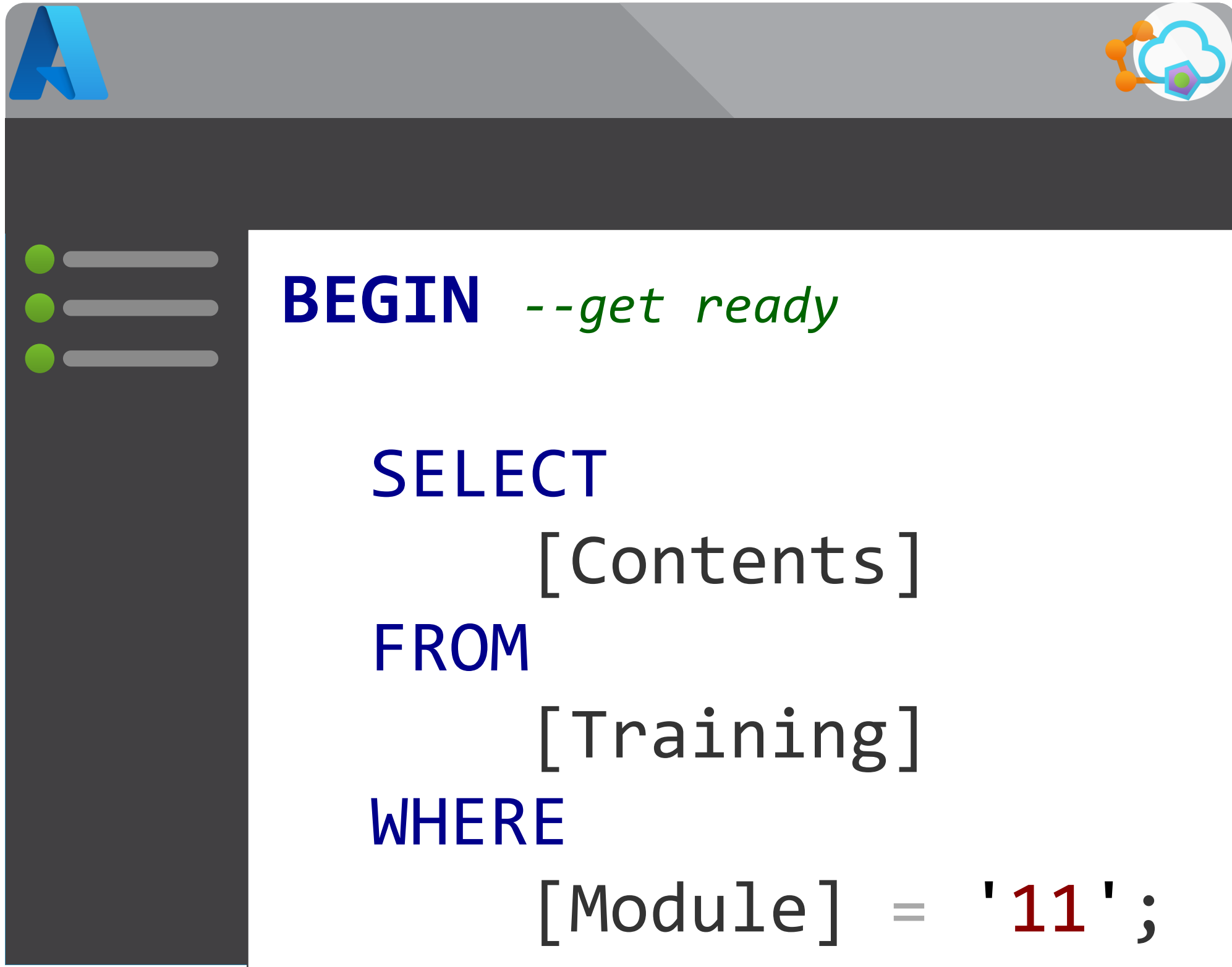


Module 11

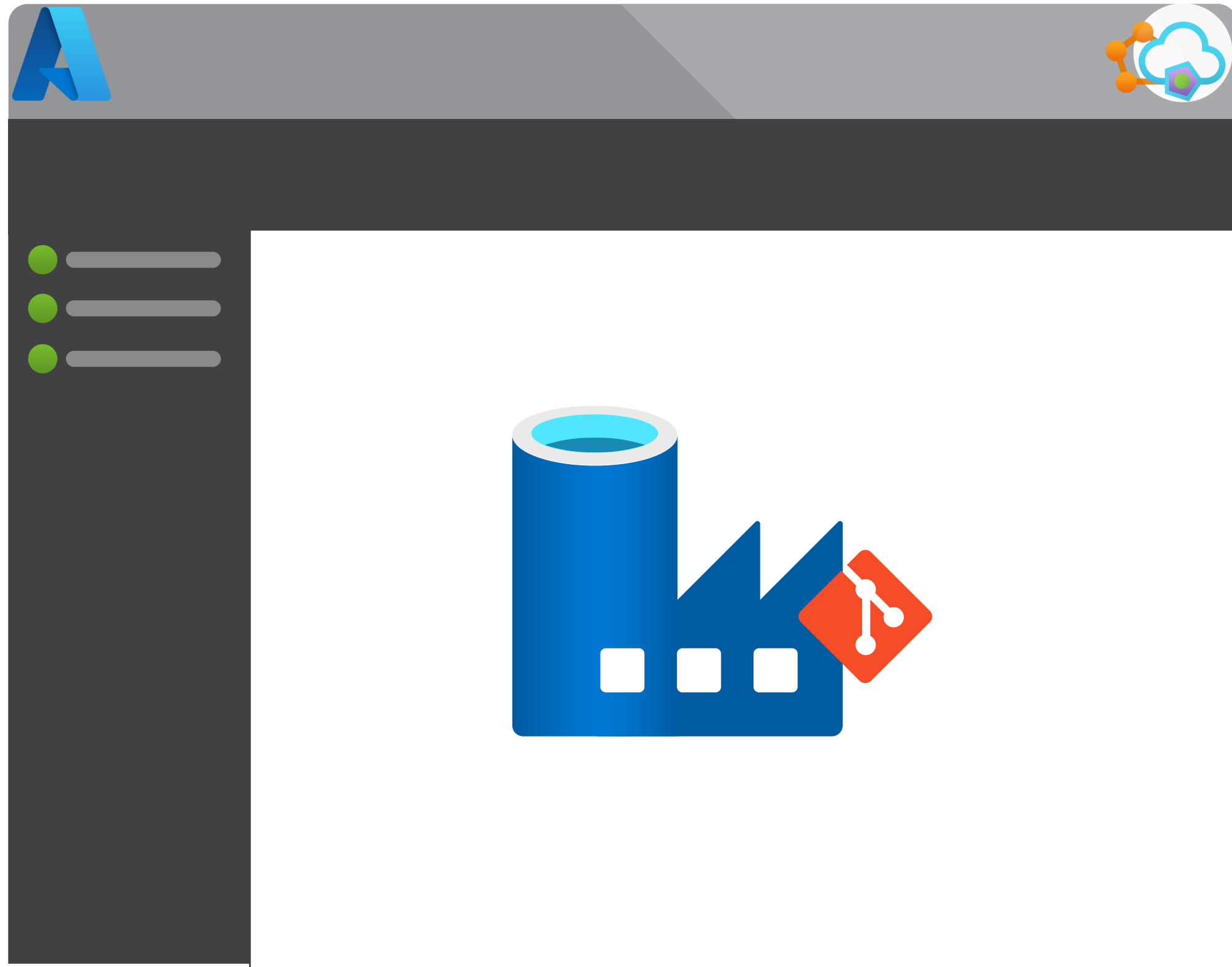
CI/CD



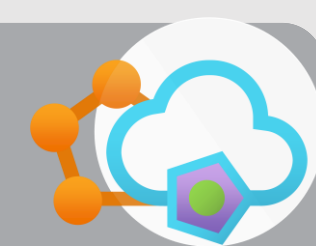
- Source Control vs Developer UI
- Basic ARM Template Deployments
- Advanced Deployment Patterns

Module 11

CI/CD



- Source Control vs Developer UI
- Basic ARM Template Deployments
- Advanced Deployment Patterns



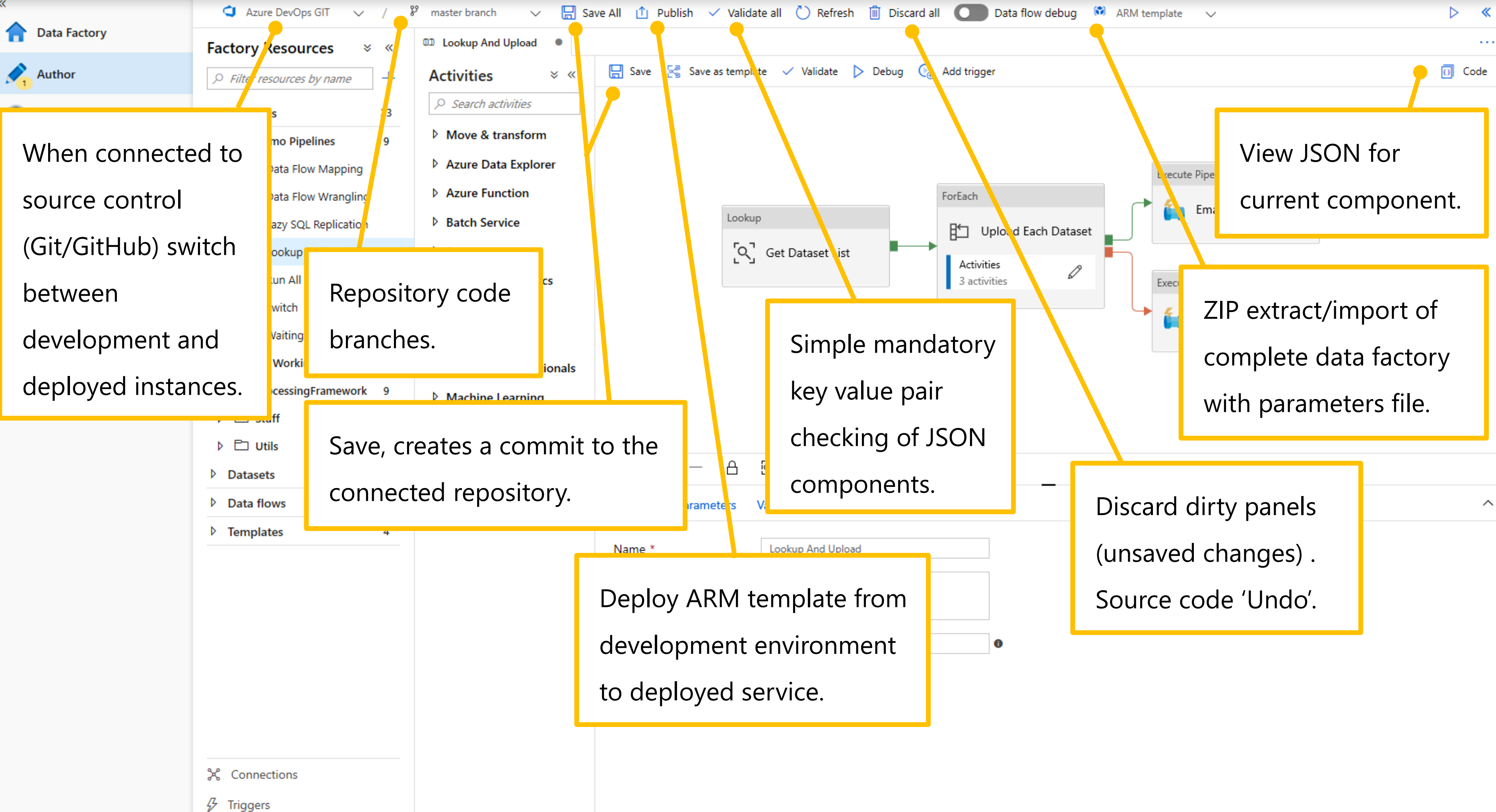
Open Azure Data Factory Studio
Start authoring and monitoring your data pipelines and data flows.

