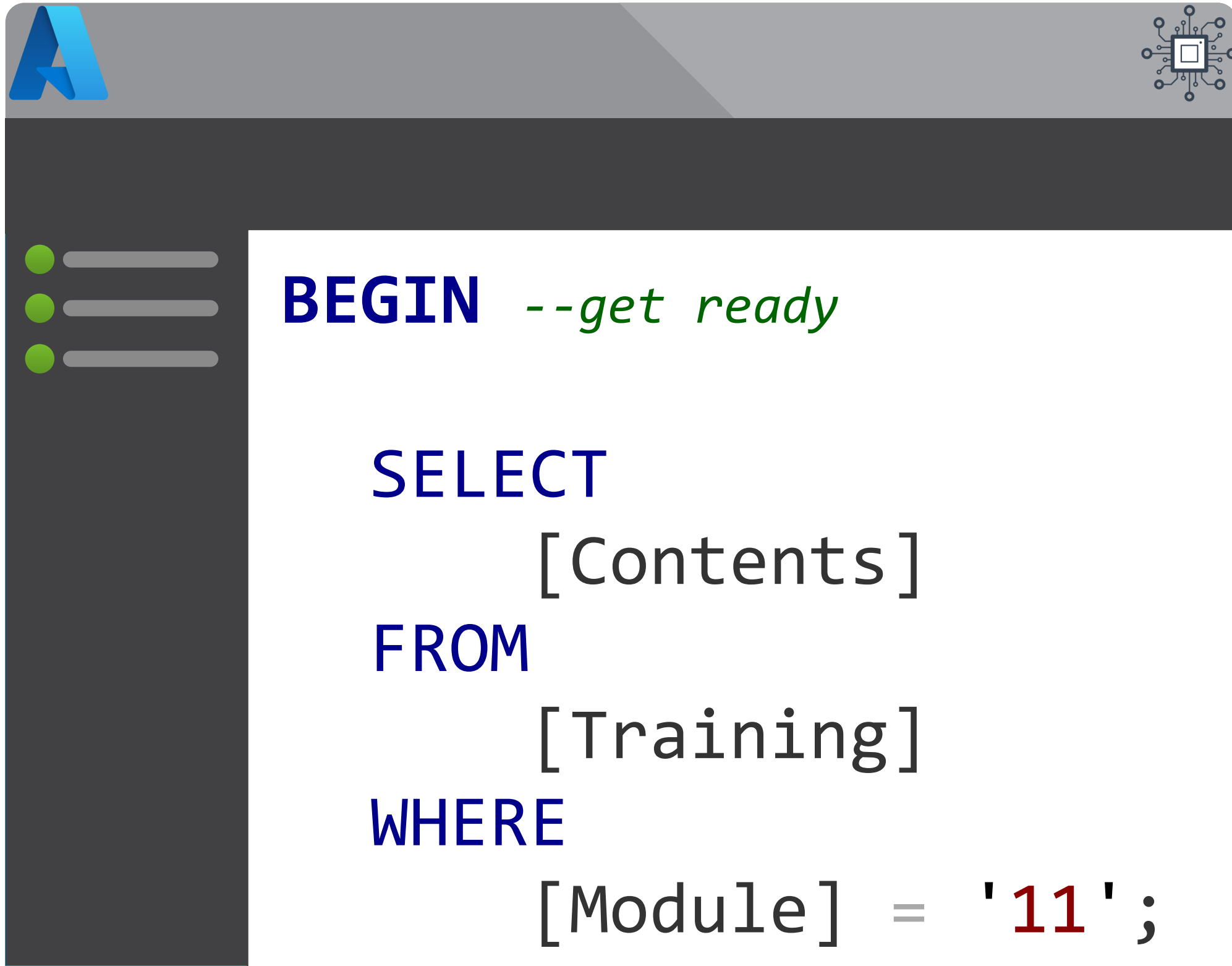


# Module 11

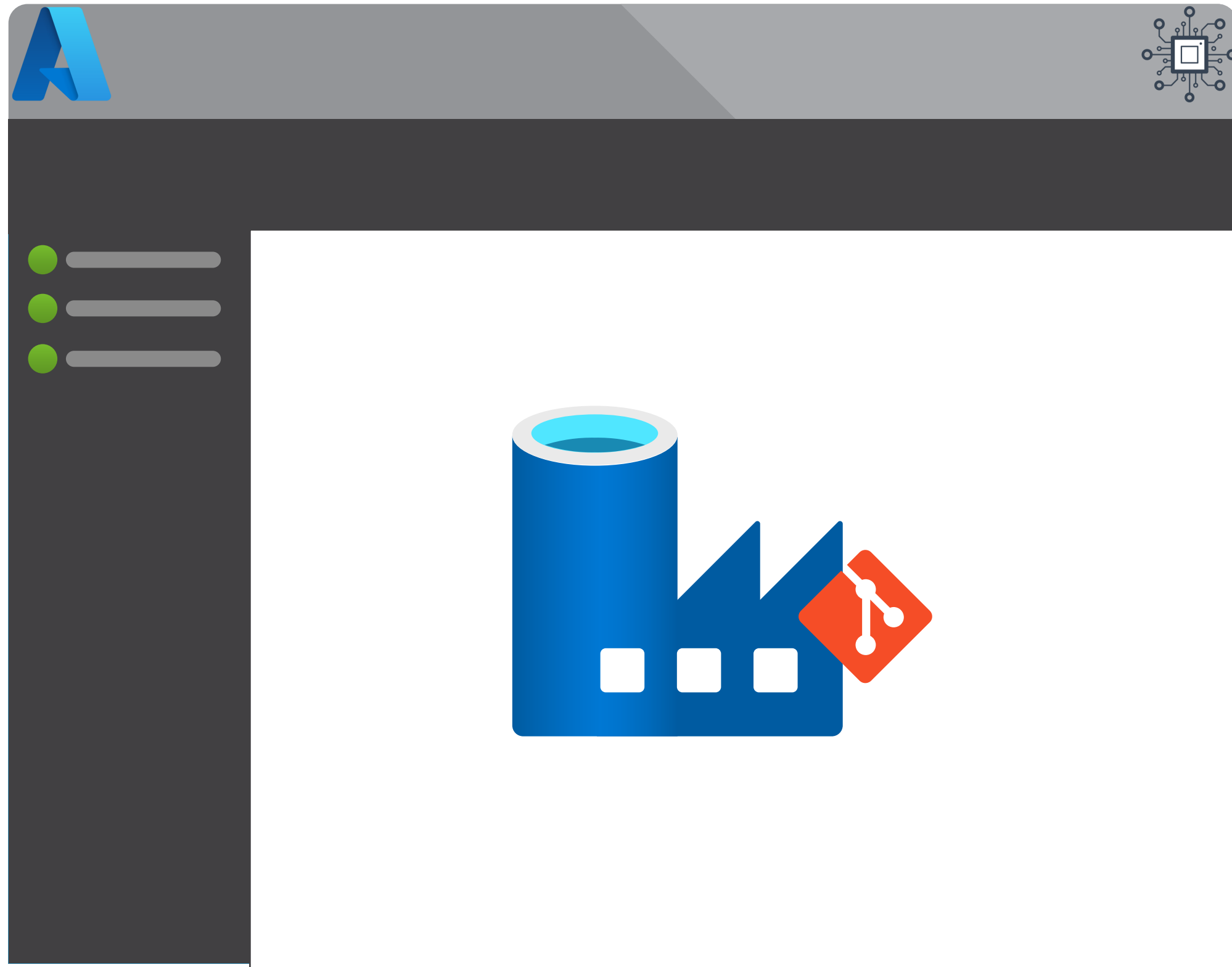
CI/CD



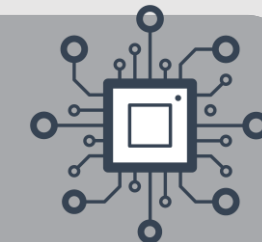
- Source Control vs Developer UI
- Basic ARM Template Deployments
- Advanced Deployment Patterns

# Module 11

CI/CD



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




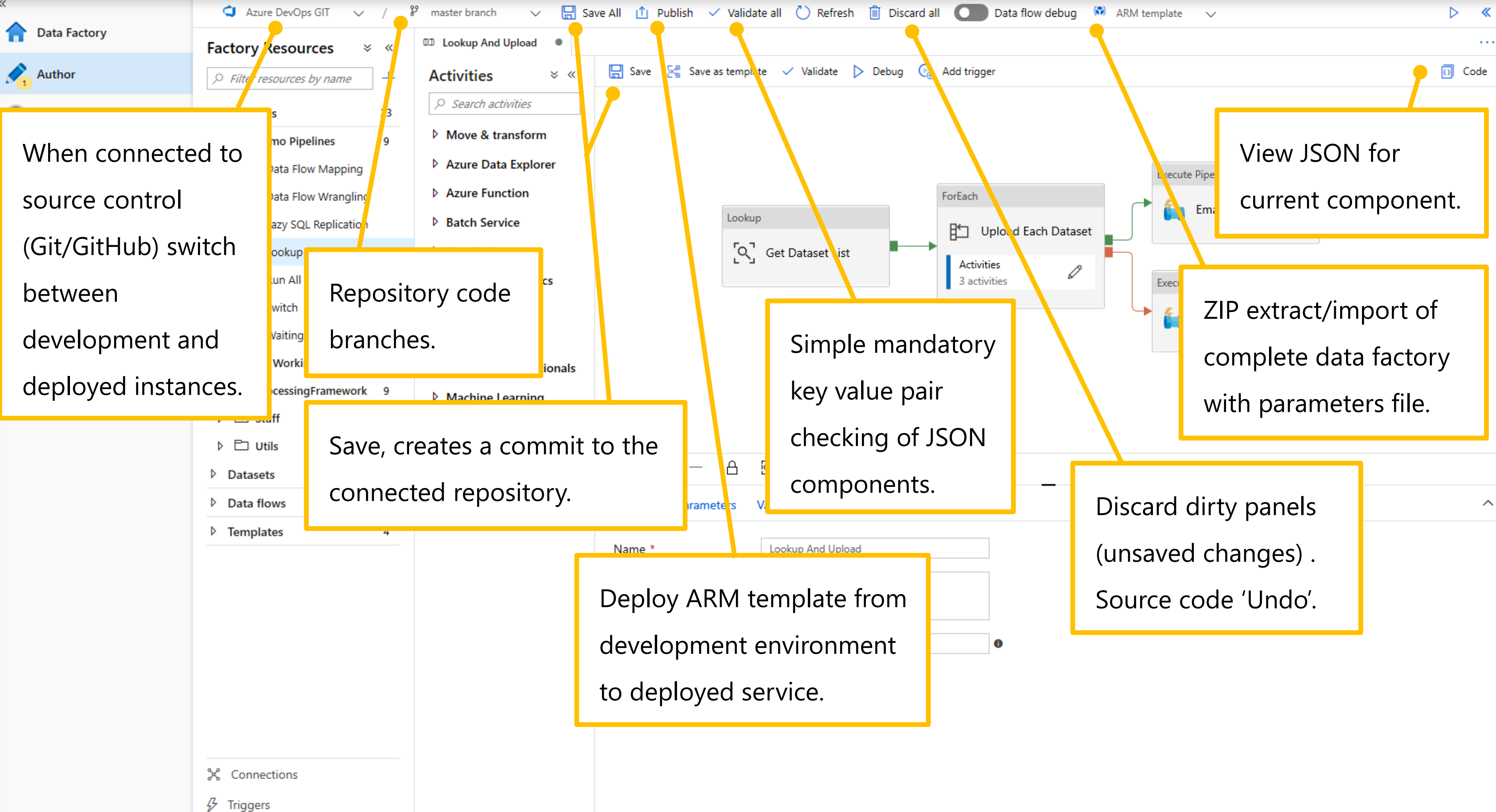
**Open Azure Data Factory Studio**  
Start authoring and monitoring your data pipelines and data flows.

