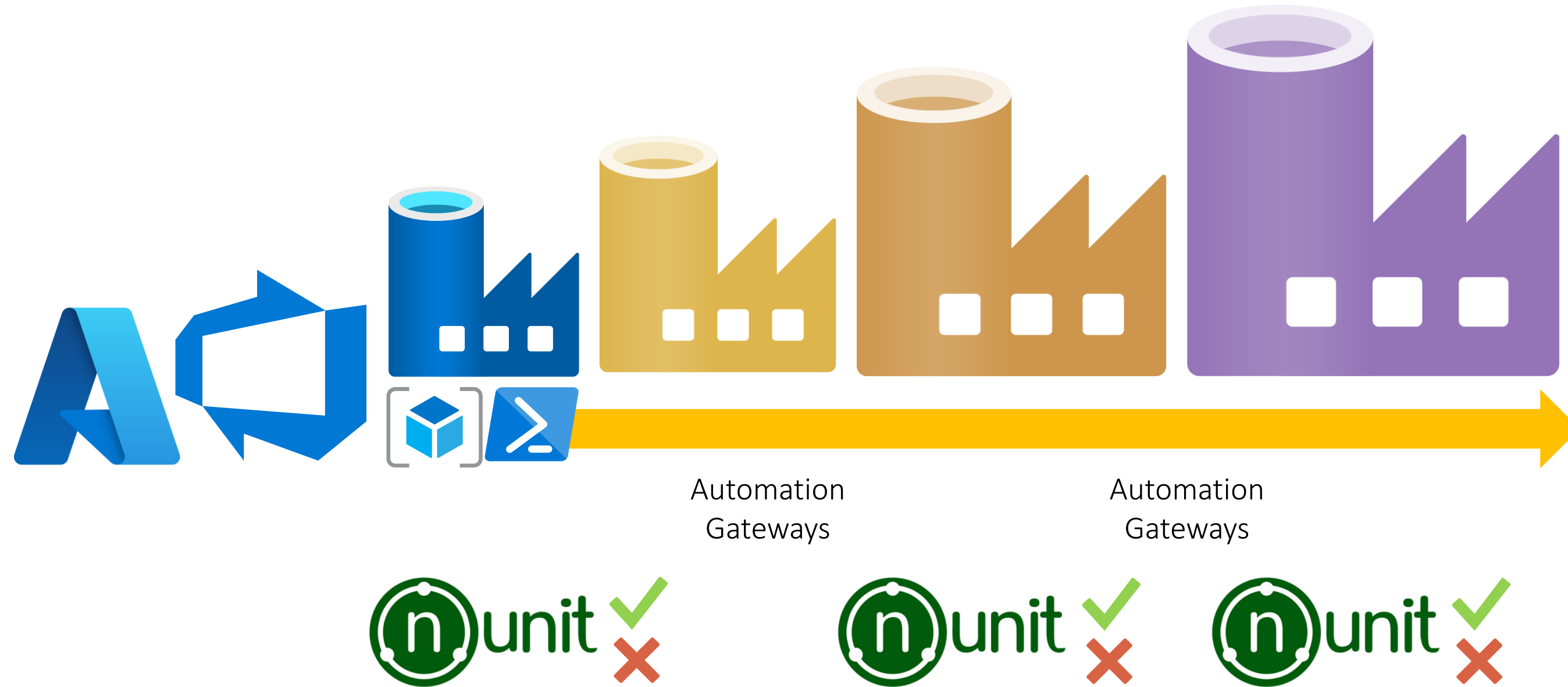
github.com/richardswinbank/community/tree/main/adf-testing-series





Testing Code vs Actual Code

Data Factory – Chicken vs Egg



Should automate this?

When should testing scripts run?

What if a test case fails?

Module 10

Testing



Any questions?

Cloud Formations