[Open](#)



Read documentation
Learn how to be productive quickly.
Explore concepts, tutorials, and samples.

[Learn more](#)



Data Factory

Author

Monitor

Factory Resources

Filter resources by name

Pipelines 23

- Demo Pipelines 9
 - Data Flow Mapping
 - Data Flow Wrangling
 - Lazy SQL Replication
 - Lookup And Upload
- Run All SSIS Packages
- Switch
- WaitingPipeline
- Working Progress 2
- ProcessingFramework 9
- Stuff 4
- Utils 1
- Datasets 27
- Data flows 6
- Templates 4

Lookup And Upload

Activities

Search activities

- Databricks
- Data Lake Analytics
- General
- HDInsight
- Iteration & conditionals
- Machine Learning

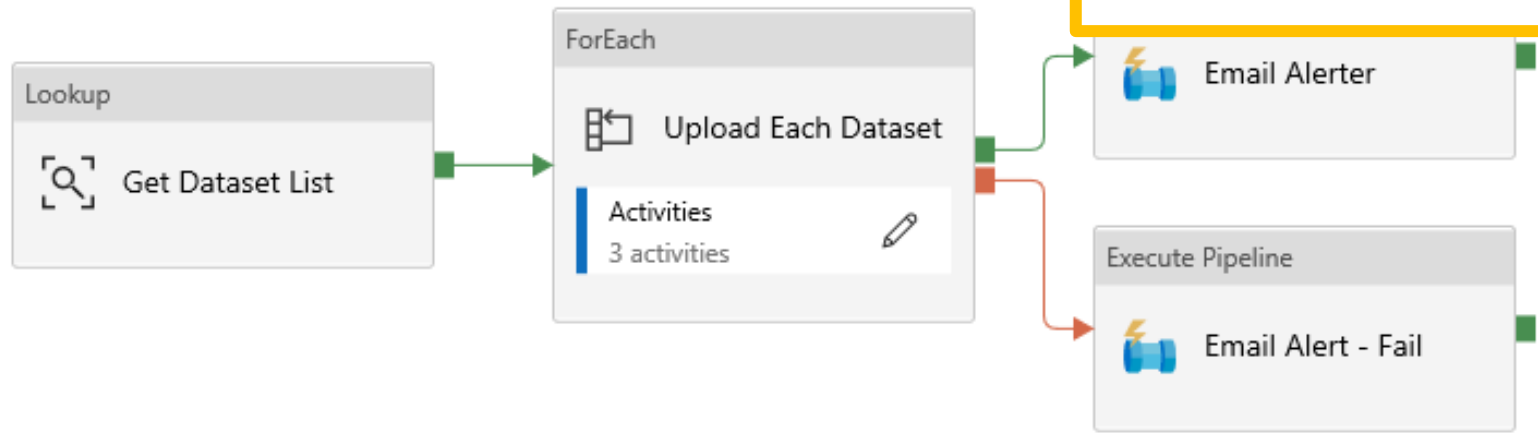
Debug the Control Flow.
Run the pipeline.

Azure DevOps GIT / master branch

Save All Publish Validate all Refresh Discard all Data flow debug ARM template

Save Save as template Validate Debug Add trigger

Debug the Data Flow.
Get a cluster ready.



General Parameters Variables Output

Name * Lookup And Upload

Description Simple dynamic demo pipeline

Concurrency

Annotations + New

Data Factory

Author

Monitor

Factory Resources

Filter resources by name

Pipelines23

Demo Pipelines9

Data Flow Mapping

Data Flow Wrangling

Lazy SQL Replication

Lookup And Upload

Run All SSIS Packages

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WaitingPipeline

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Data Lake Analytics

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HDInsight

Iteration & conditionals

Machine Learning

Azure DevOps GIT / master branch

Save All

Publish

Validate all

Refresh

Discard all

Data flow debug

ARM template

Save

Save as template

Validate

Debug

Add trigger

Code

Lookup

Get Dataset List

ForEach

Upload Each Dataset

Activities3 activities

Execute Pipeline

Email Alerter

Execute Pipeline

Email Alert - Fail

General

Settings

Activities (3)

User properties

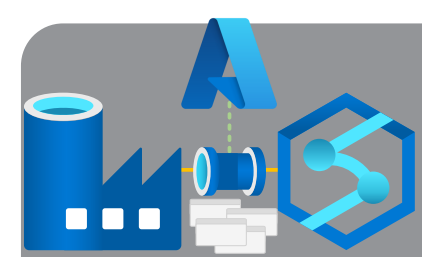
Name *Upload Each Dataset

Description

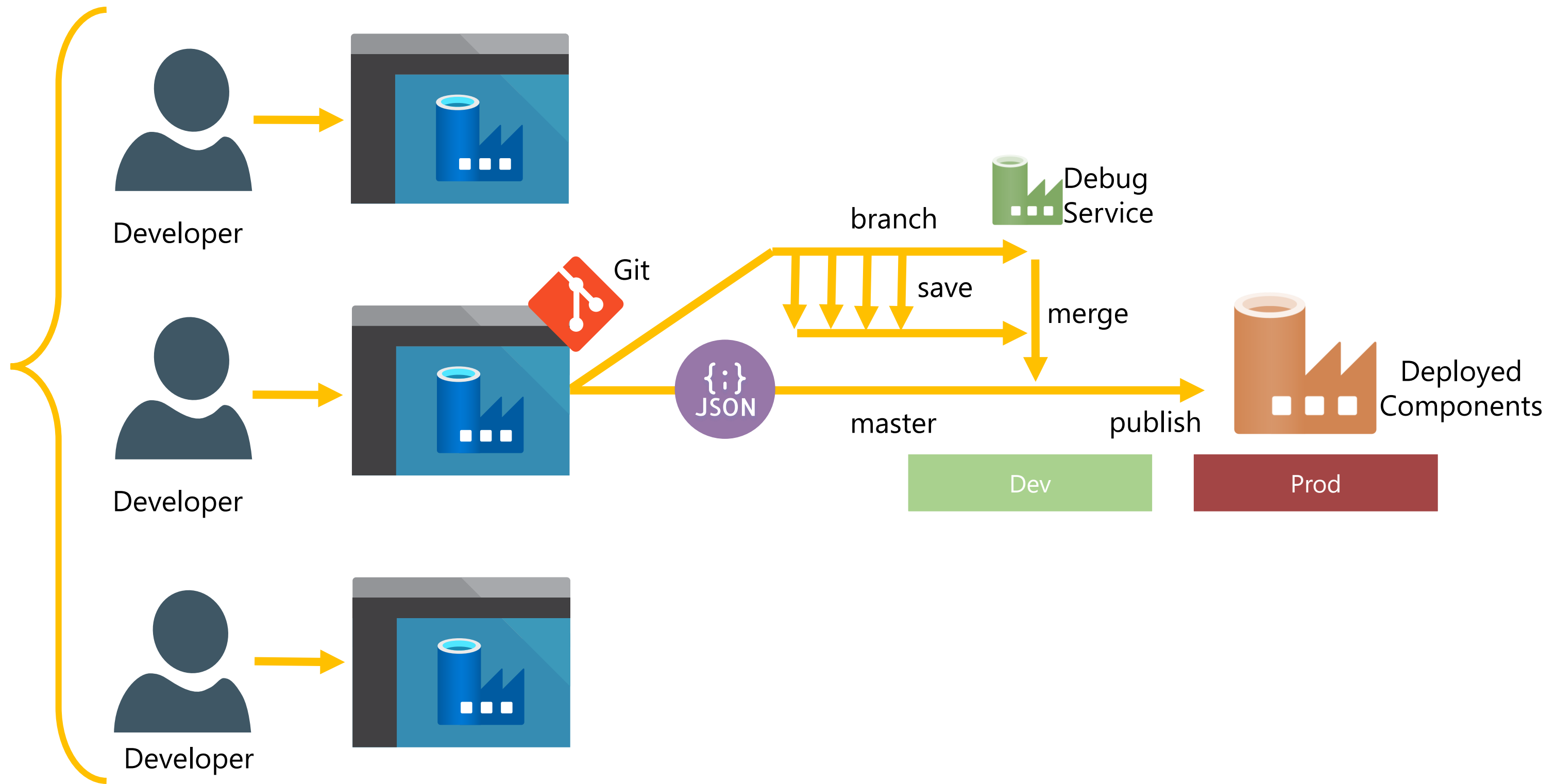
Learn more

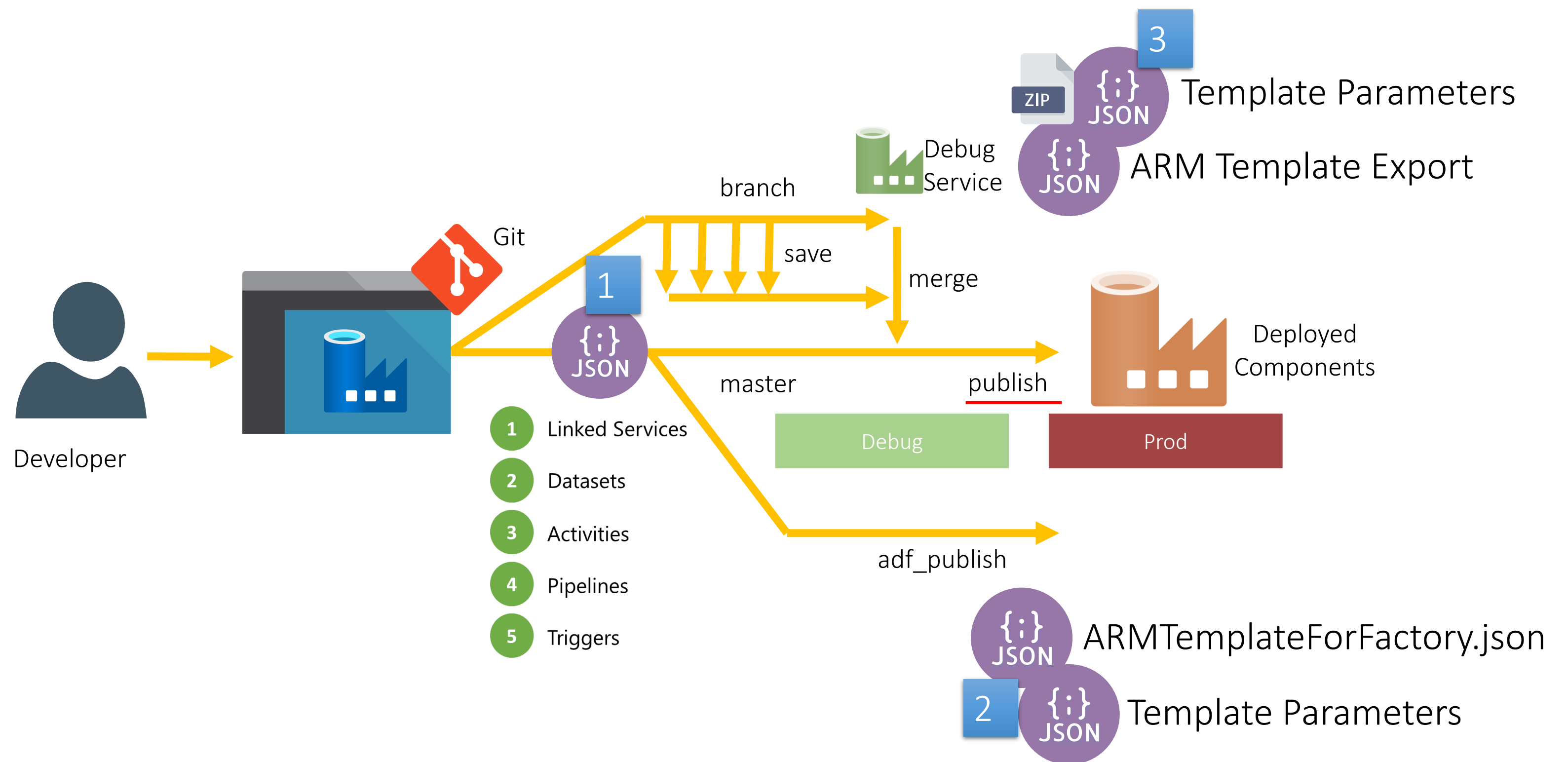
Debug the Control Flow.