[Open](#) 



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

[Learn more](#) 



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Simple dynamic demo pipeline

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Debug the Control Flow.

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Get a cluster ready.

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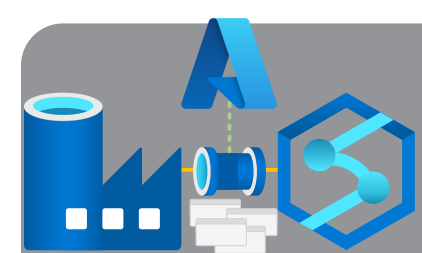
Learn more

Connections

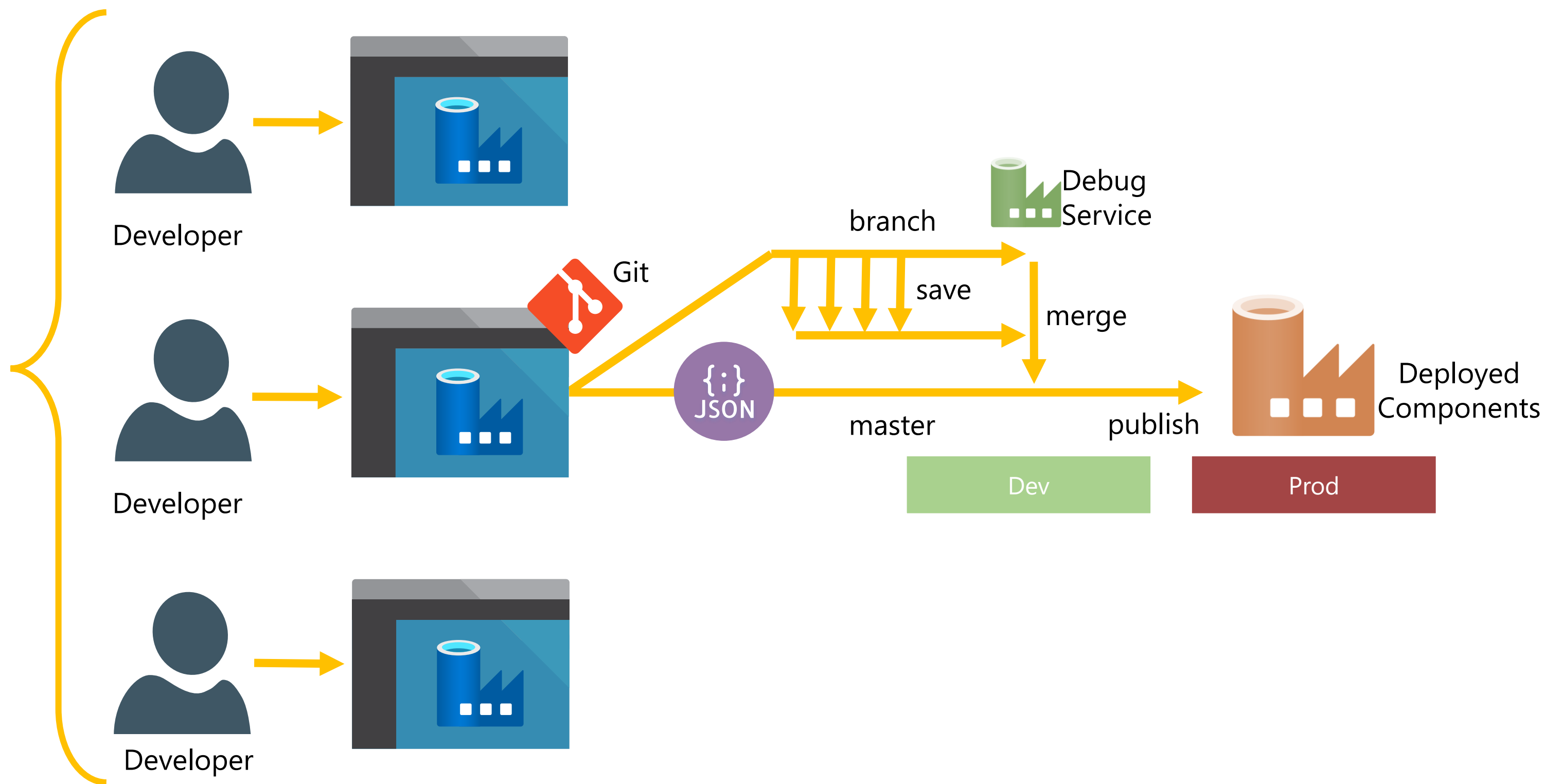
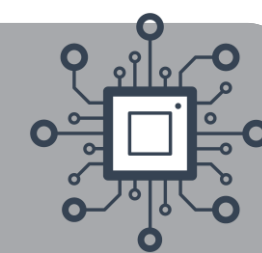
Triggers

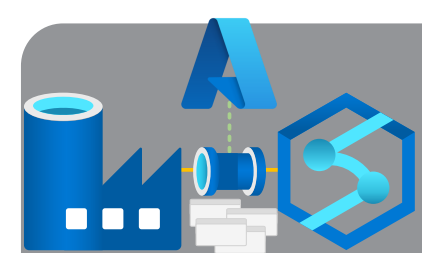
Debug the Control Flow.

Run the pipeline.

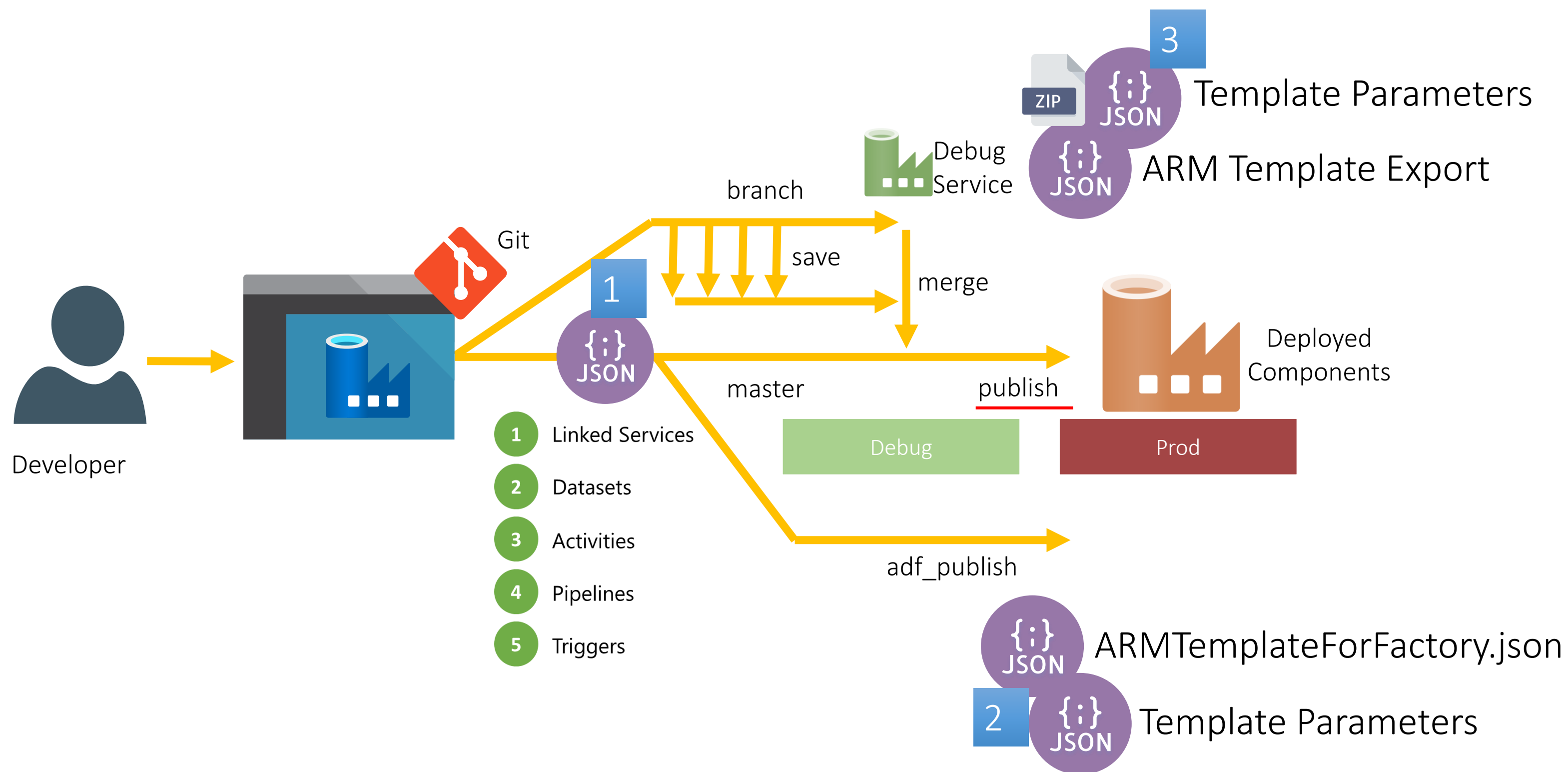
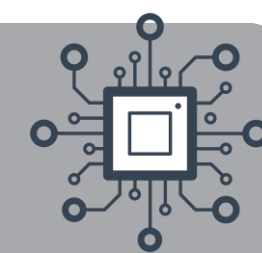


