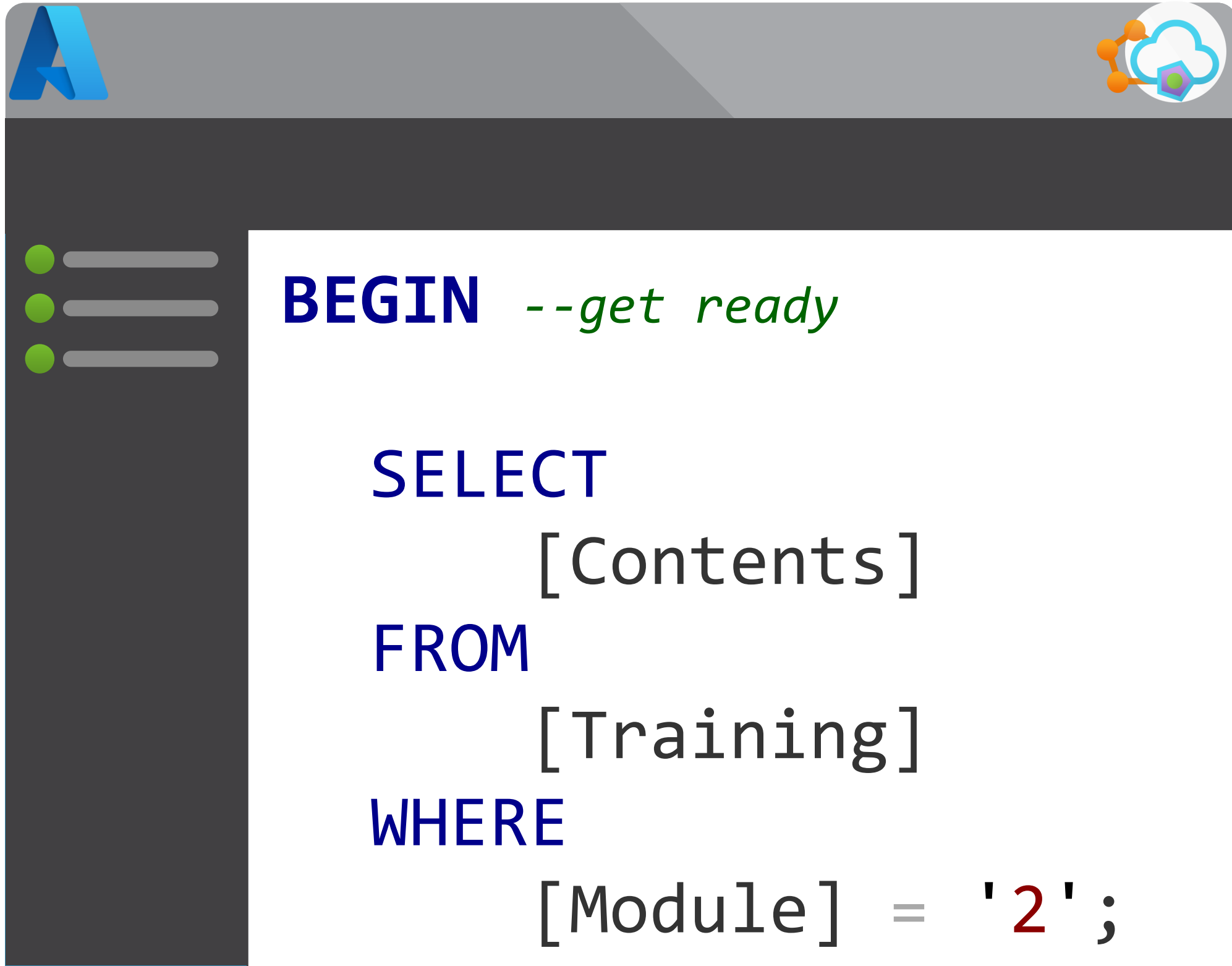


Module 2

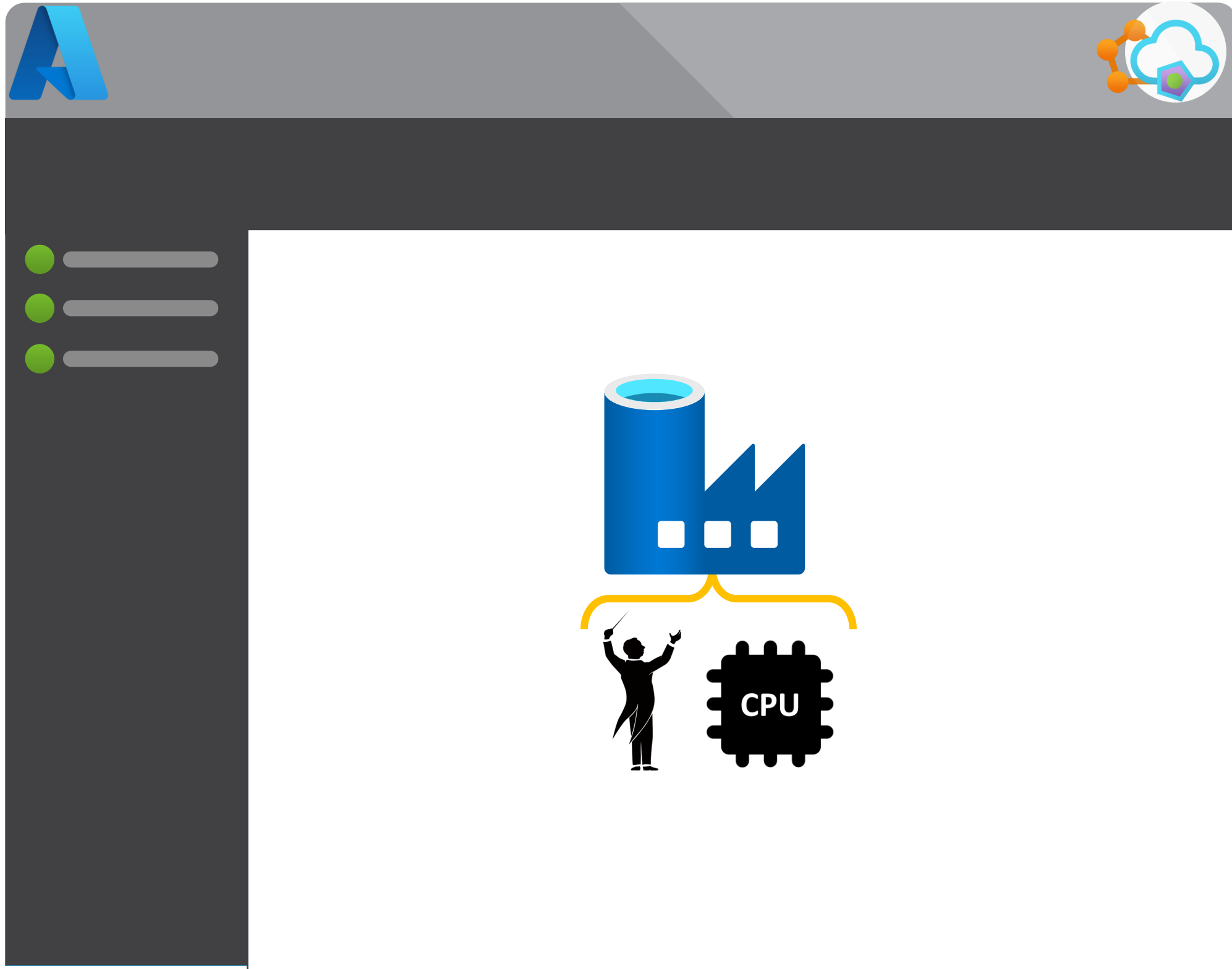