Run the pipeline.



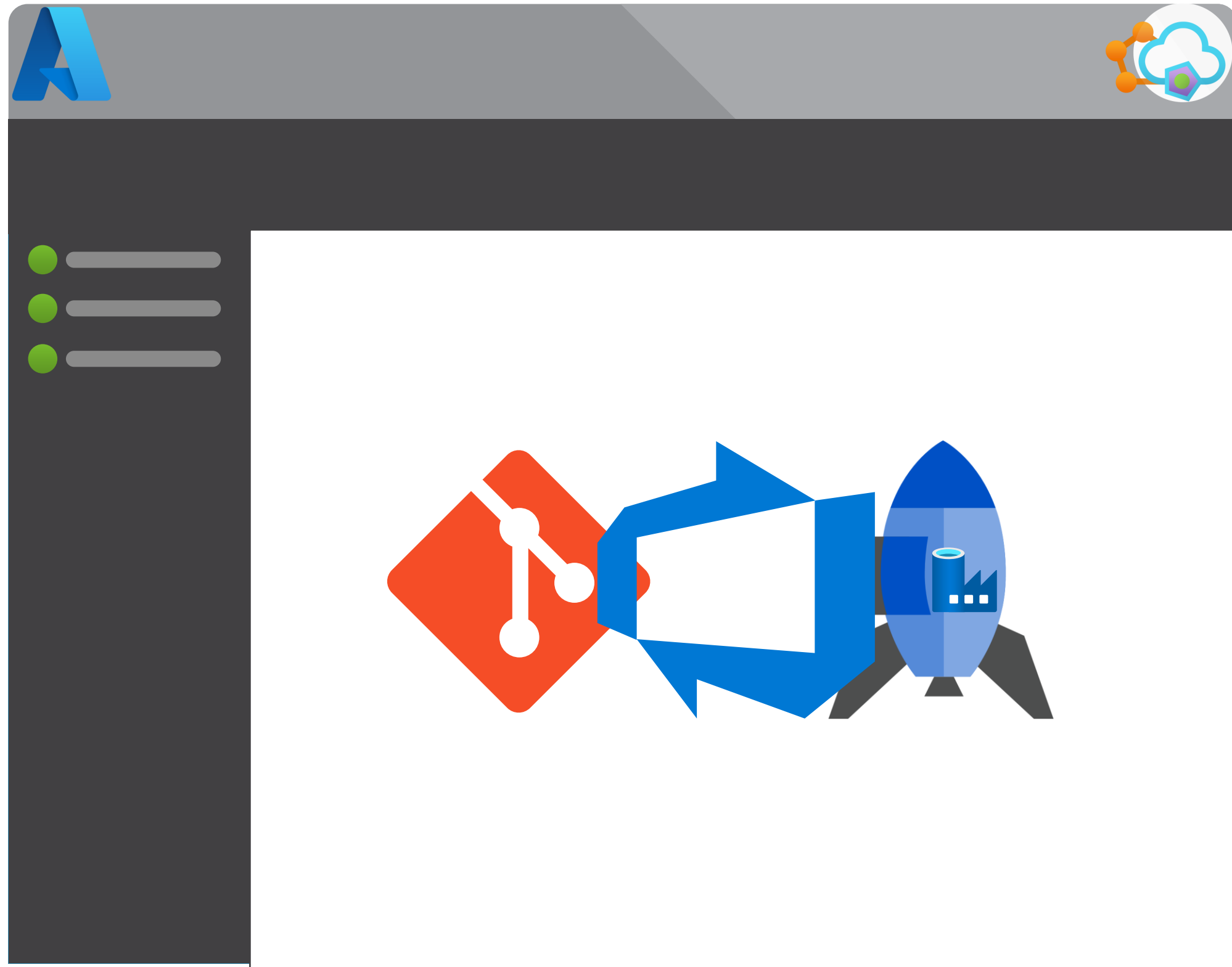
Data Factory Continuous Integration



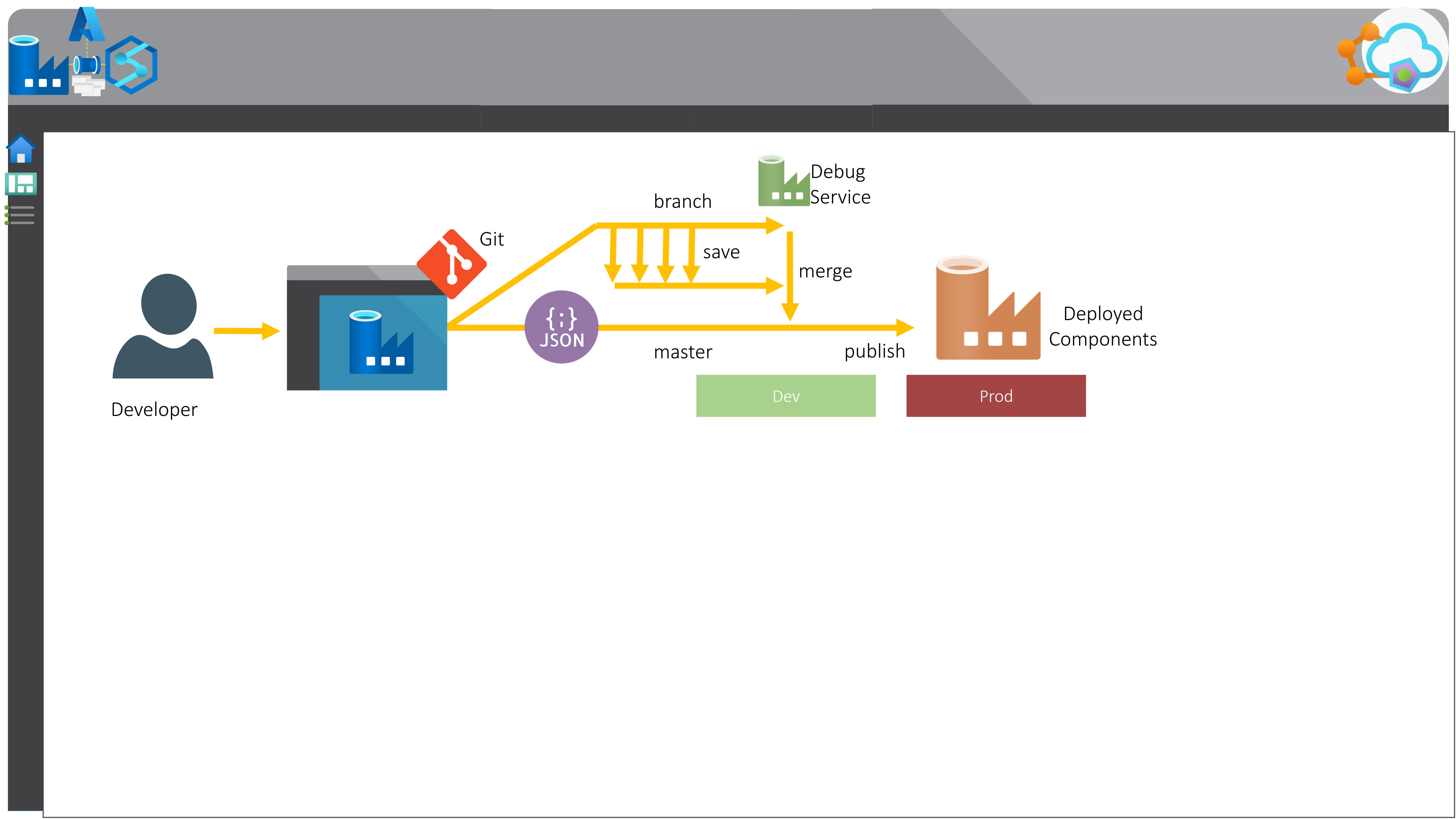


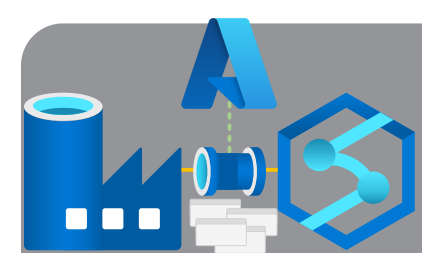
Module 11

CI/CD



- Source Control vs Developer UI
- Basic ARM Template Deployments
- Advanced Deployment Patterns