# Data Factory Continuous Integration





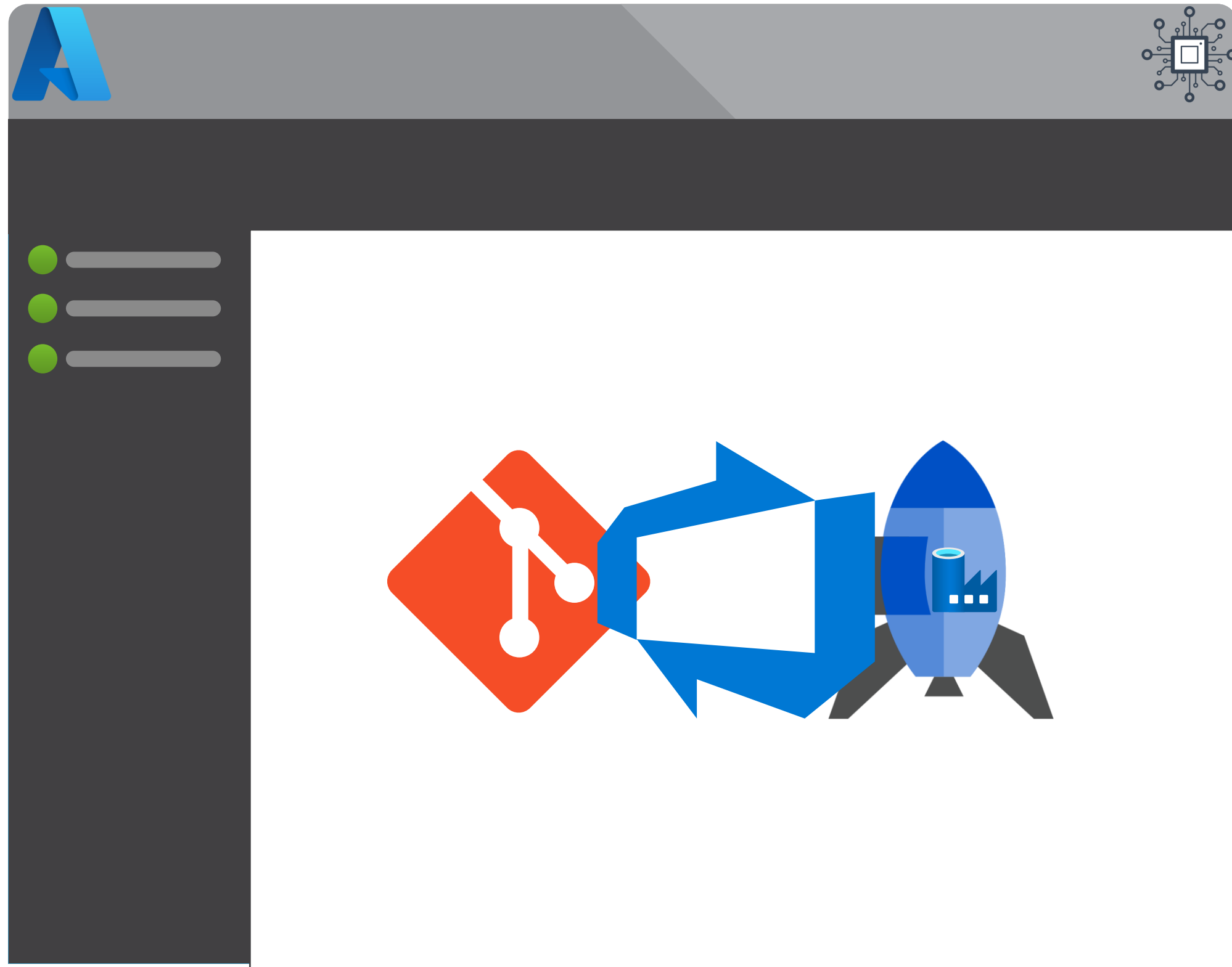
# Getting Our ADF Source Code



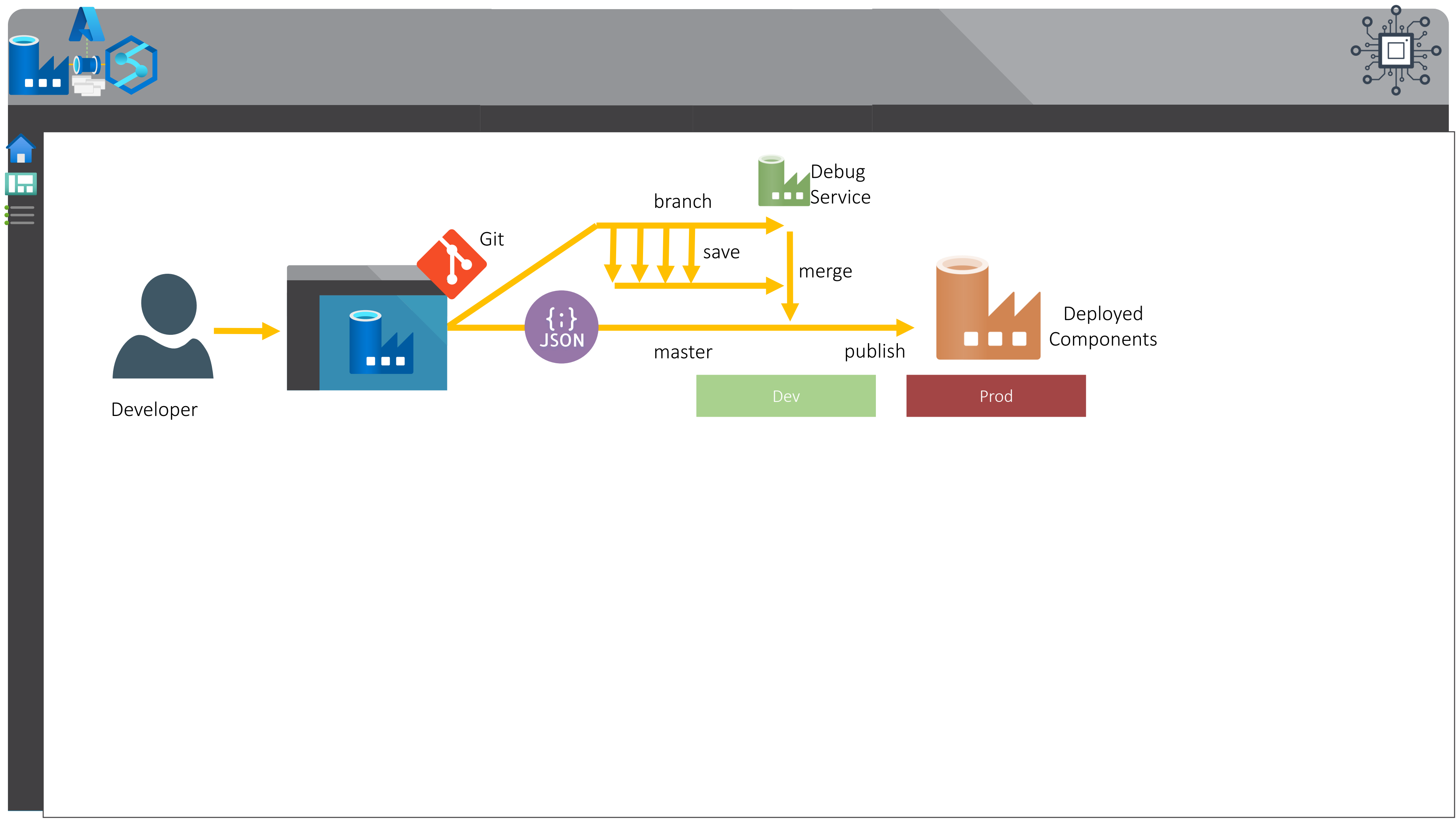


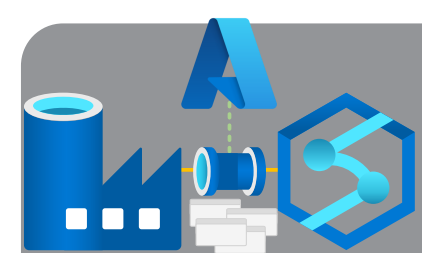
# Module 11

CI/CD



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

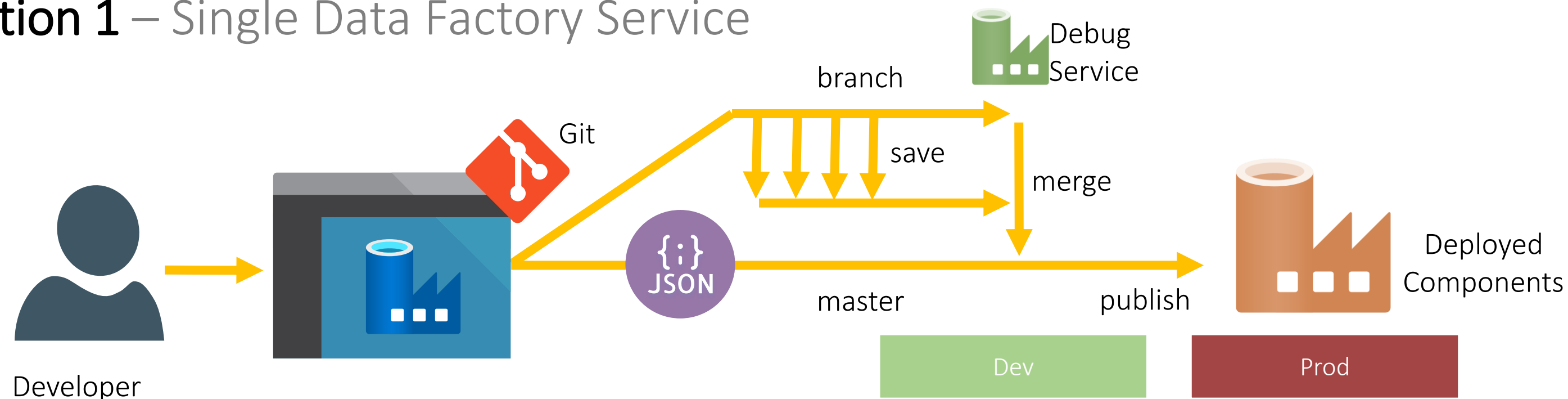




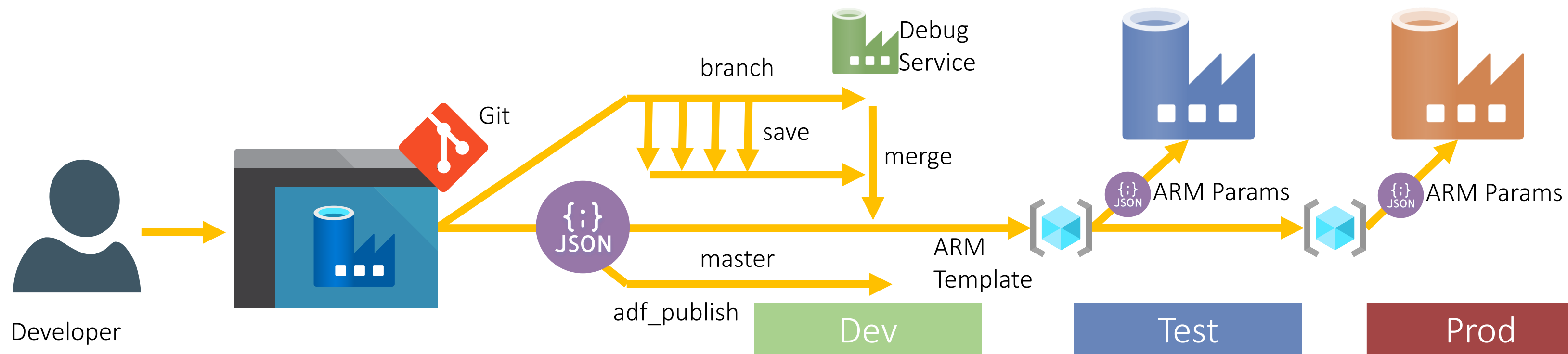
# Data Factory Continuous Delivery



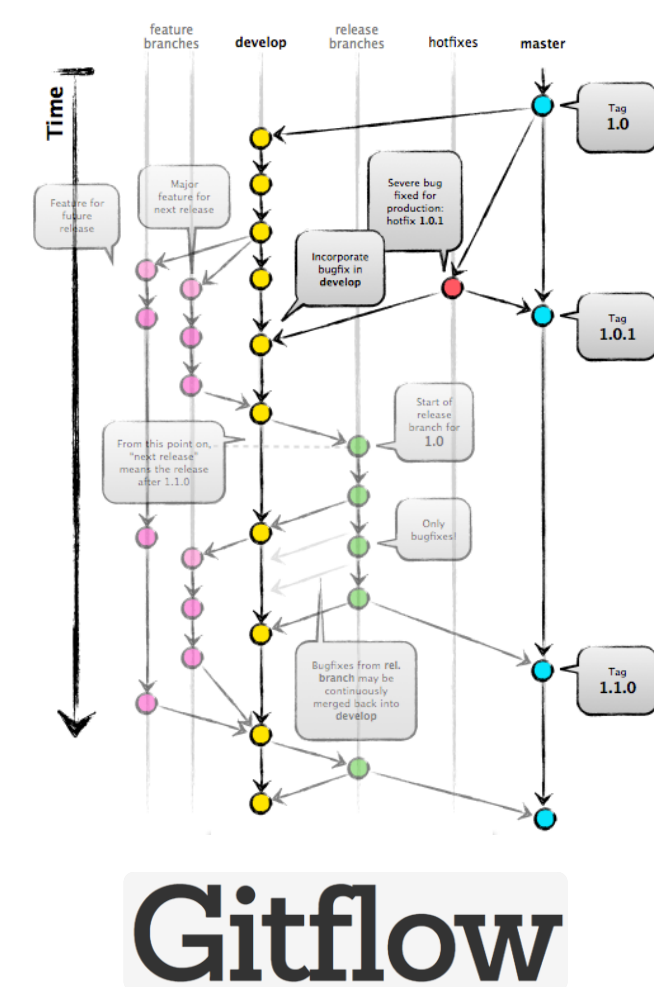
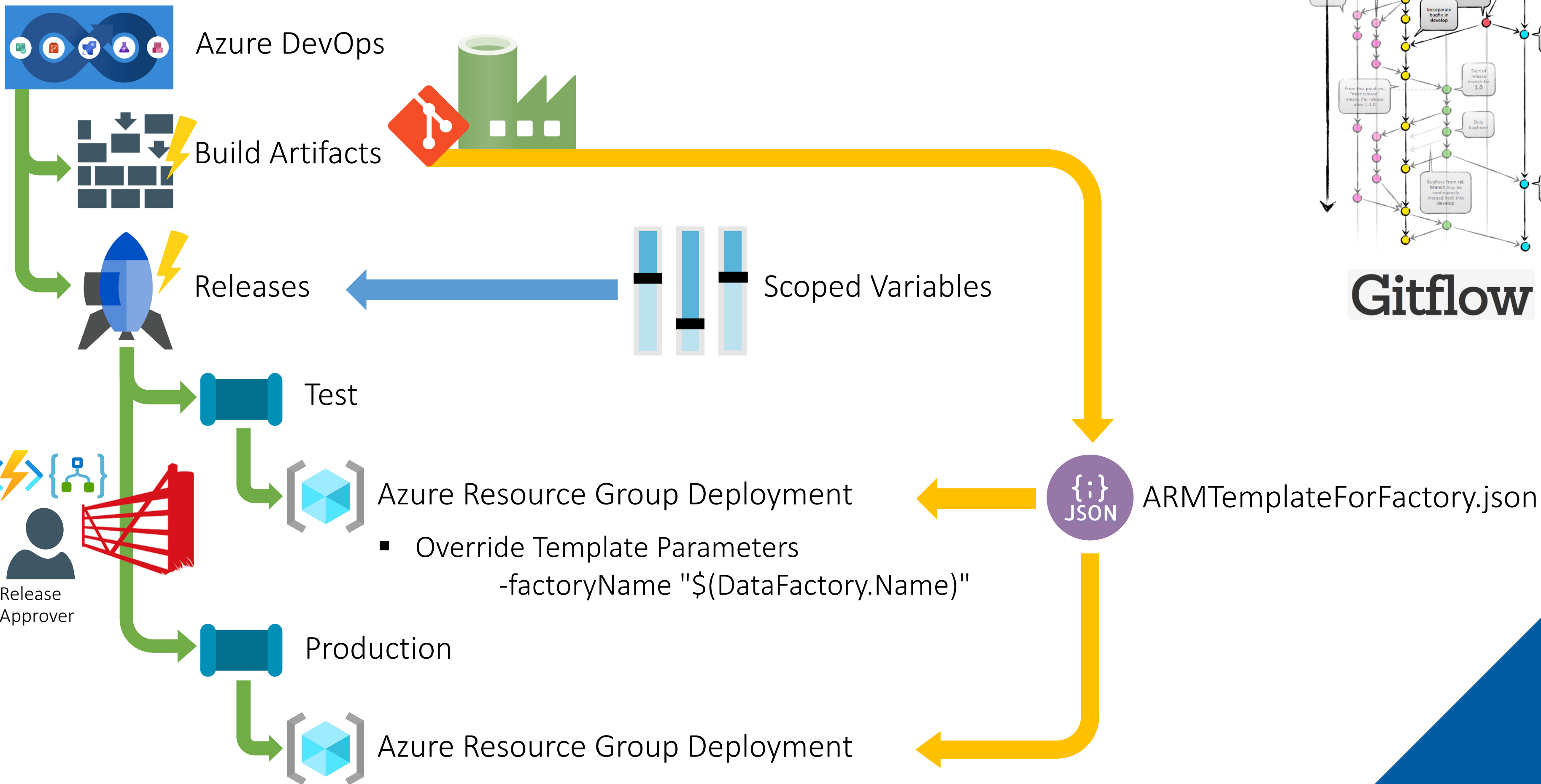
## Option 1 – Single Data Factory Service