Integration Runtime Design Patterns



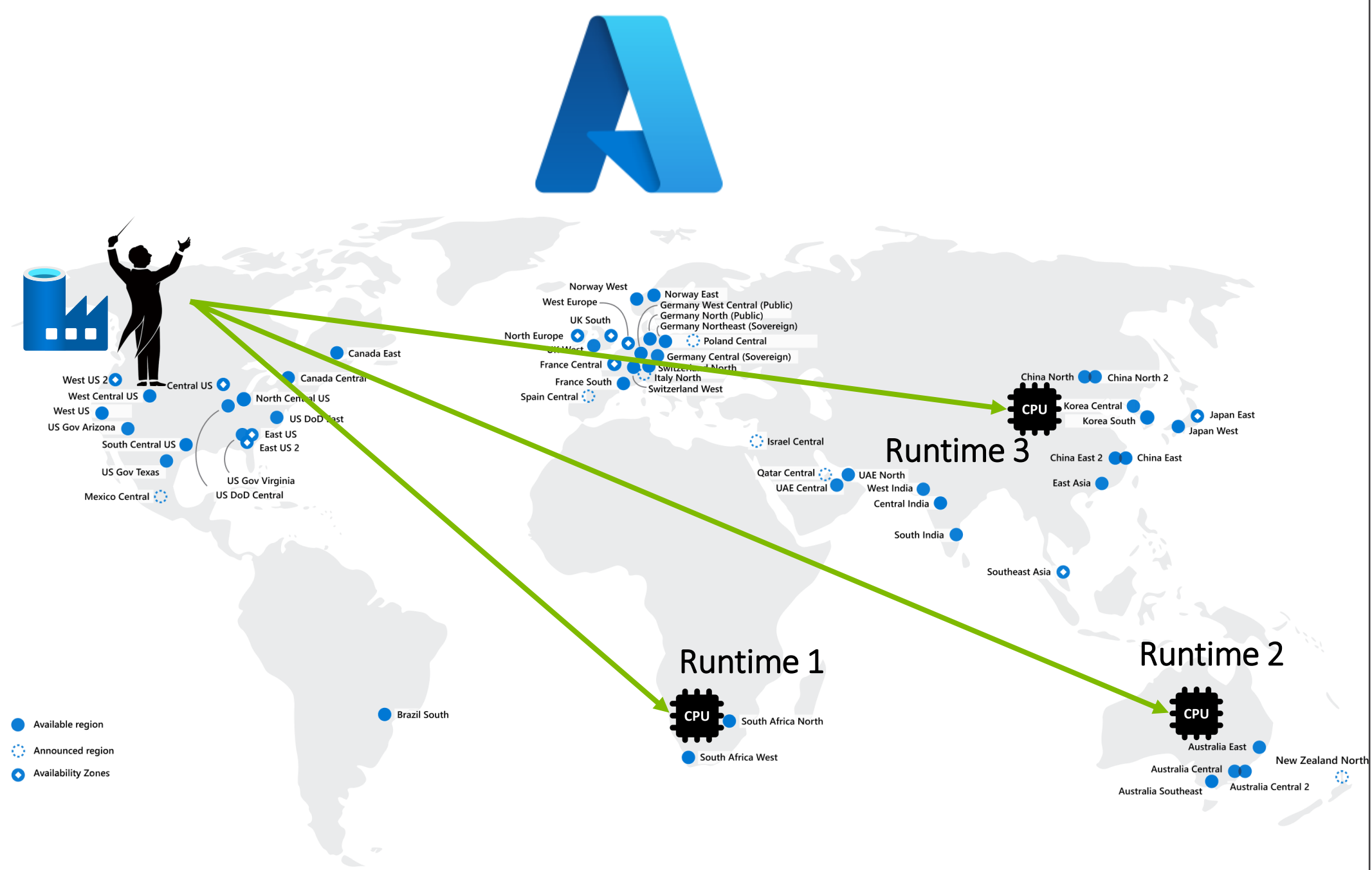