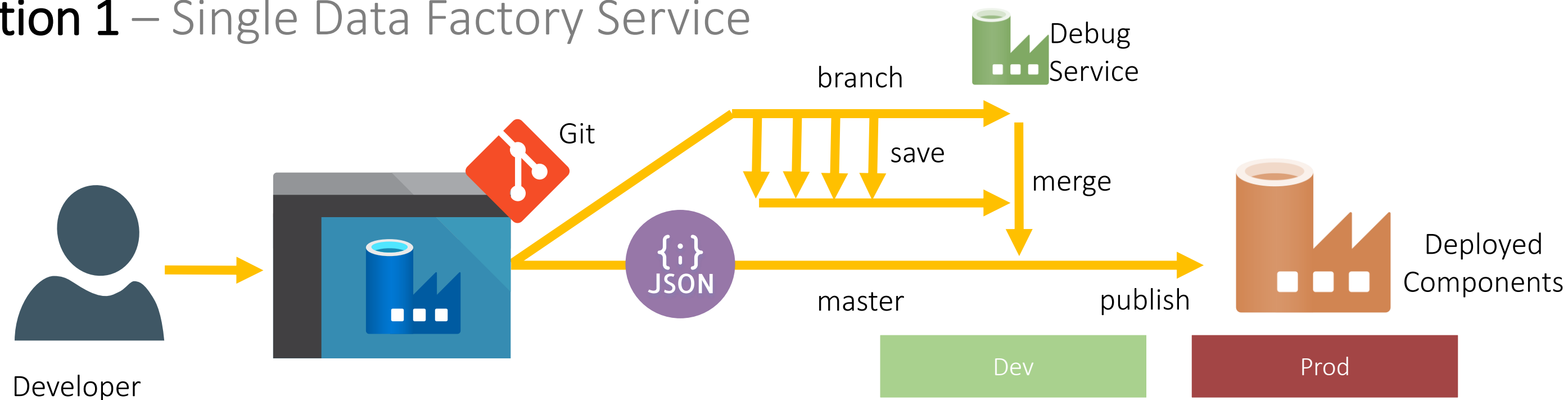




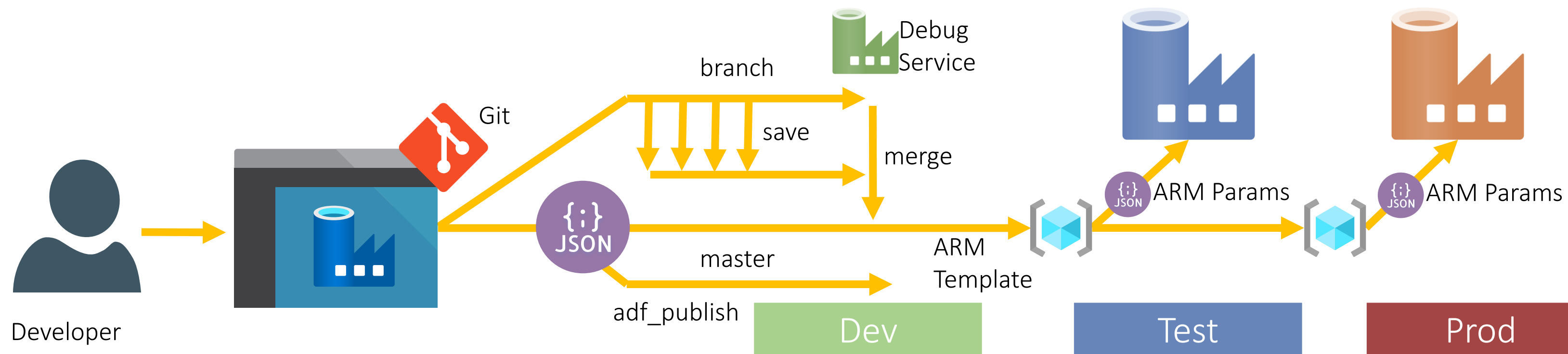
Data Factory Continuous Delivery



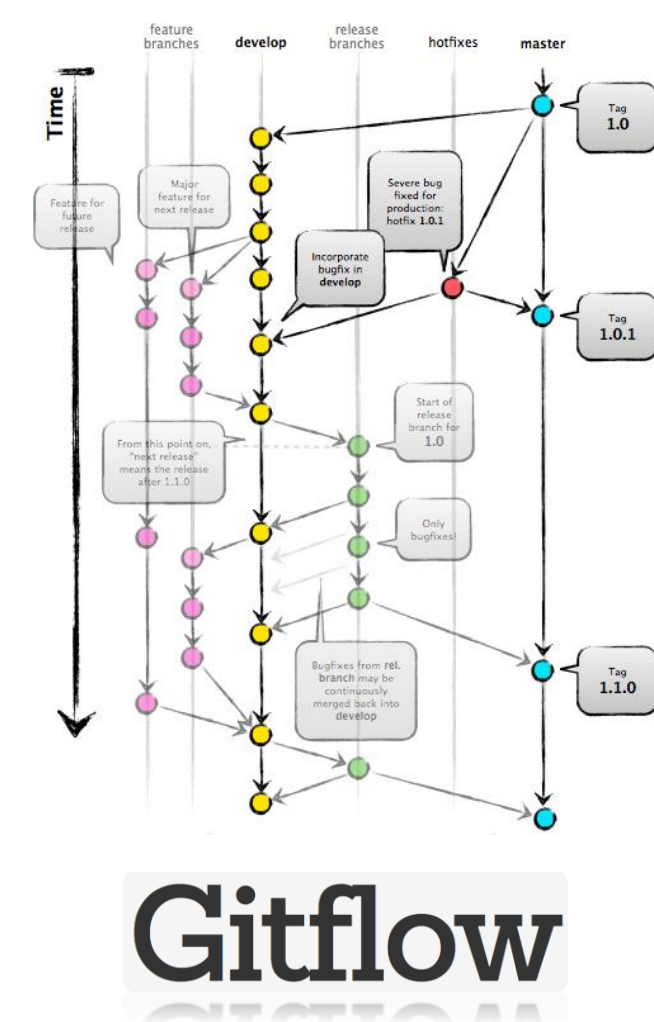
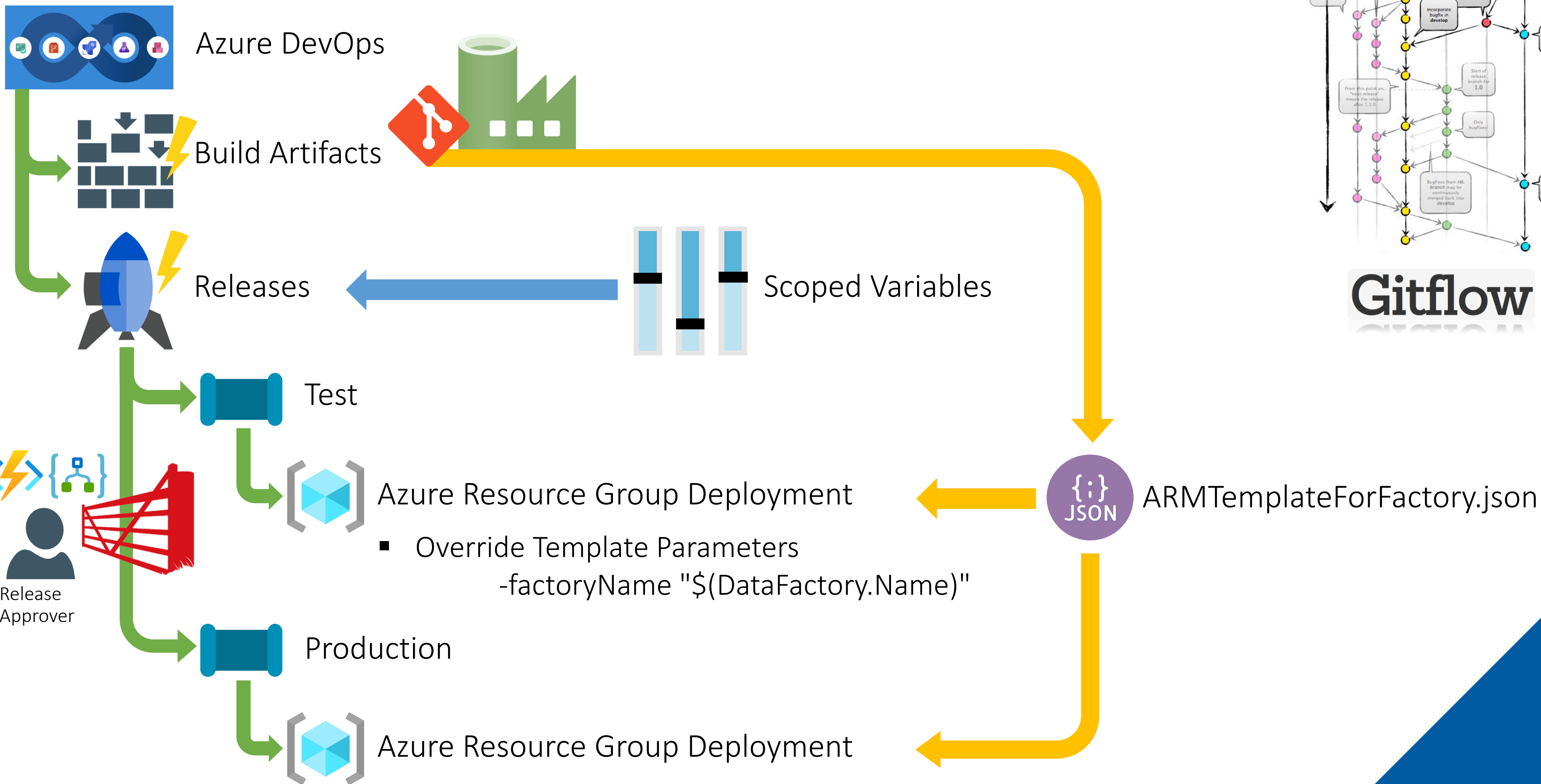
Option 1 – Single Data Factory Service



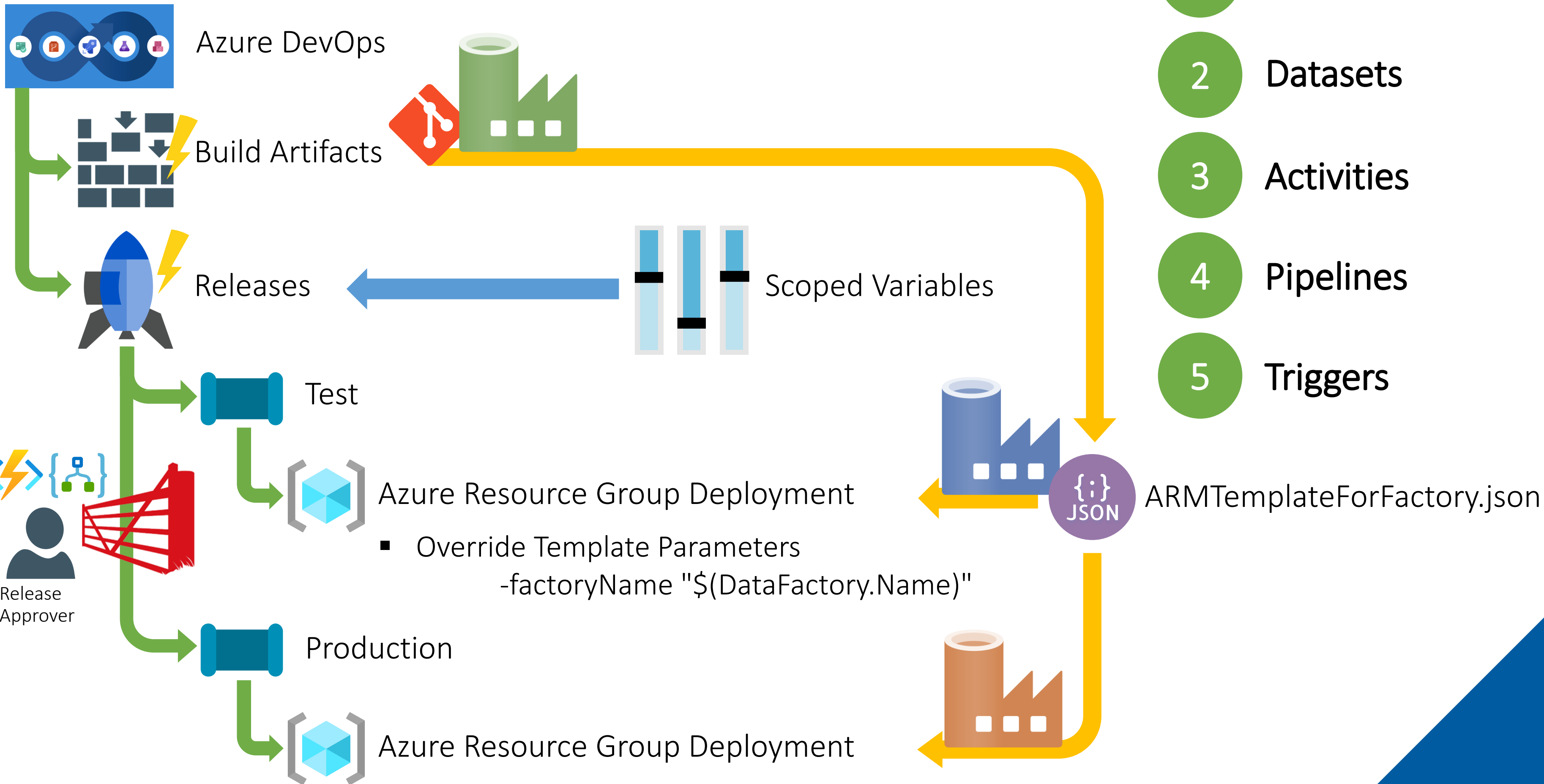
Option 2 – ARM Templates for Multiple Data Factory Services