## Option 2 – ARM Templates for Multiple Data Factory Services

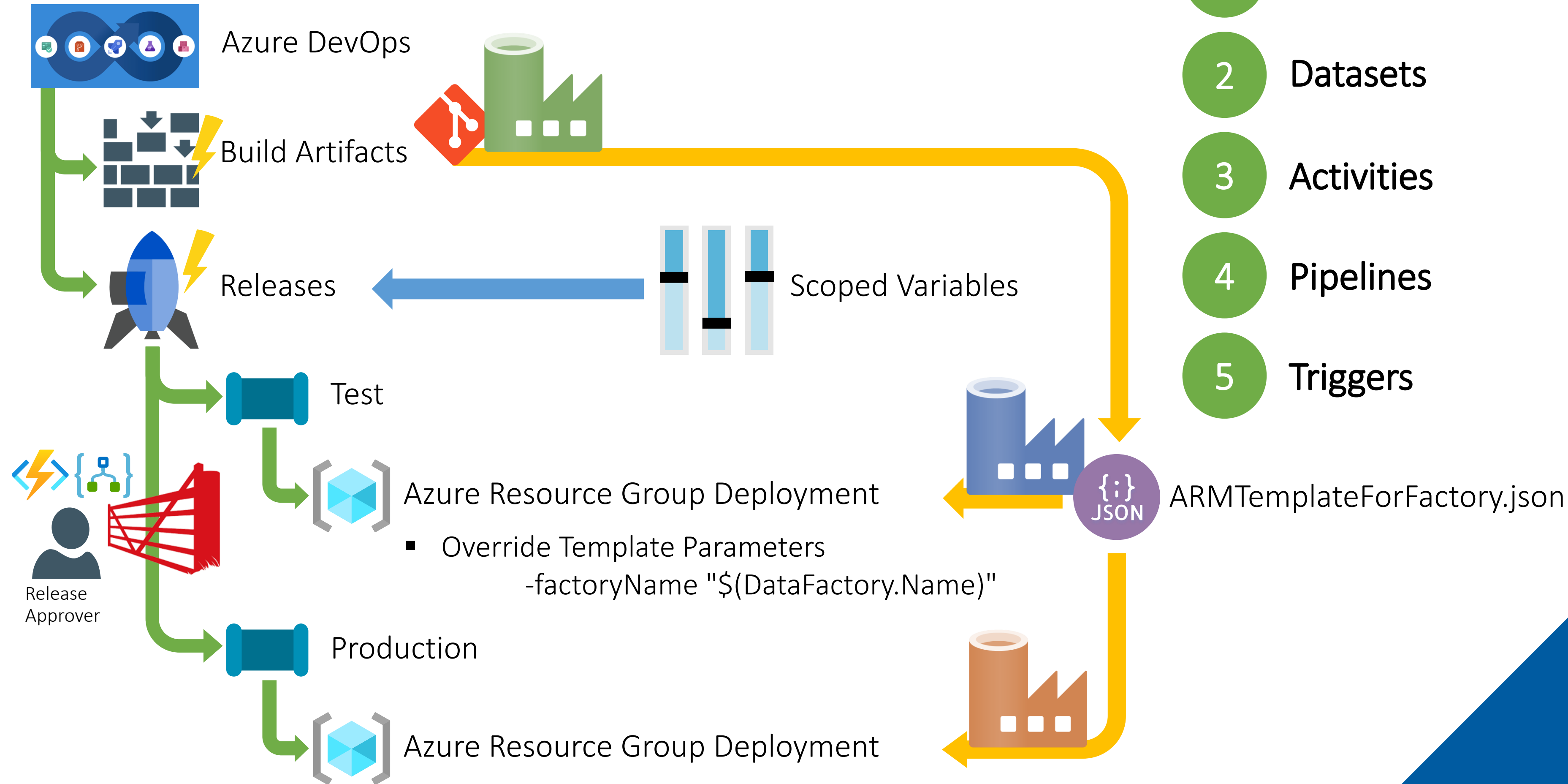


# Data Factory Continuous Delivery



# Data Factory Continuous Delivery

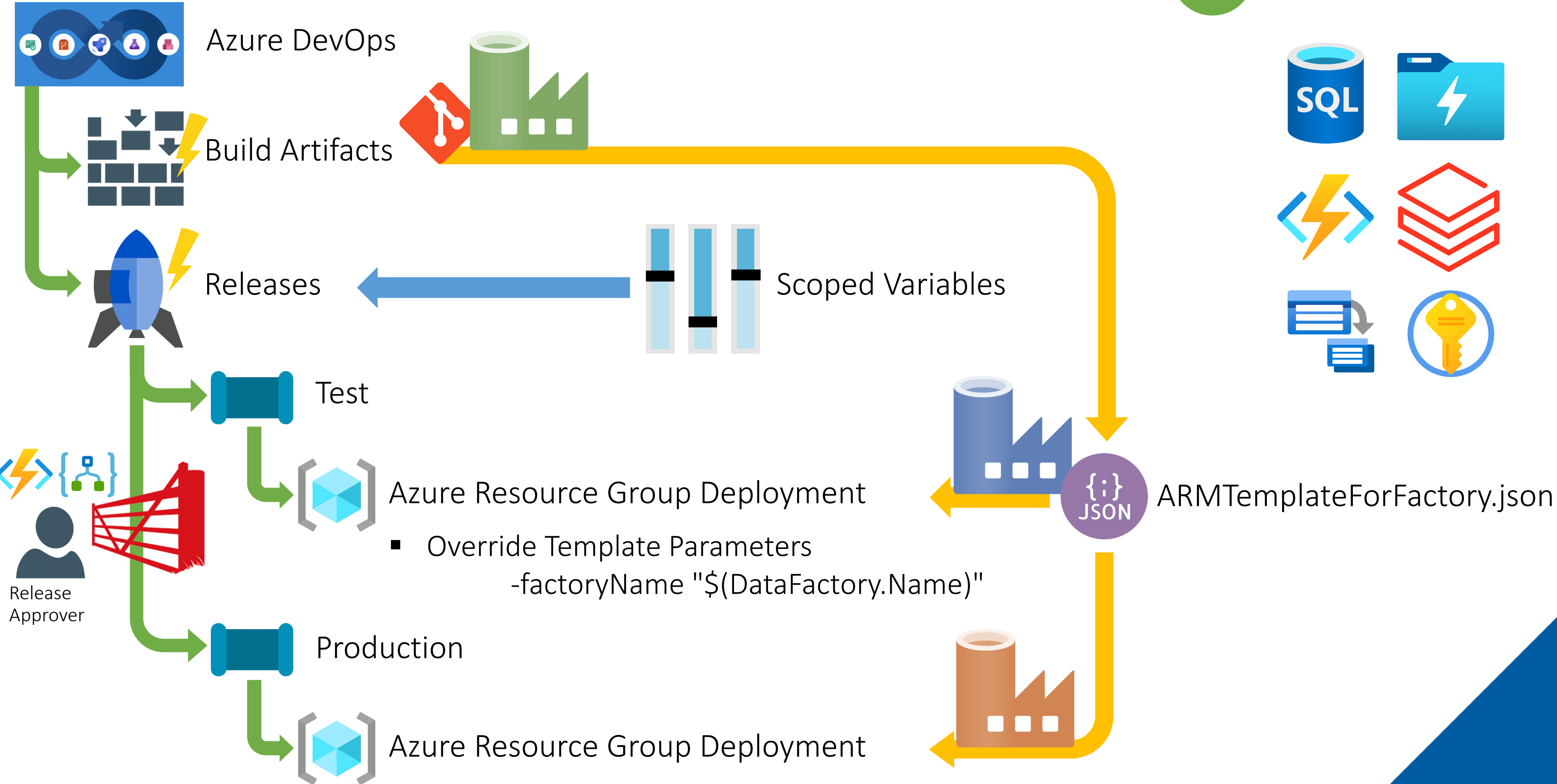
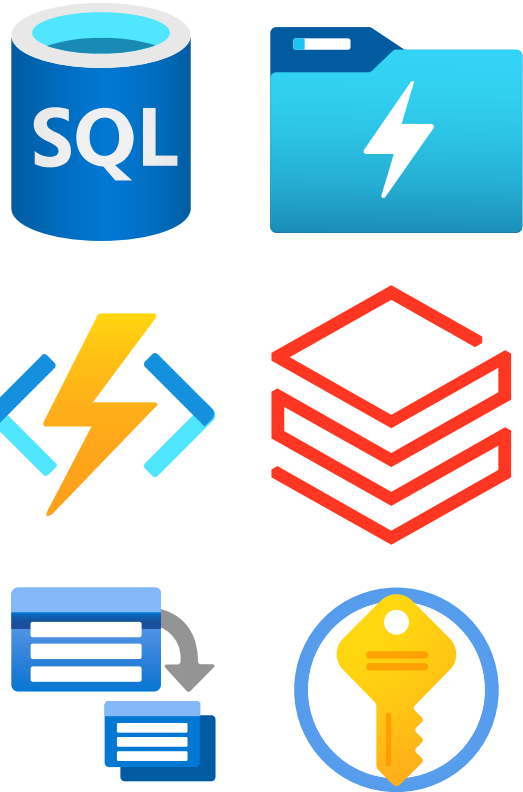
- 1 Linked Services
- 2 Datasets
- 3 Activities
- 4 Pipelines
- 5 Triggers