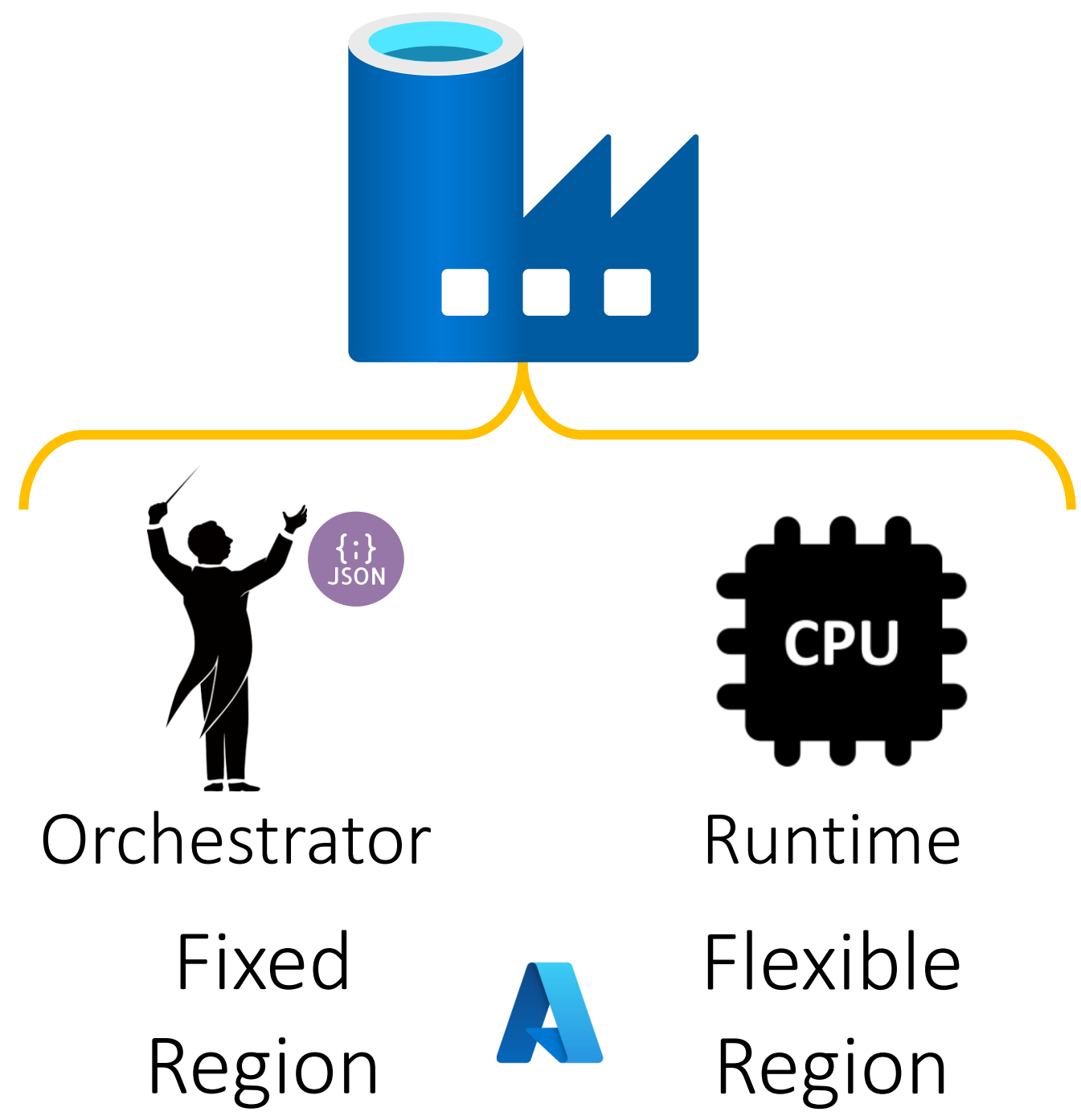
- Compute Types
 - Azure
 - Hosted
 - SSIS
- Patterns & Configuration