Data Factory Continuous Delivery



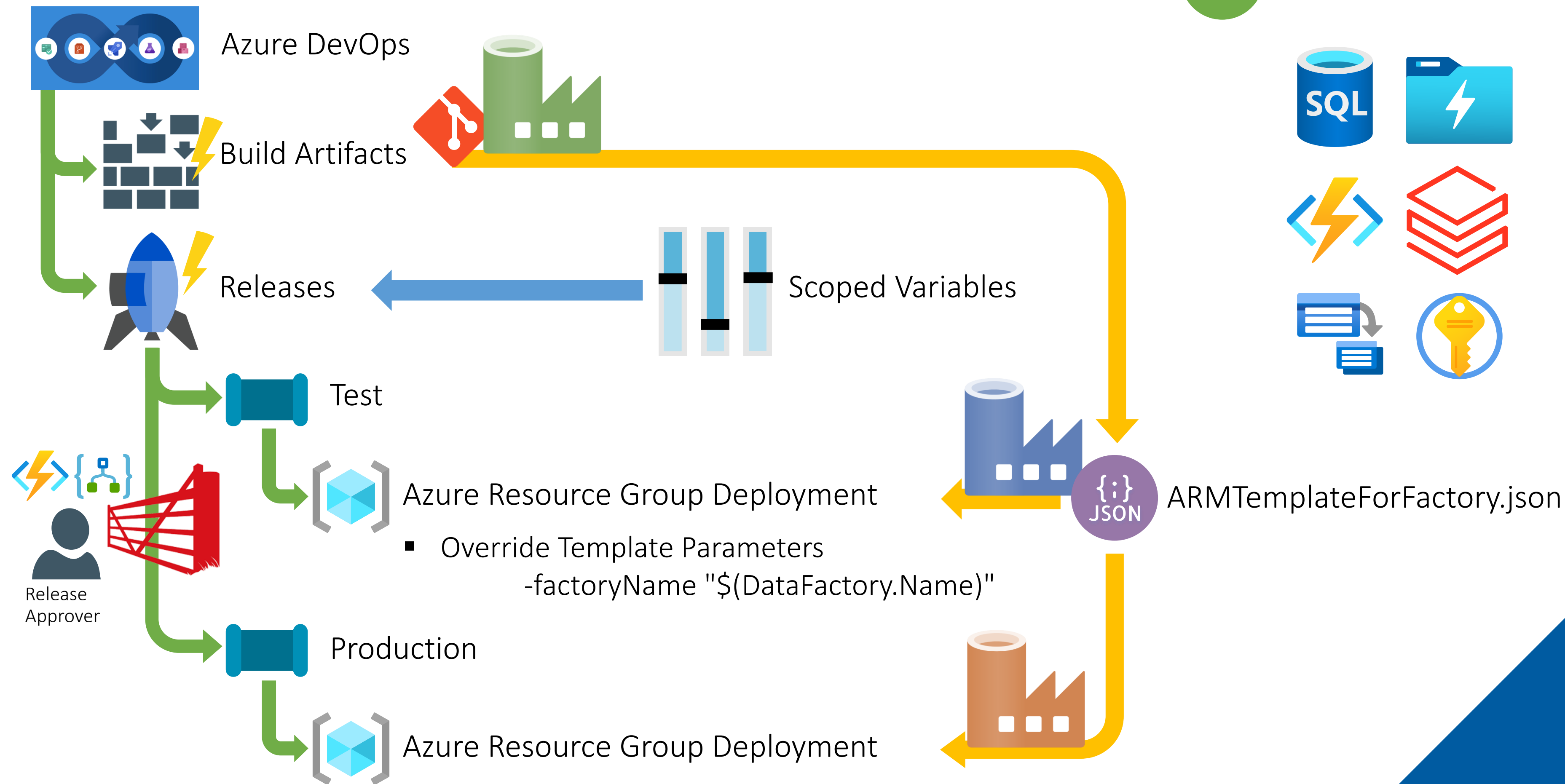
Data Factory Continuous Delivery



Data Factory Continuous Delivery

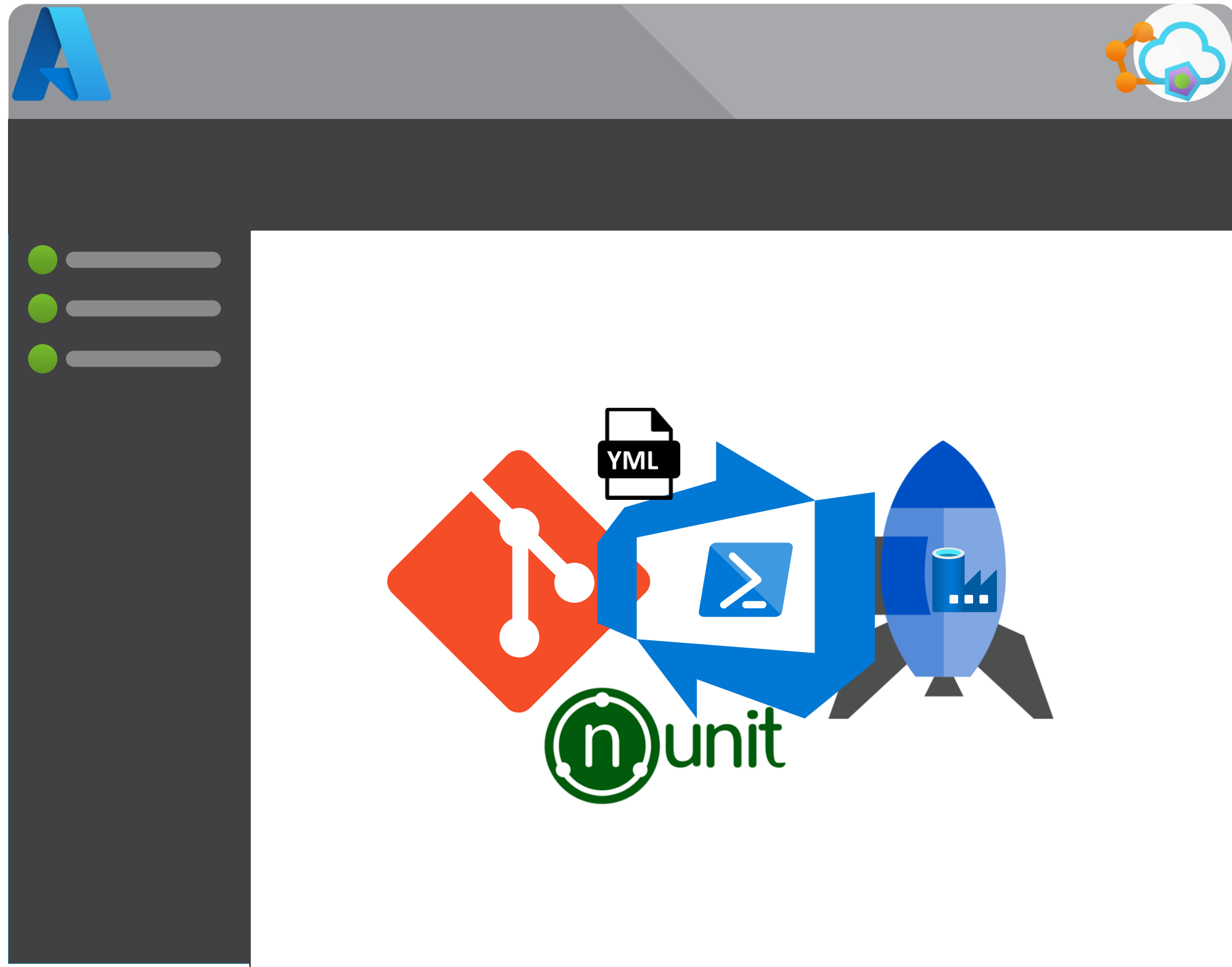
1

Linked Services



Module 11

CI/CD

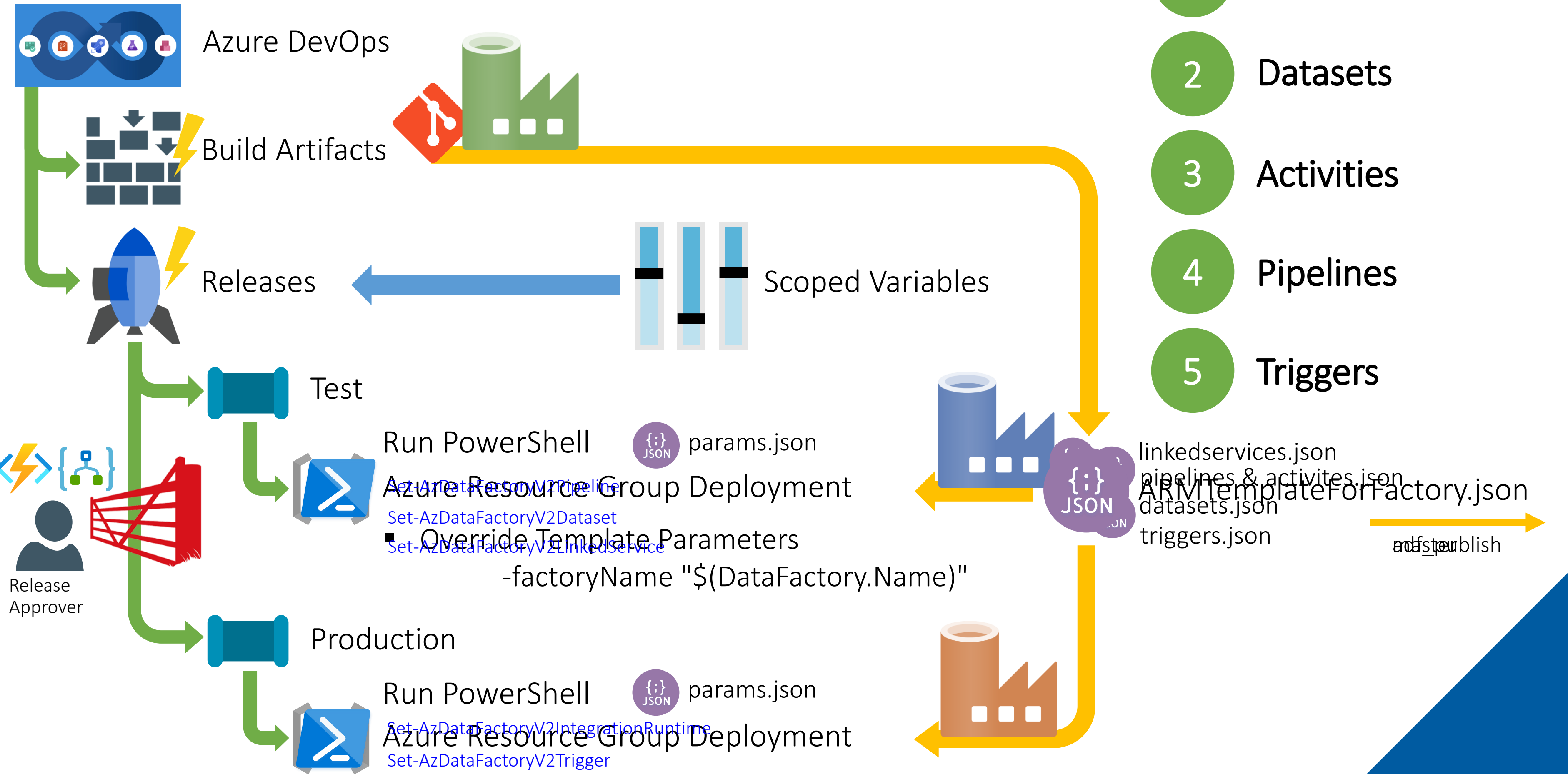


- Source Control vs Developer UI
- Basic ARM Template Deployments
- Advanced Deployment Patterns