# Data Factory Continuous Delivery

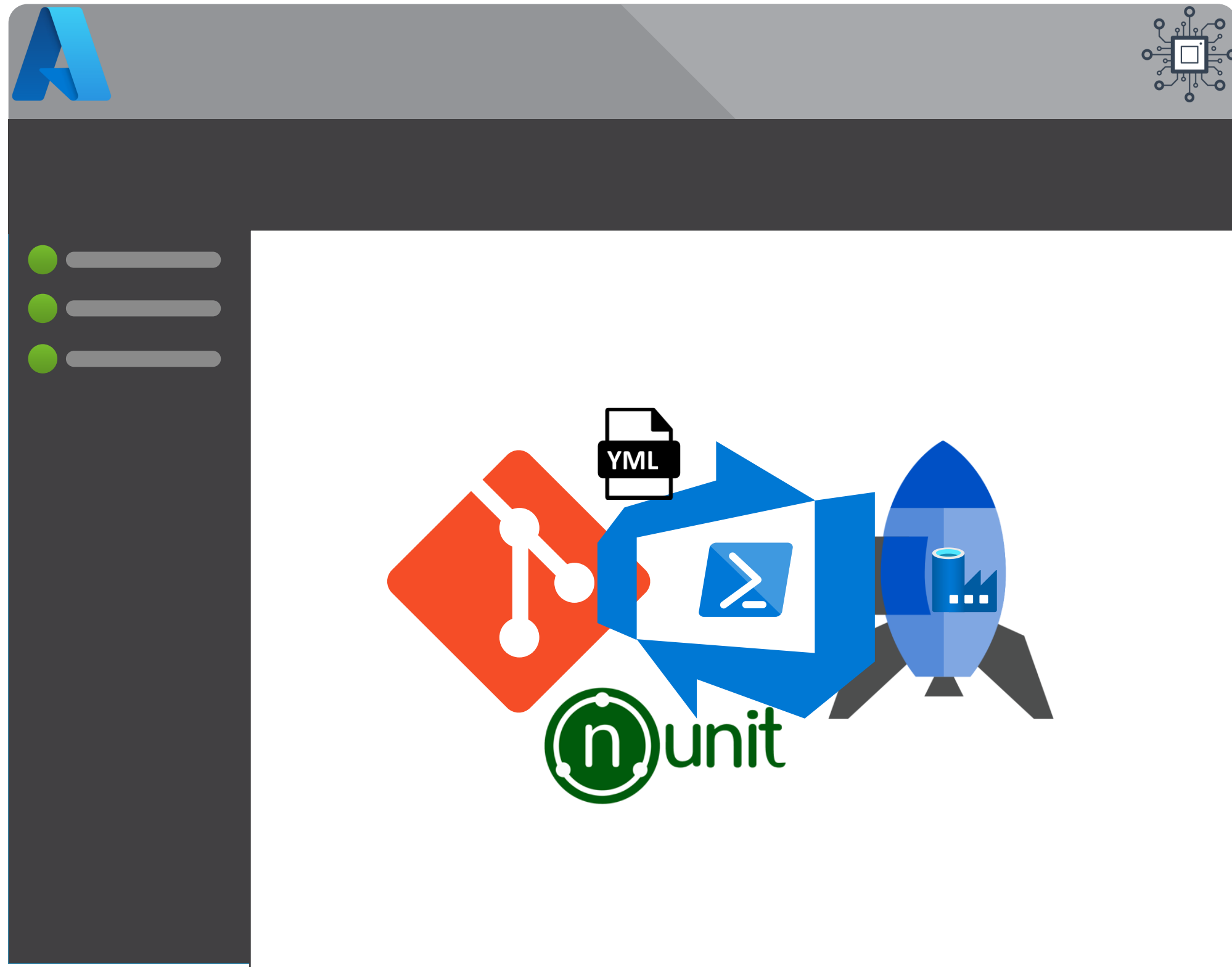
1

Linked Services



# Module 11

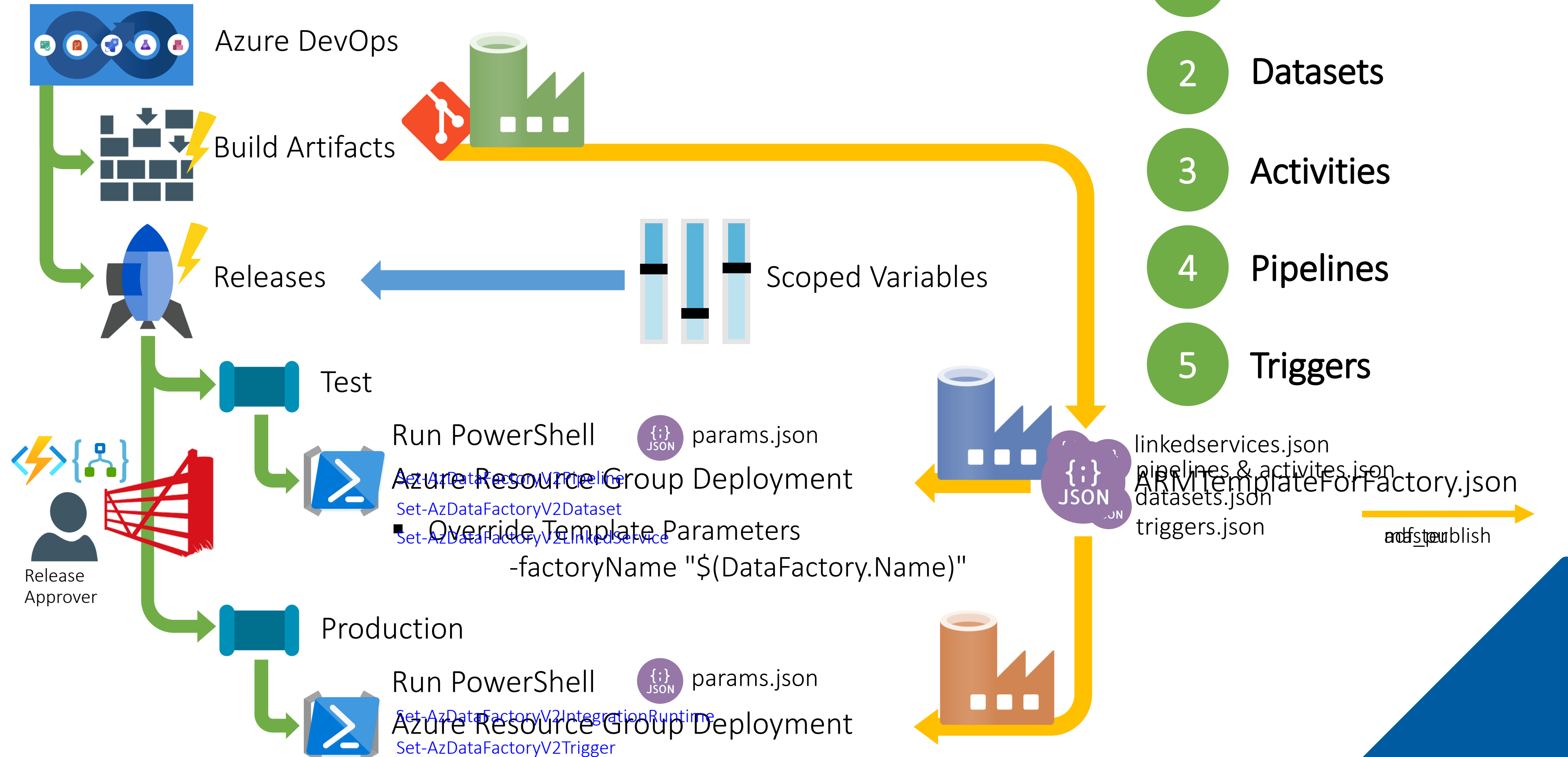
CI/CD



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

# Data Factory Continuous Delivery

- Option 3

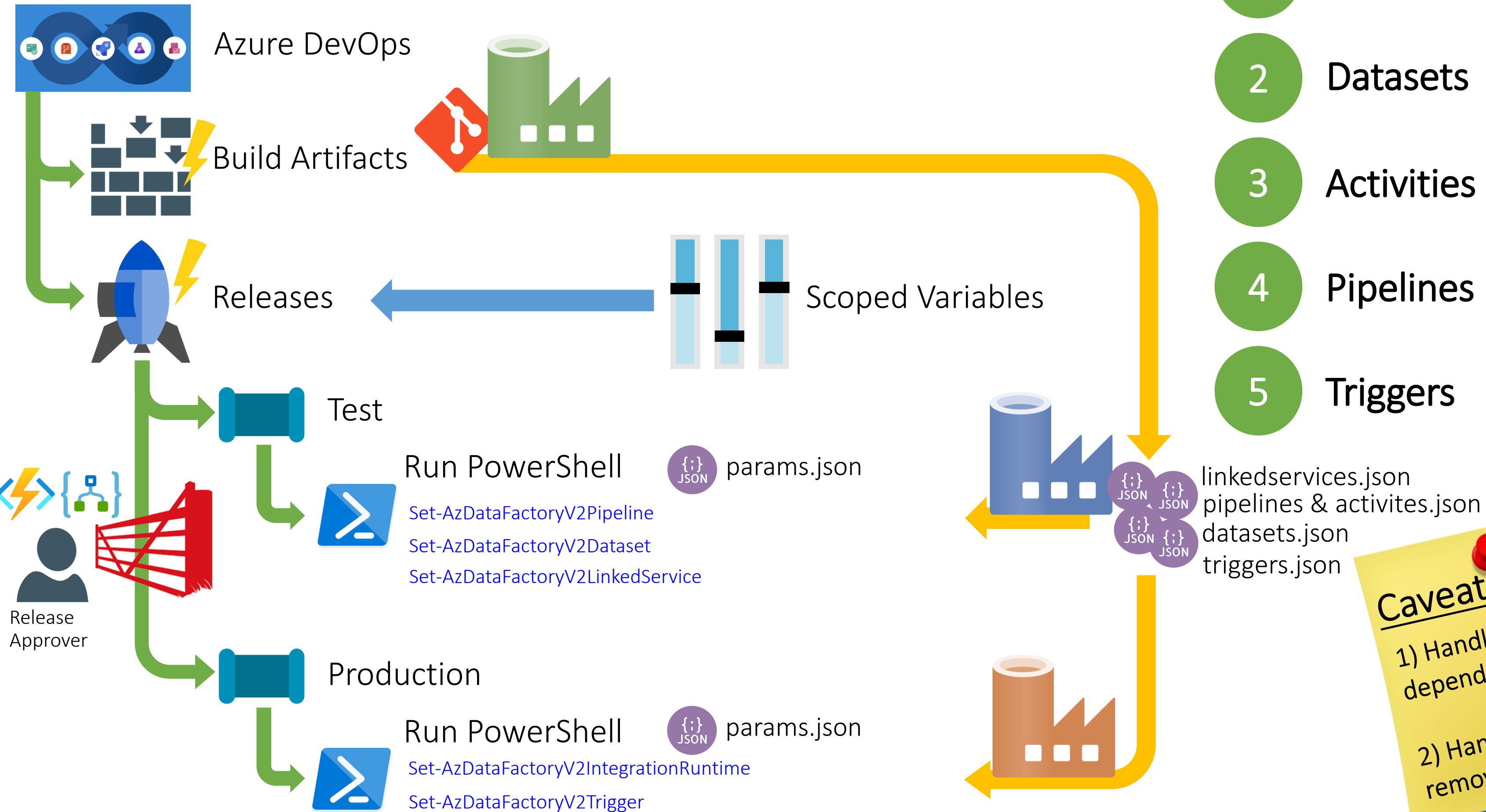




# Data Factory Continuous Delivery

- Option 3

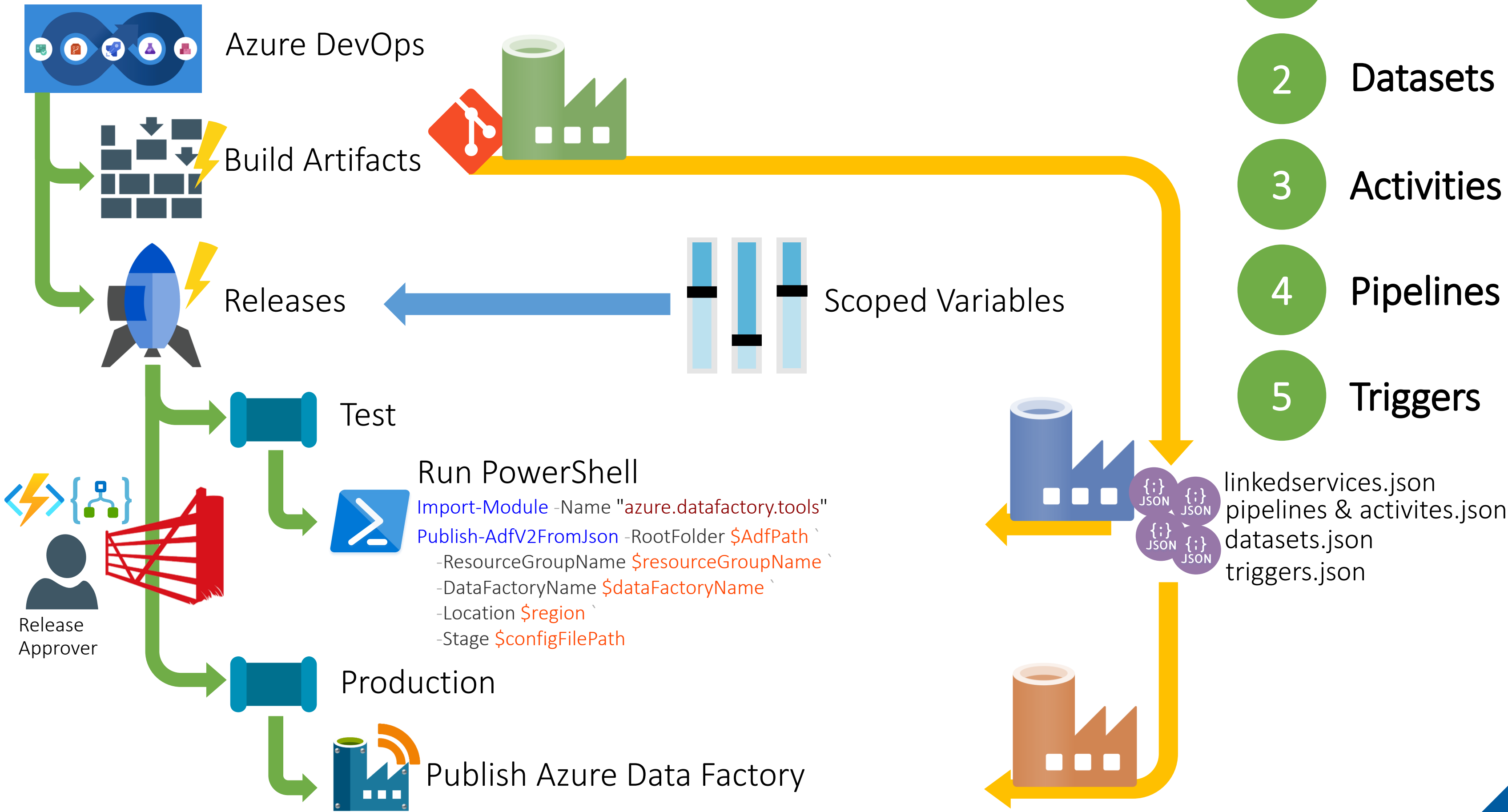
- 1 Linked Services
- 2 Datasets
- 3 Activities
- 4 Pipelines
- 5 Triggers

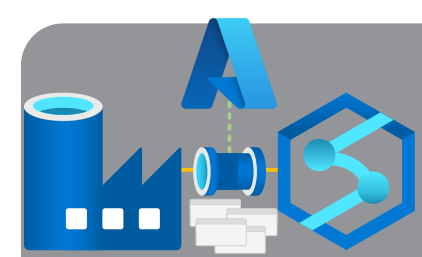