Module 2

Integration Runtime Design Patterns

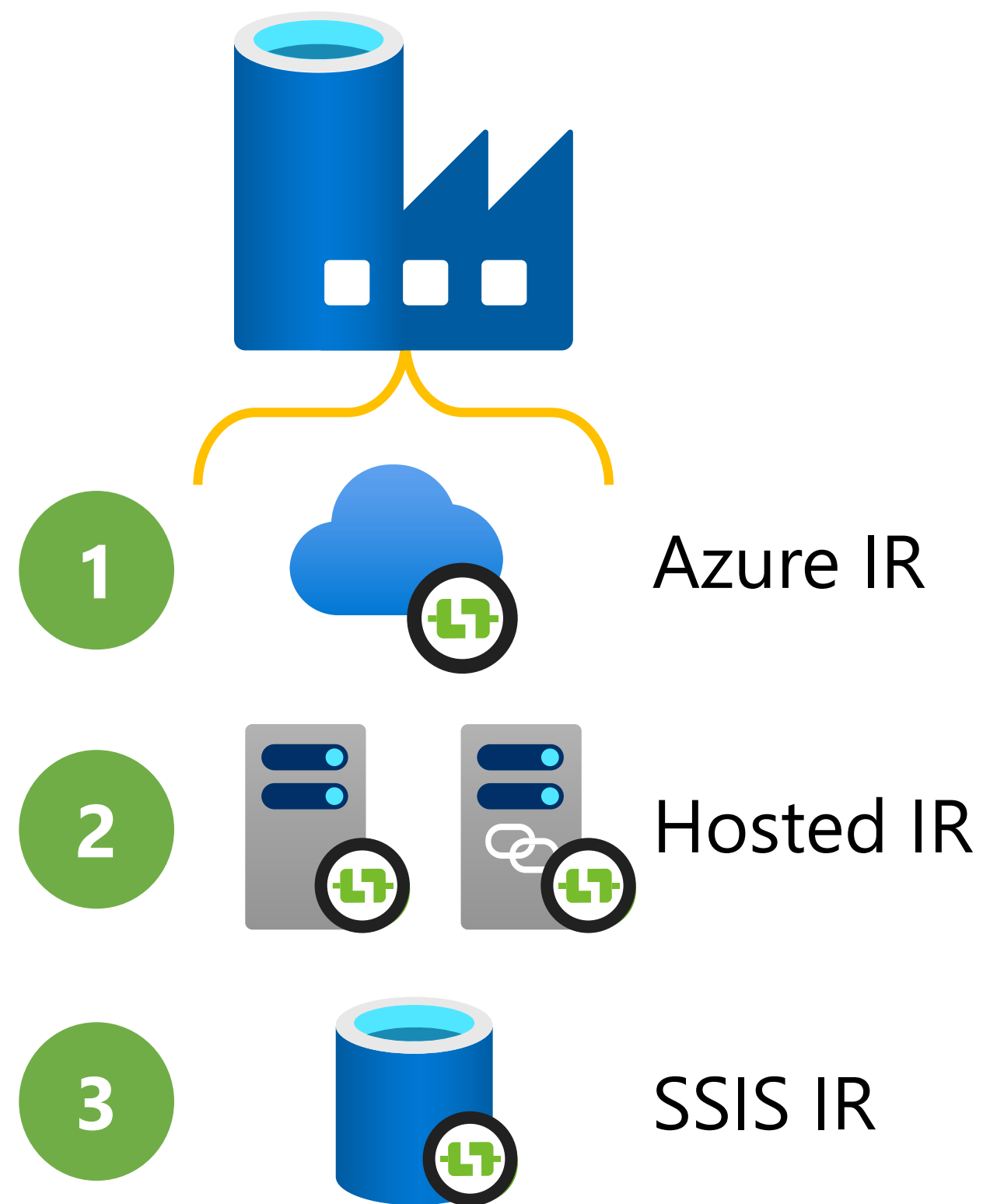


- Compute Types
 - Azure
 - Hosted
 - SSIS
- Patterns & Configuration



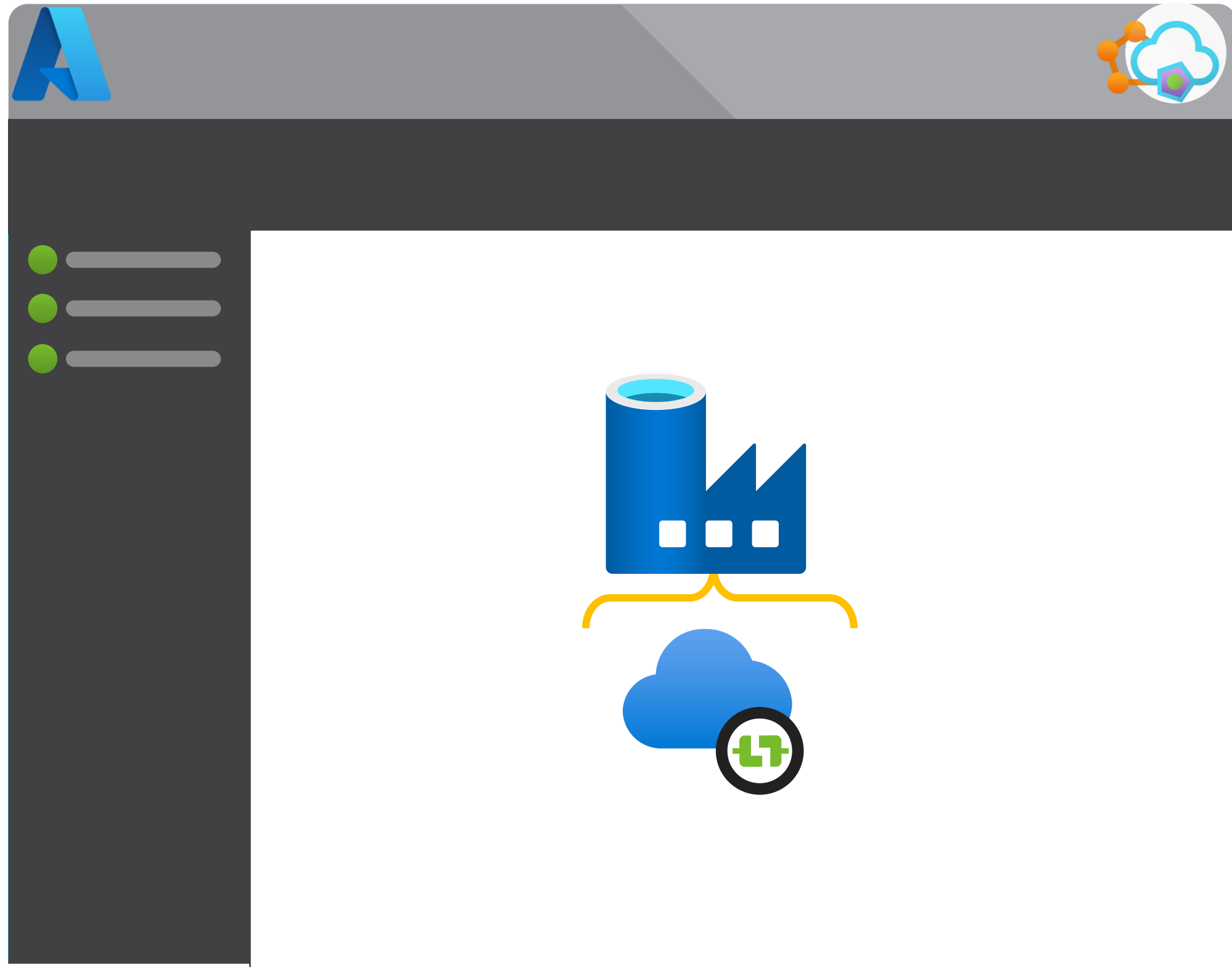


What can an Integration Runtime do?