Data Factory Continuous Delivery

- Option 3

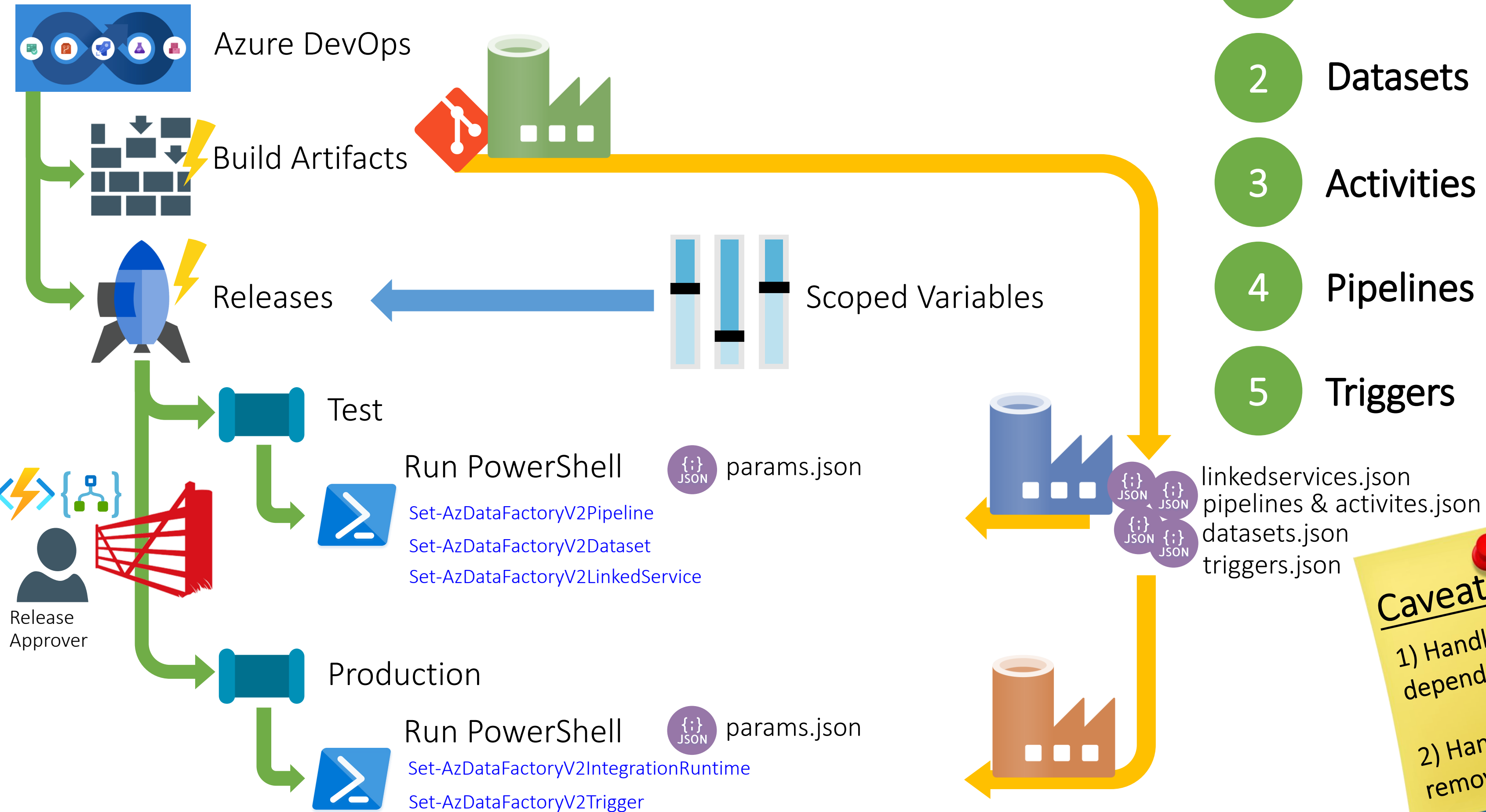
- 1 Linked Services
- 2 Datasets
- 3 Activities
- 4 Pipelines
- 5 Triggers



Data Factory Continuous Delivery

- Option 3

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



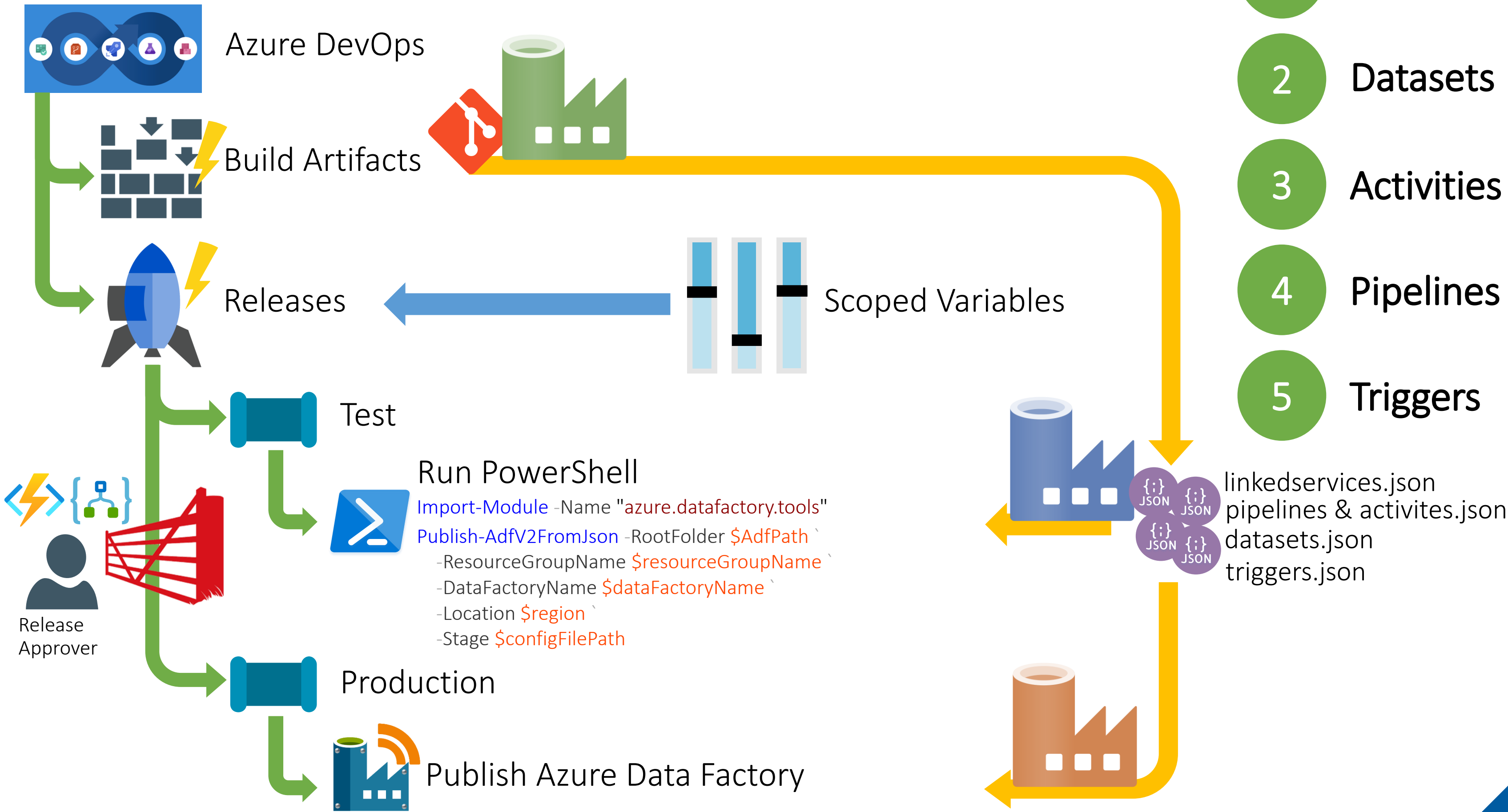
Caveats

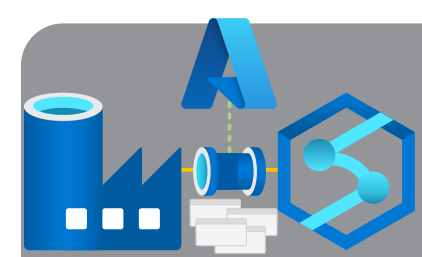
- 1) Handle own dependencies.
- 2) Handle own removals.

Data Factory Continuous Delivery

- Option 4

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





Deployment Options Summary

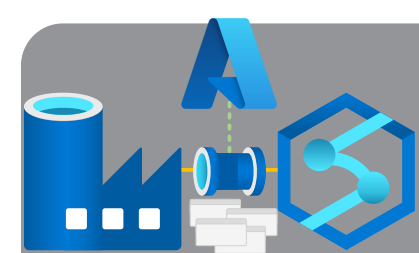


Option 1 – Use a single Data Factory service.

Option 2 – ARM Templates for multiple Data Factory services (environments).

Option 3 – Use PowerShell cmdlets for each ADF artifact.

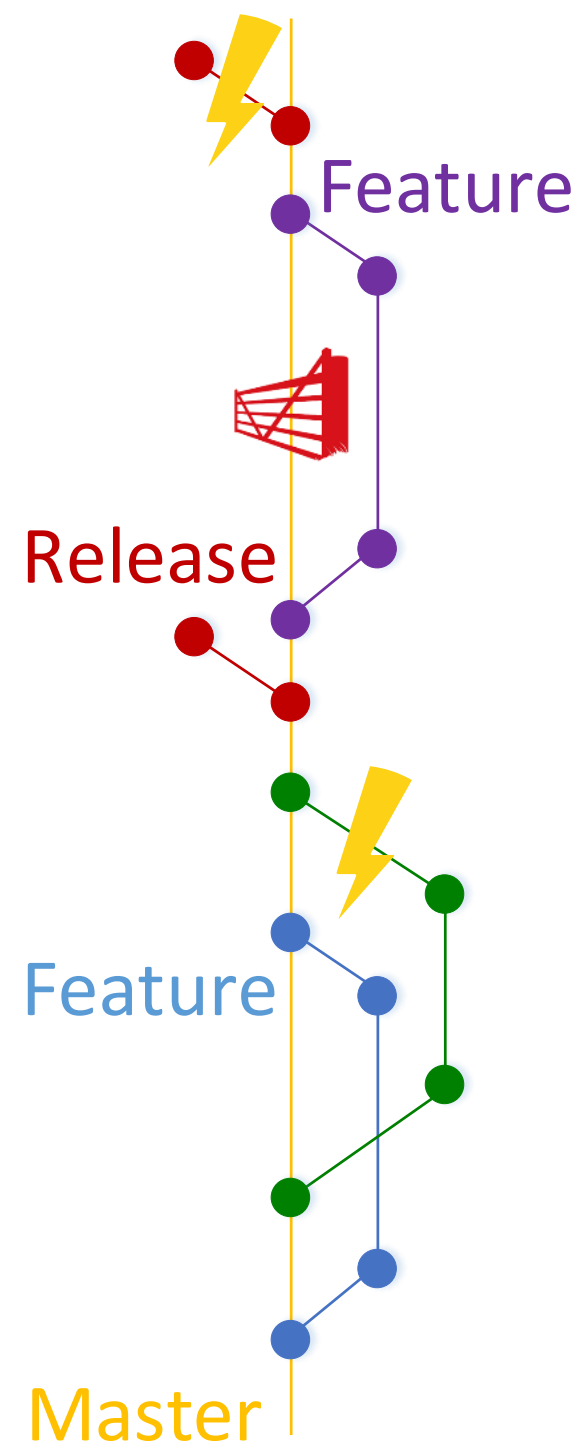
Option 4 – Use a PowerShell module or custom Azure DevOps task.