# Data Factory Continuous Delivery

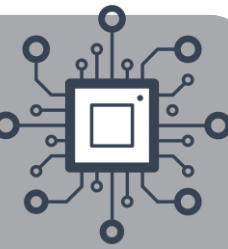
- Option 4

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





# Deployment Options Summary

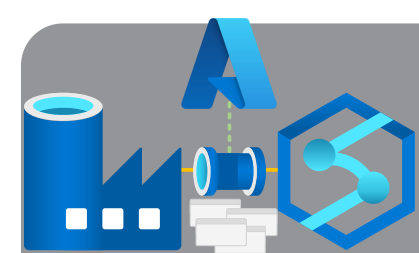


**Option 1** – Use a single Data Factory service.

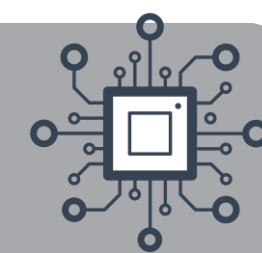
**Option 2** – ARM Templates for multiple Data Factory services (environments).

**Option 3** – Use PowerShell cmdlets for each ADF artifact.

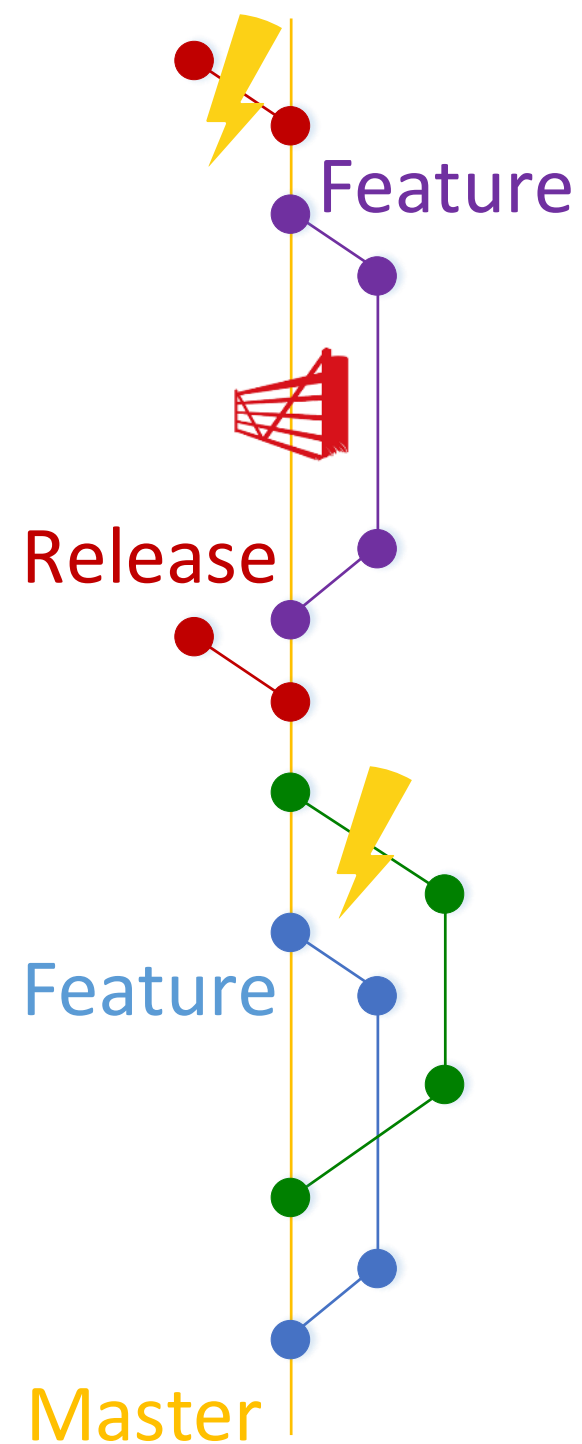
**Option 4** – Use a PowerShell module or custom Azure DevOps task.