Module 2

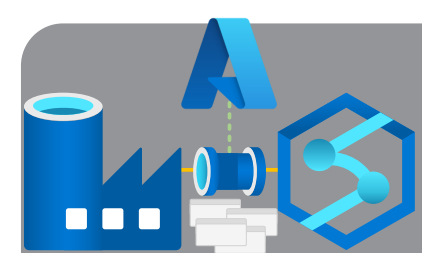
Integration Runtime Design Patterns



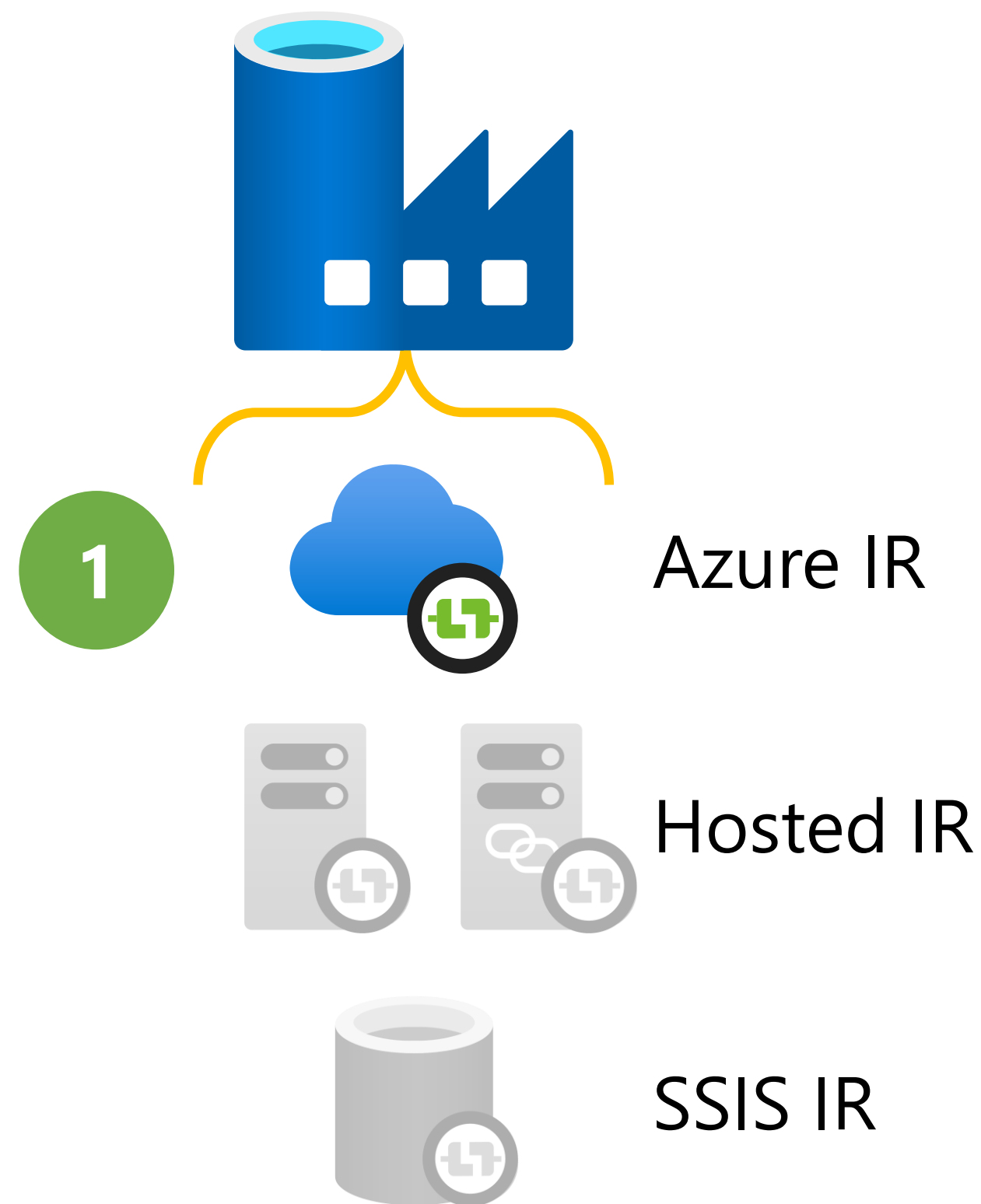
- Compute Types