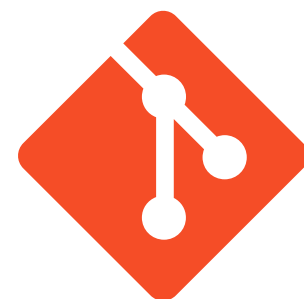
Data Factory DevOps Story Summary



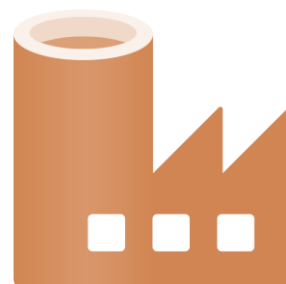
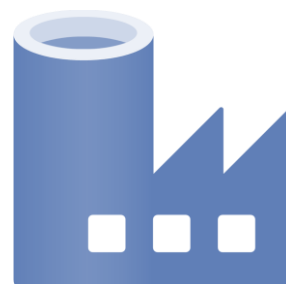
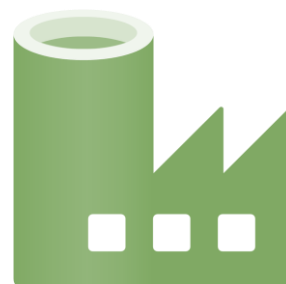
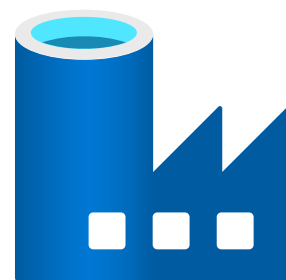
What is your code branching strategy?



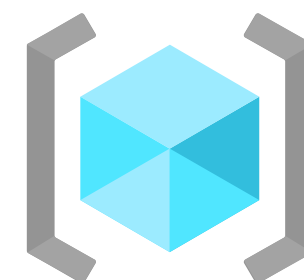
Which source control tool to use?



How many environments do we want?



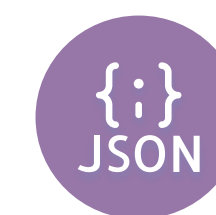
What deployment method do we want to use?



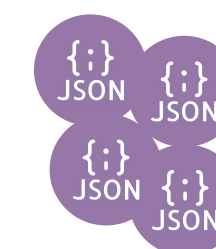
What artifacts are we going to use?...

OR

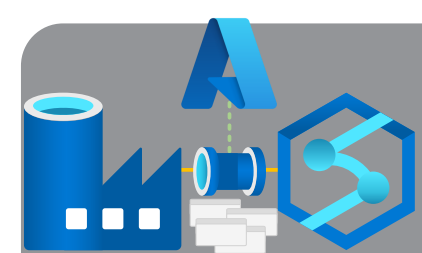
How much control do you want?



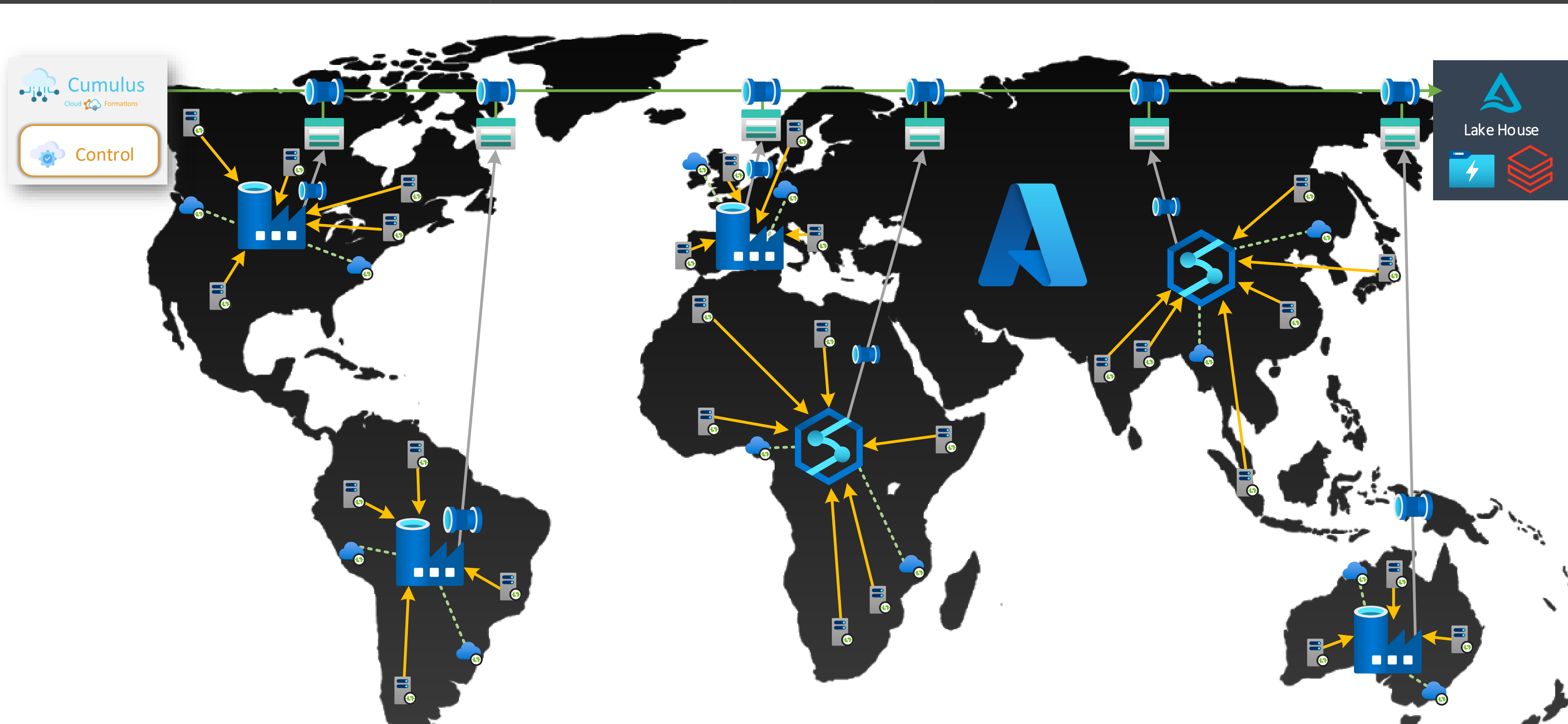
ARMTemplate
ForFactory.json



linkedservices.json
pipelines &
activites.json
datasets.json
triggers.json



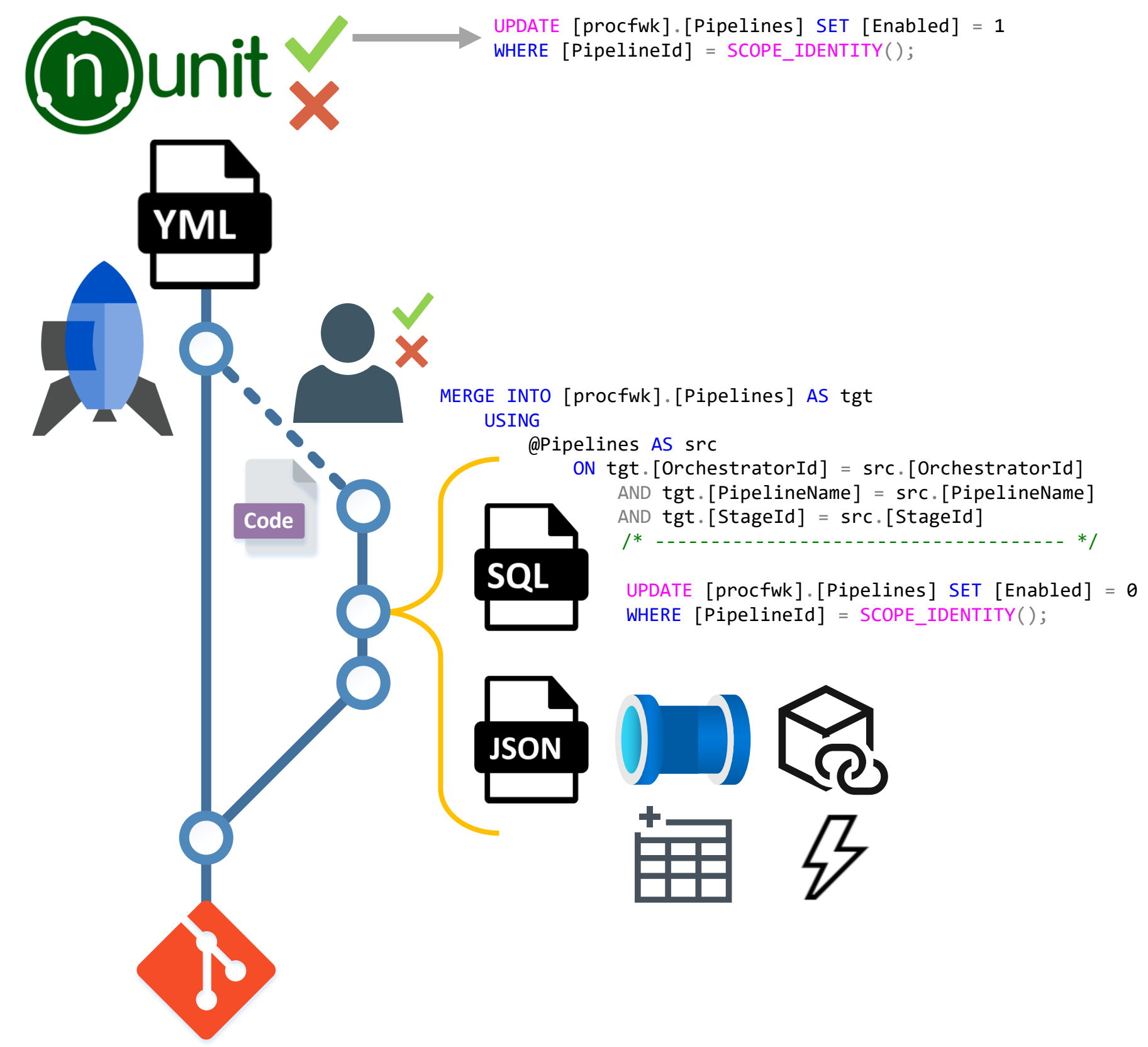
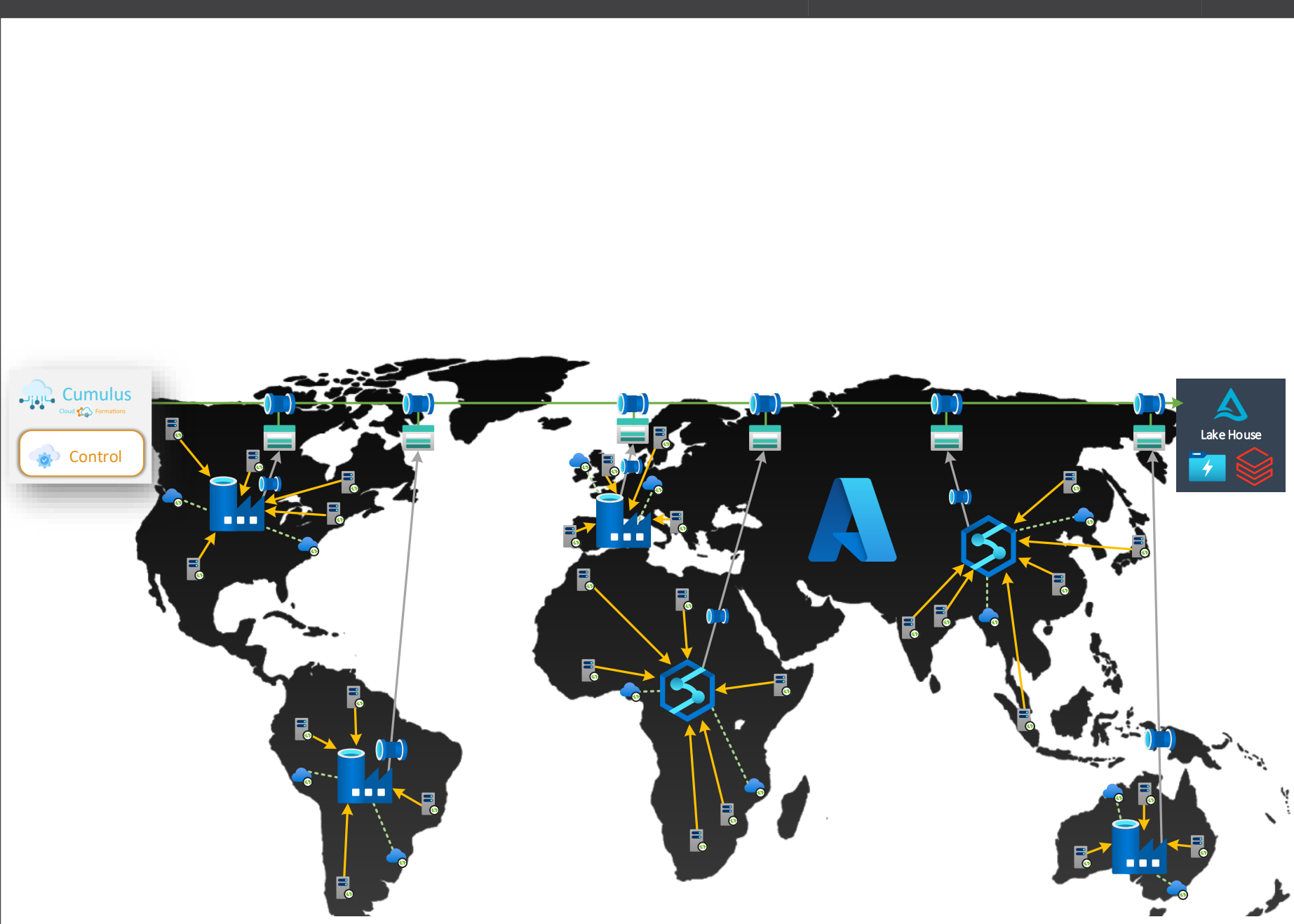
Hub & Spoke Integration Architecture