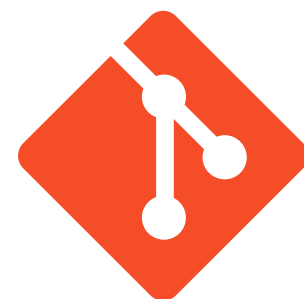
# Data Factory DevOps Story Summary



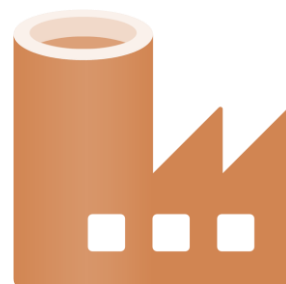
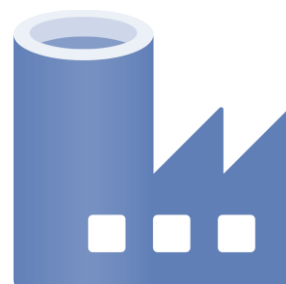
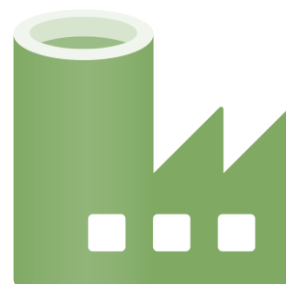
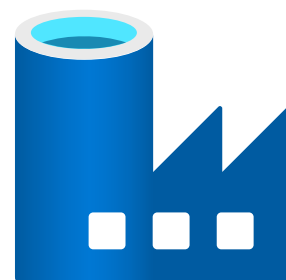
What is your code branching strategy?



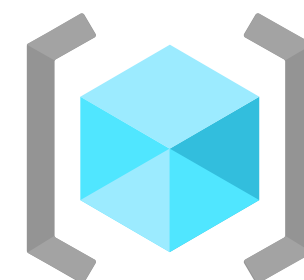
Which source control tool to use?



How many environments do we want?



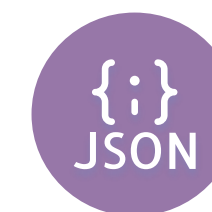
What deployment method do we want to use?



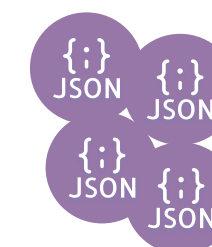
What artifacts are we going to use?...

OR

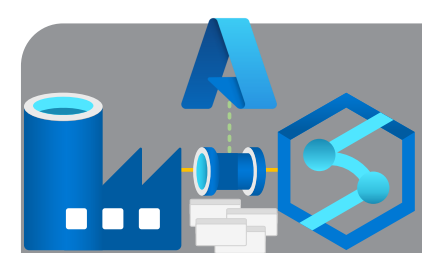
How much control do you want?



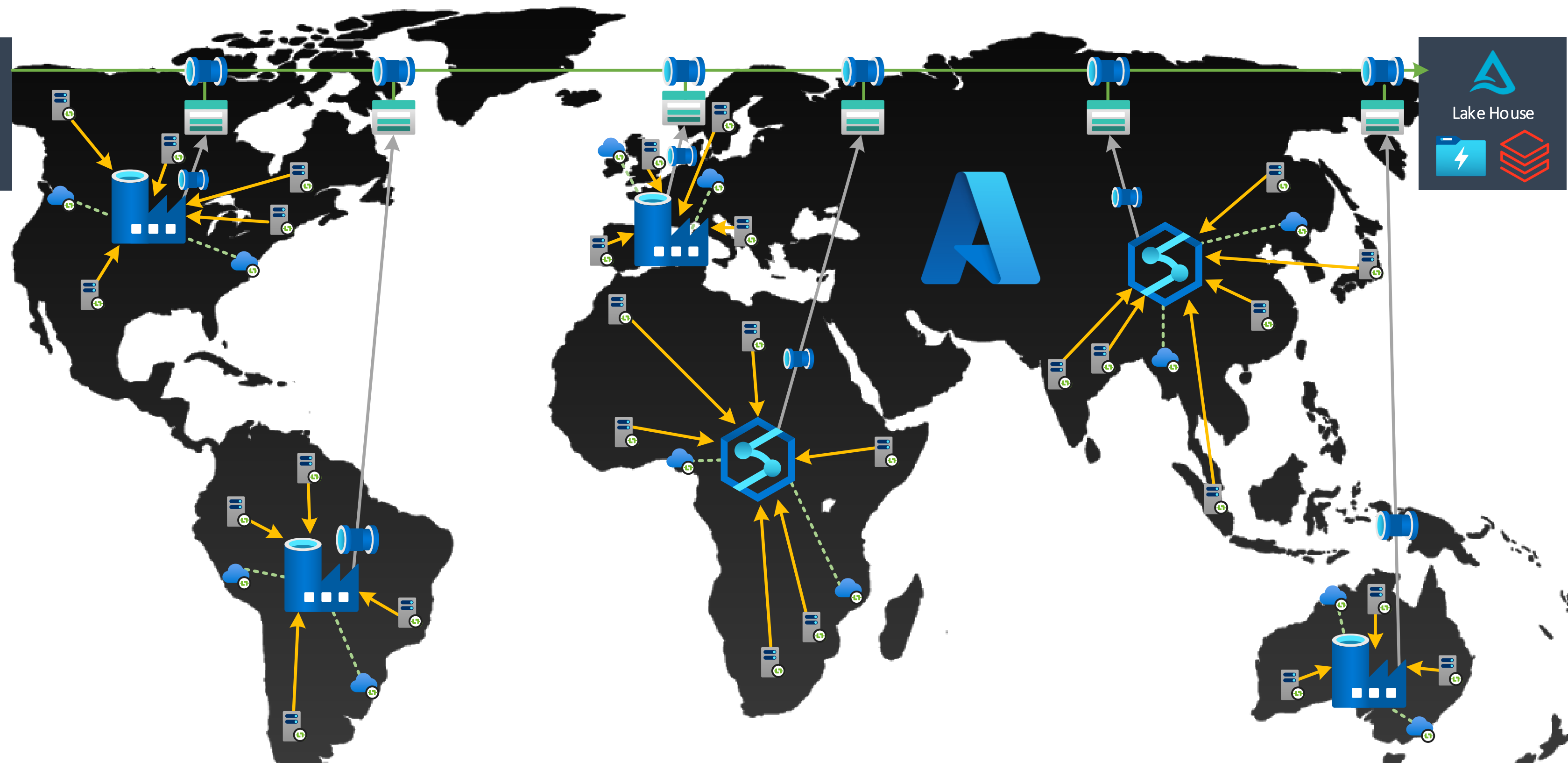
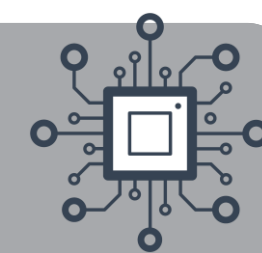
ARMTemplate  
ForFactory.json

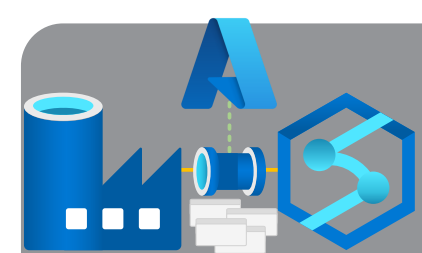


linkedservices.json  
pipelines &  
activities.json  
datasets.json  
triggers.json

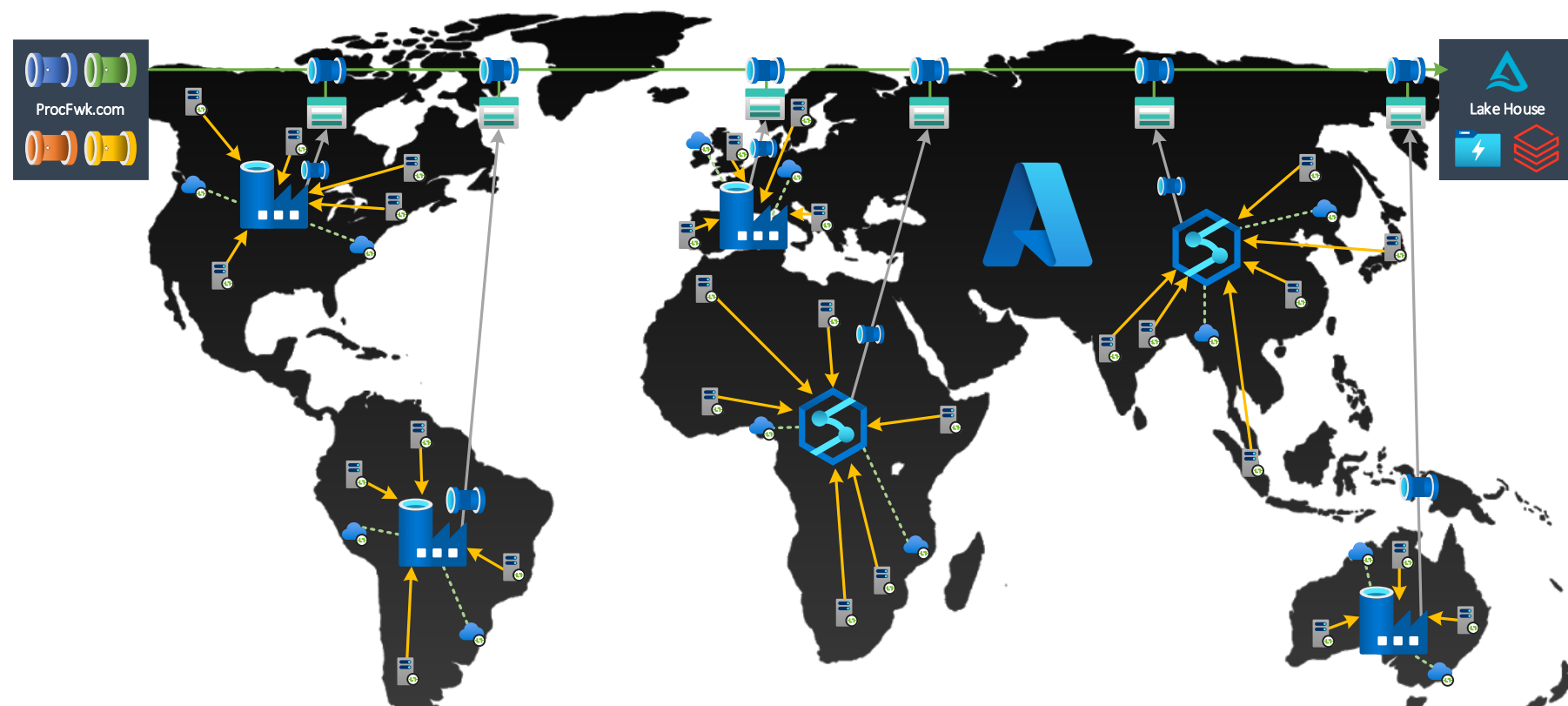
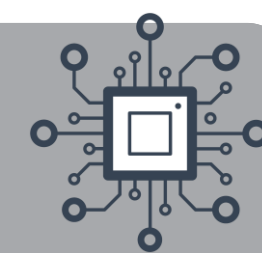