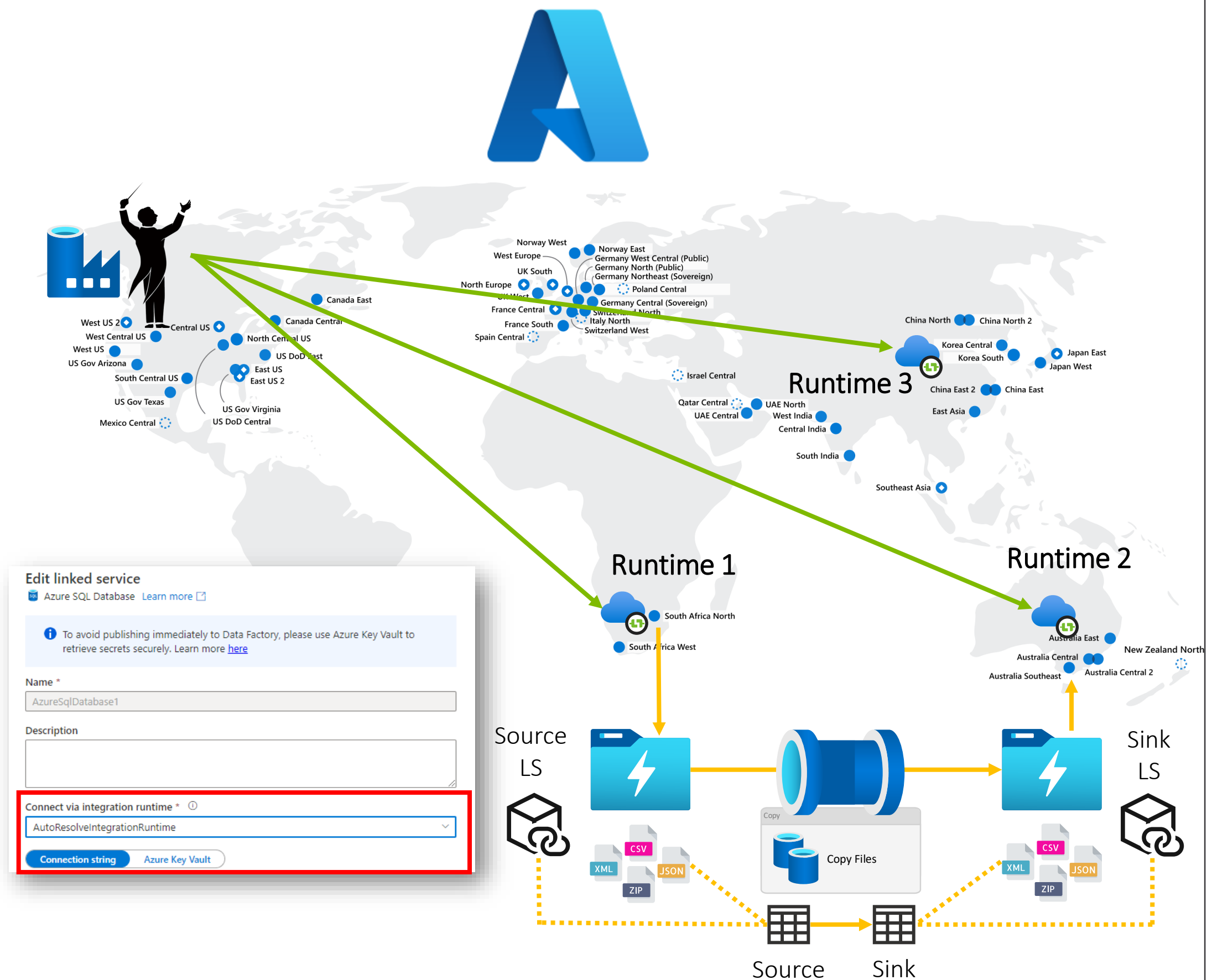
- Azure
- Hosted
- SSIS

- Patterns & Configuration



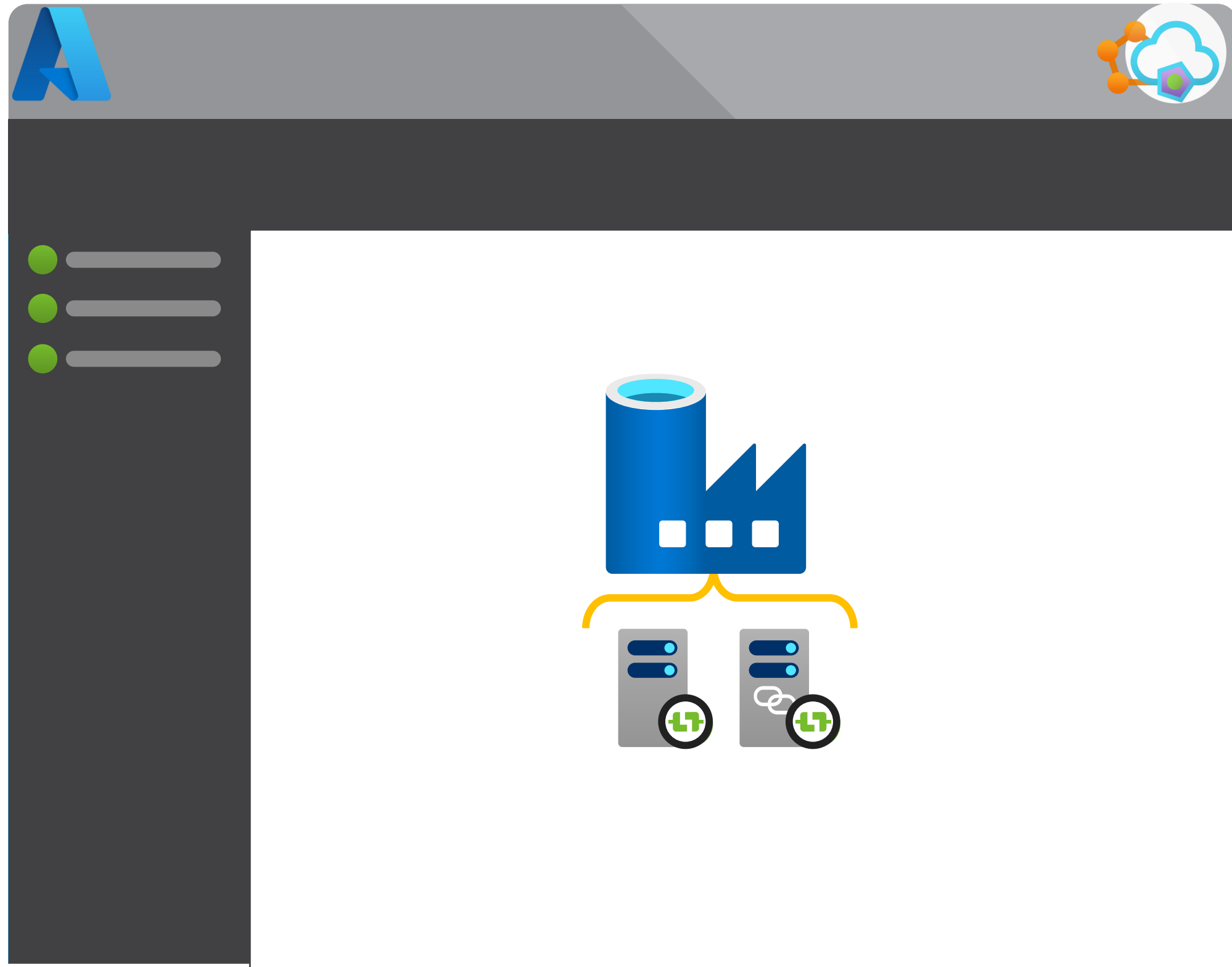
What can an Integration Runtime do?