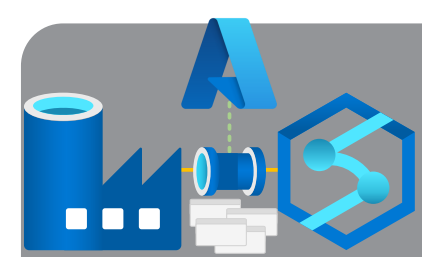




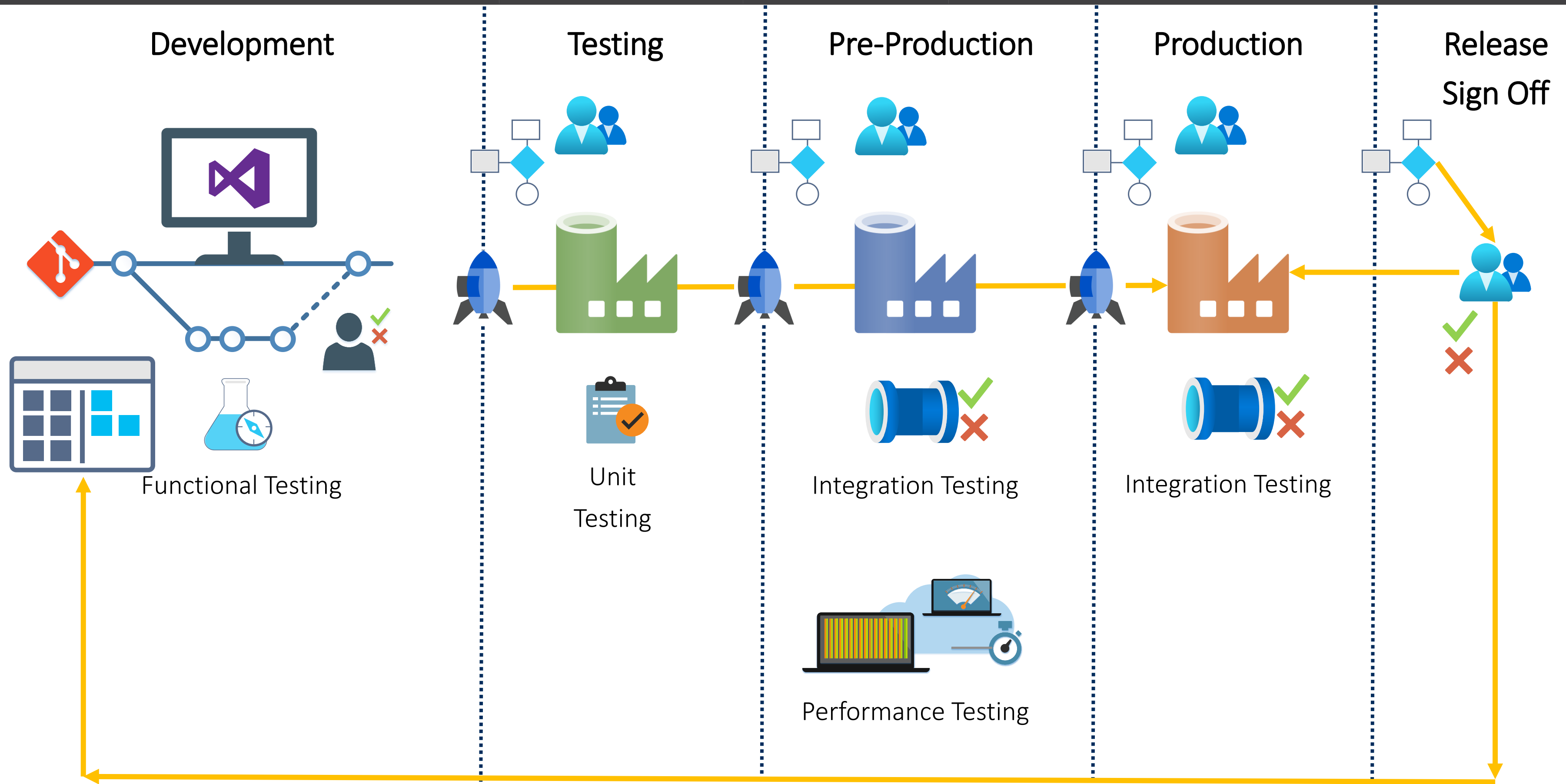
How Small Can Deployments Be?





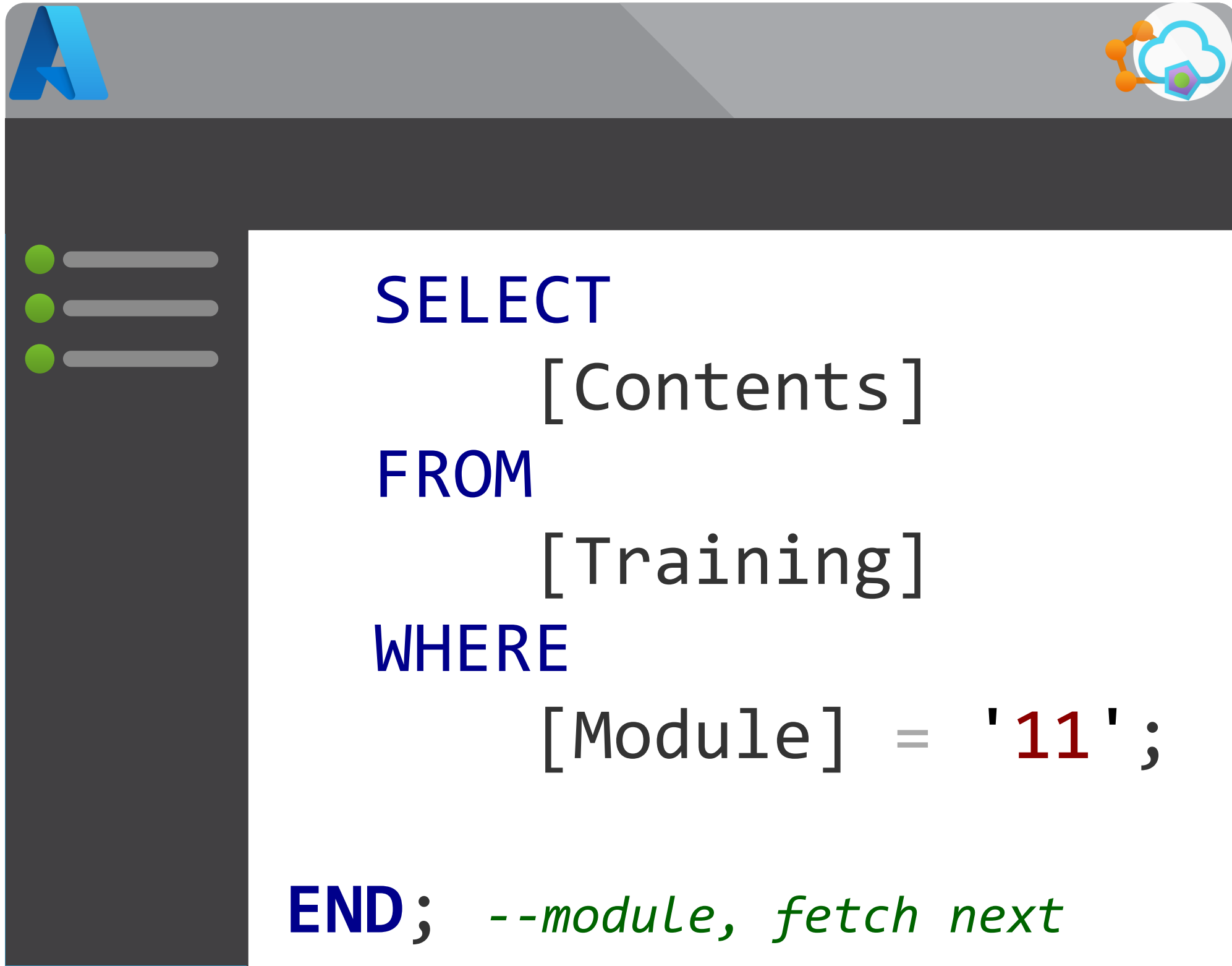


Deployment Life Cycle & Gateway



Module 11

CI/CD



- Source Control vs Developer UI
- Basic ARM Template Deployments
- Advanced Deployment Patterns