# Hub & Spoke Integration Architecture

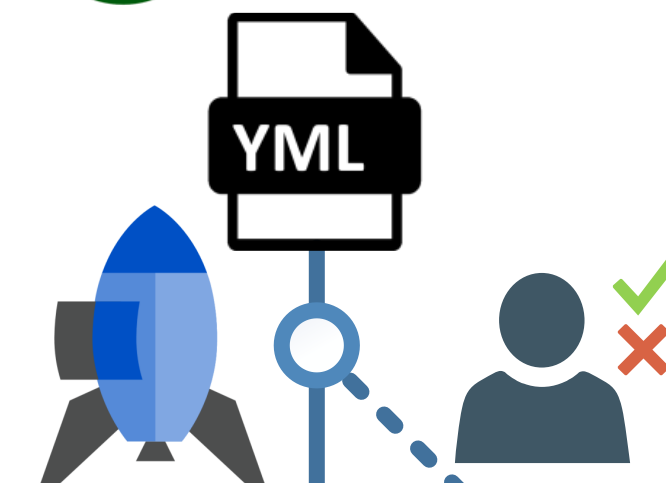




# How Small Can Deployments Be?

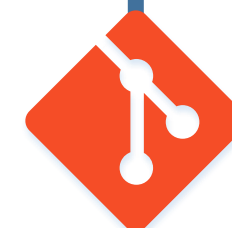
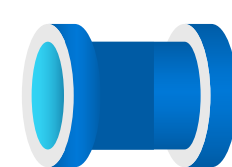


```
UPDATE [procfwk].[Pipelines] SET [Enabled] = 1  
WHERE [PipelineId] = SCOPE_IDENTITY();
```

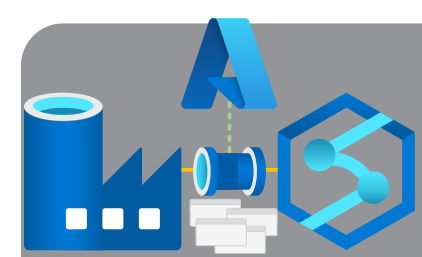


```
MERGE INTO [procfwk].[Pipelines] AS tgt  
USING  
  @Pipelines AS src  
ON tgt.[OrchestratorId] = src.[OrchestratorId]  
AND tgt.[PipelineName] = src.[PipelineName]  
AND tgt.[StageId] = src.[StageId]  
/* ----- */
```

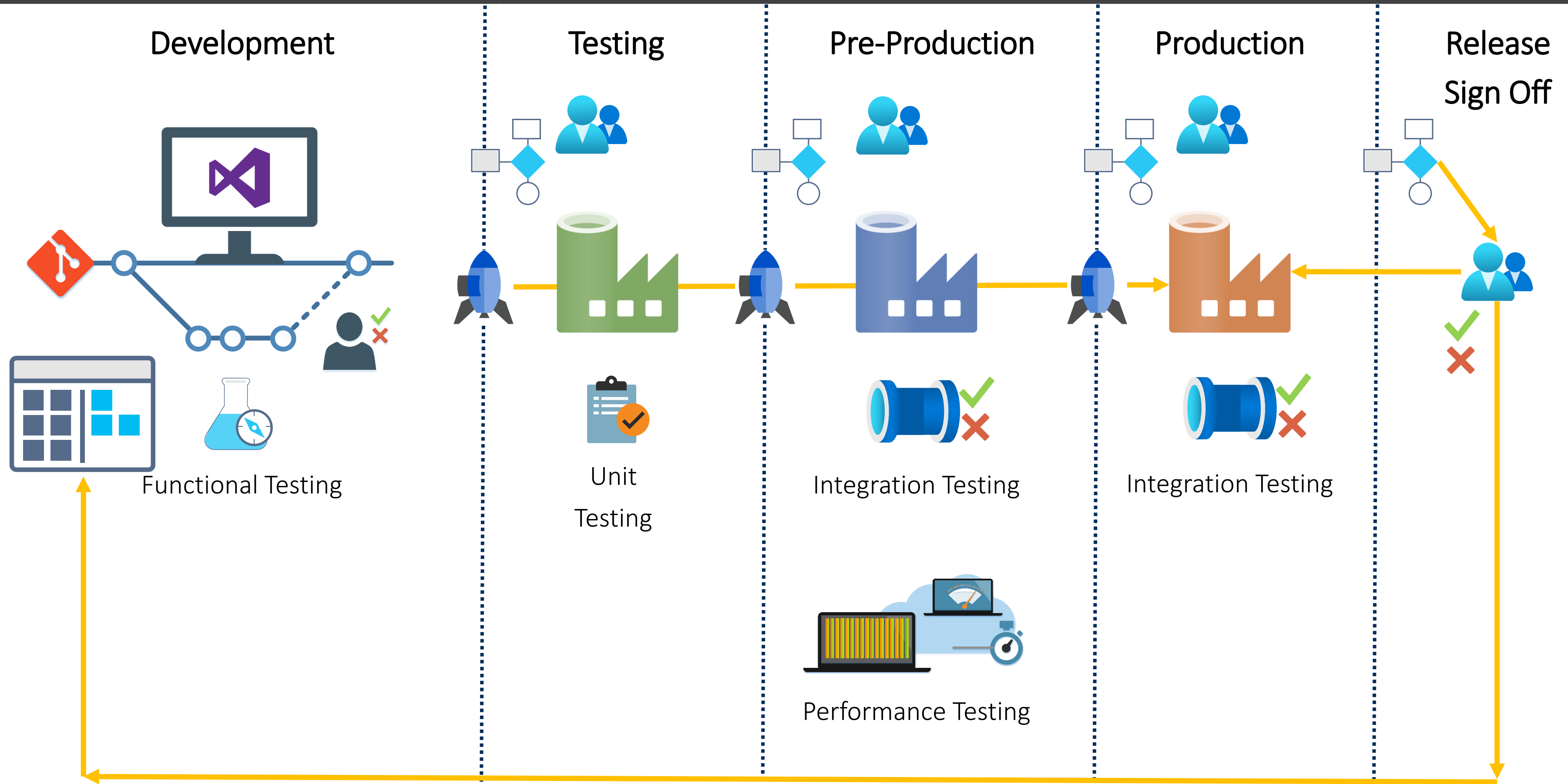
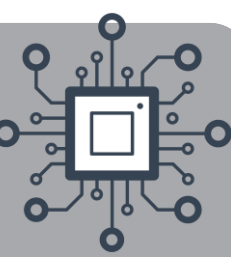
```
UPDATE [procfwk].[Pipelines] SET [Enabled] = 0  
WHERE [PipelineId] = SCOPE_IDENTITY();
```





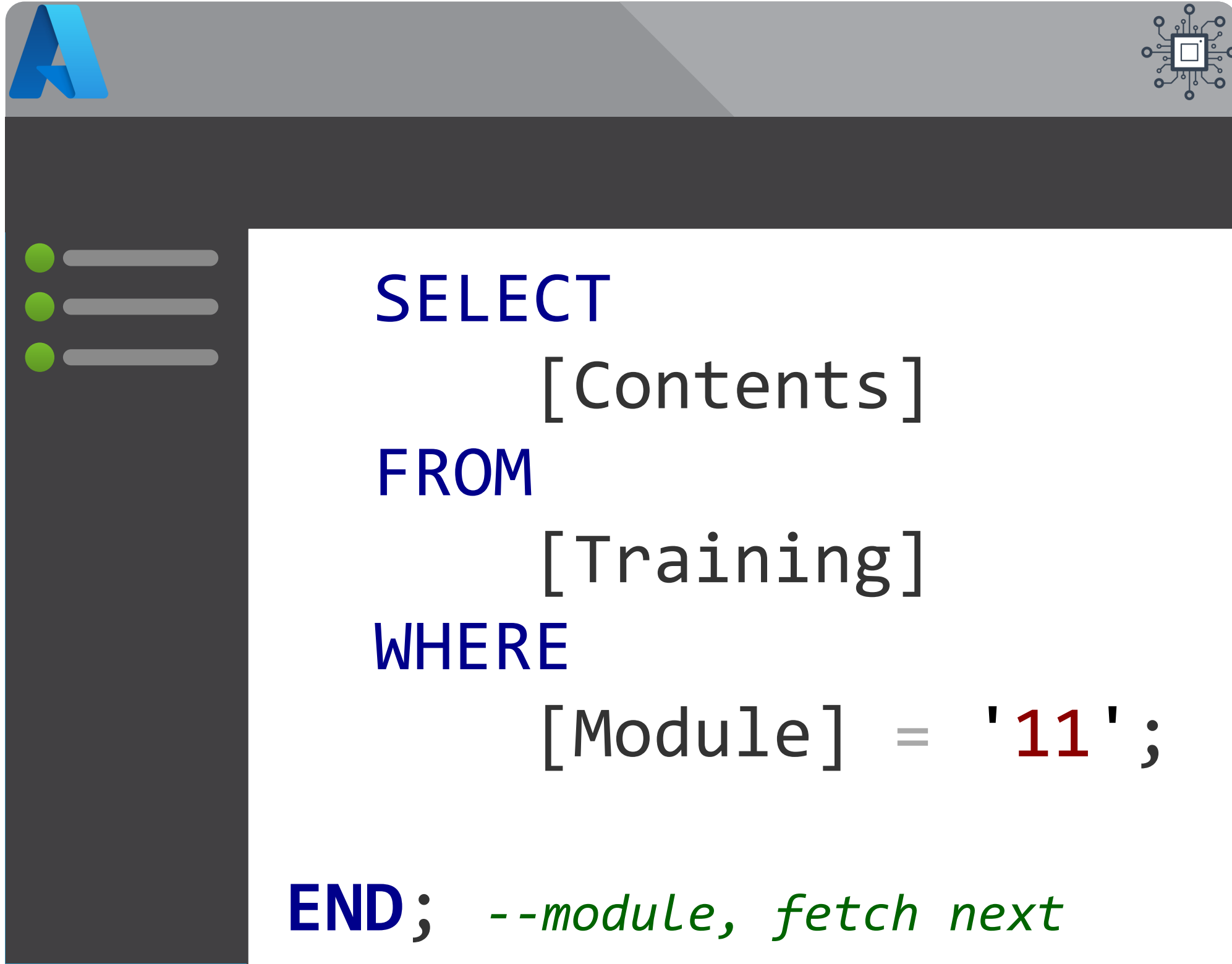


# Deployment Life Cycle & Gateway



# Module 11

CI/CD



- Source Control vs Developer UI
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