Module 2

Integration Runtime Design Patterns



- Compute Types

- Azure

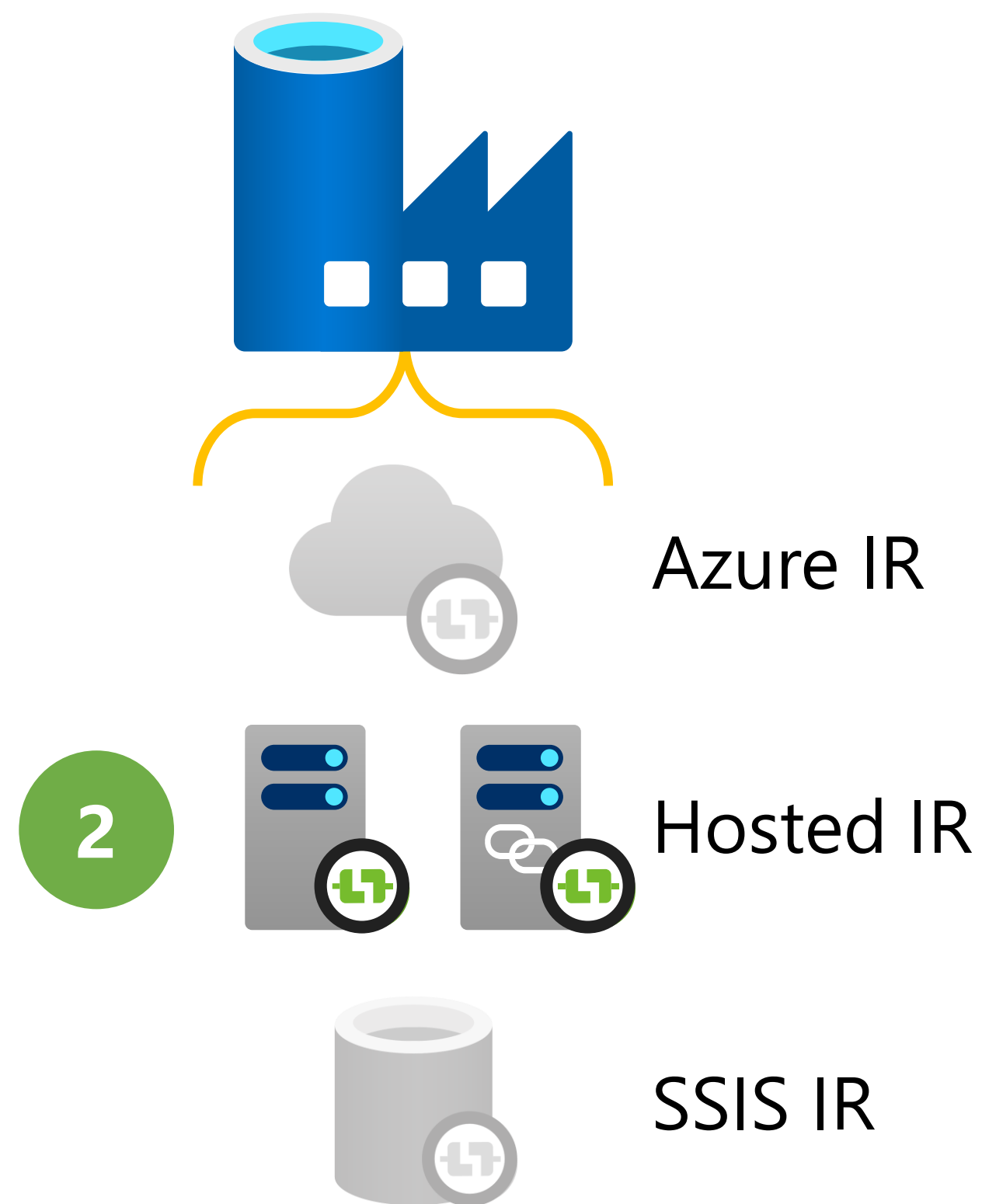
- Hosted

- SSIS

- Patterns & Configuration



What can an Integration Runtime do?

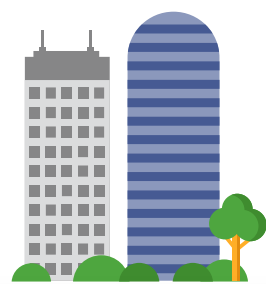




Hosted Integration Runtime



Windows OS
32GB RAM
6 CPU Cores
(12 Logical Cores)
80GB Storage



Edit integration runtime

Settings **Nodes** Auto update Sharing Links

[View Service URLs](#)

Name	Status	IP address	Limit concurrent jobs	Actions
WINAP71RY2YAB...	Running	Get IP address	112	✓ ✗ 🔄 🗑️

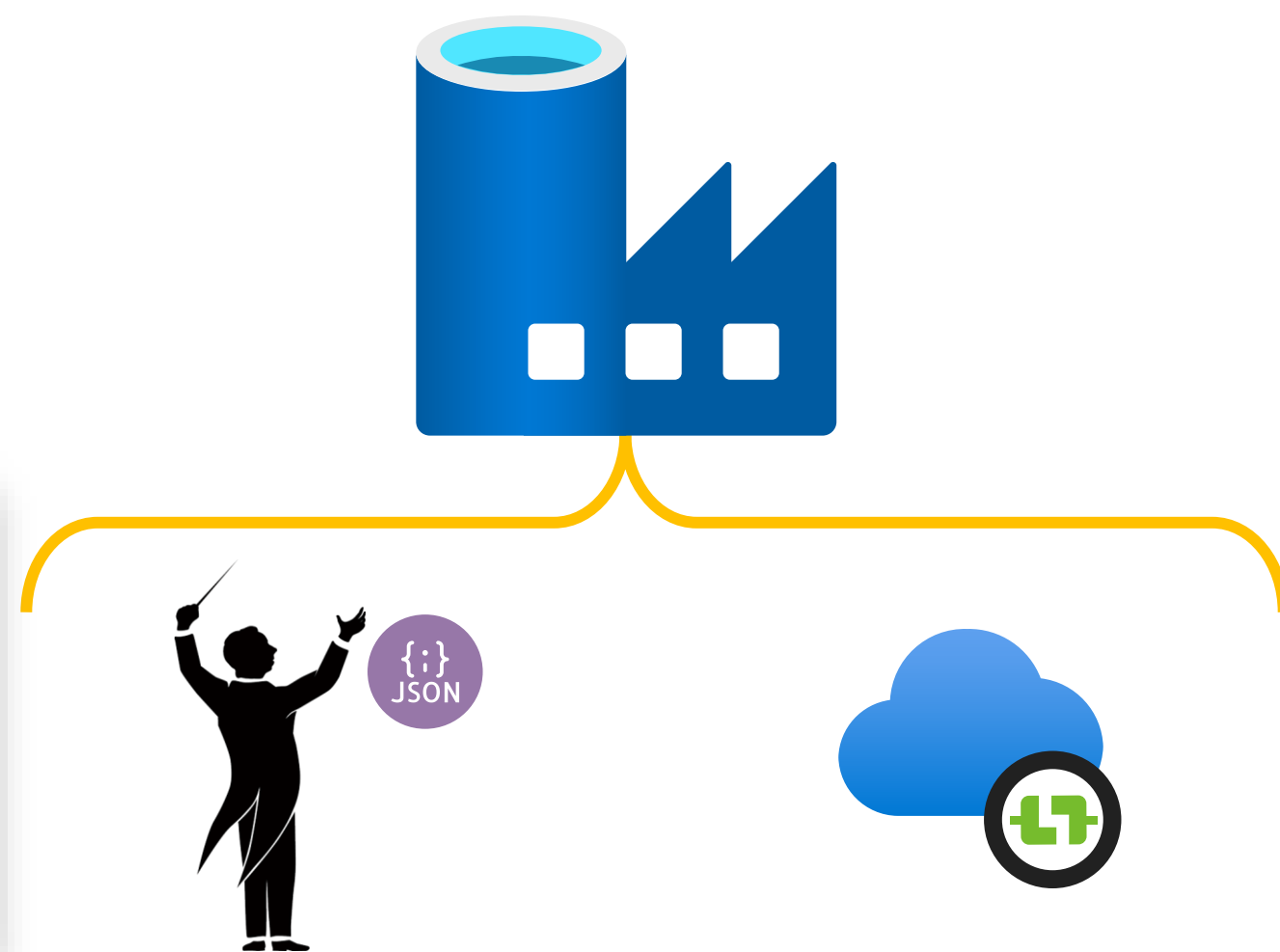
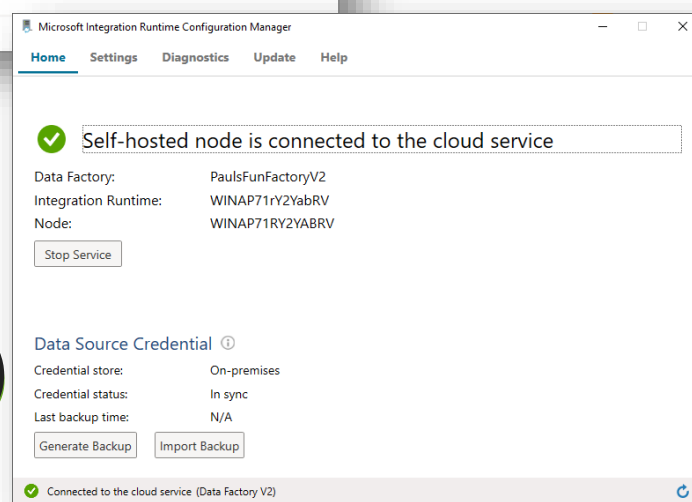
Data
Sources



Windows OS
8GB RAM
4 CPU Cores
80GB Storage

Runtime

Self Hosted



Orchestrator

Fixed Region

Runtime

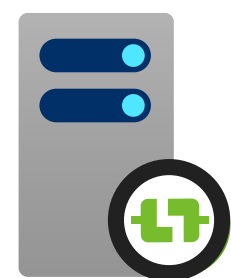
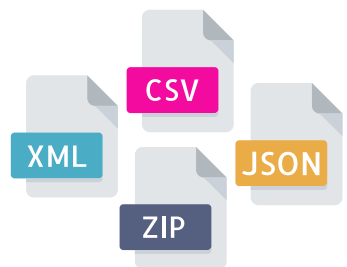
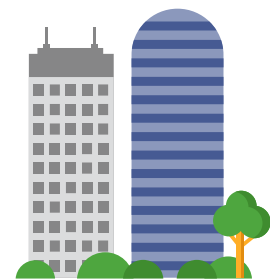
Flexible Region



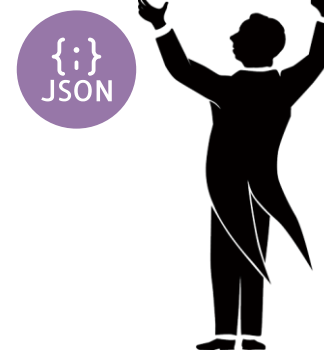
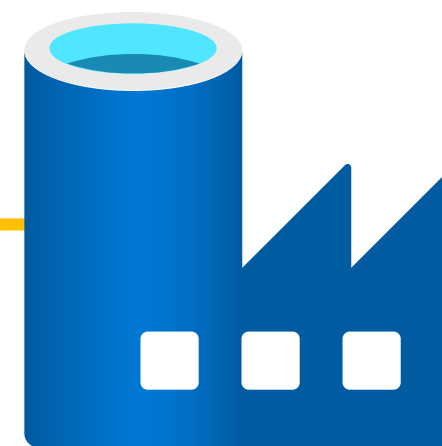
```
cd "C:\Program Files\Microsoft Integration Runtime\5.0\Shared\  
.\dmgcmd.exe -DisableLocalFolderPathValidation
```



Hosted Integration Runtime



Runtime
Self Hosted



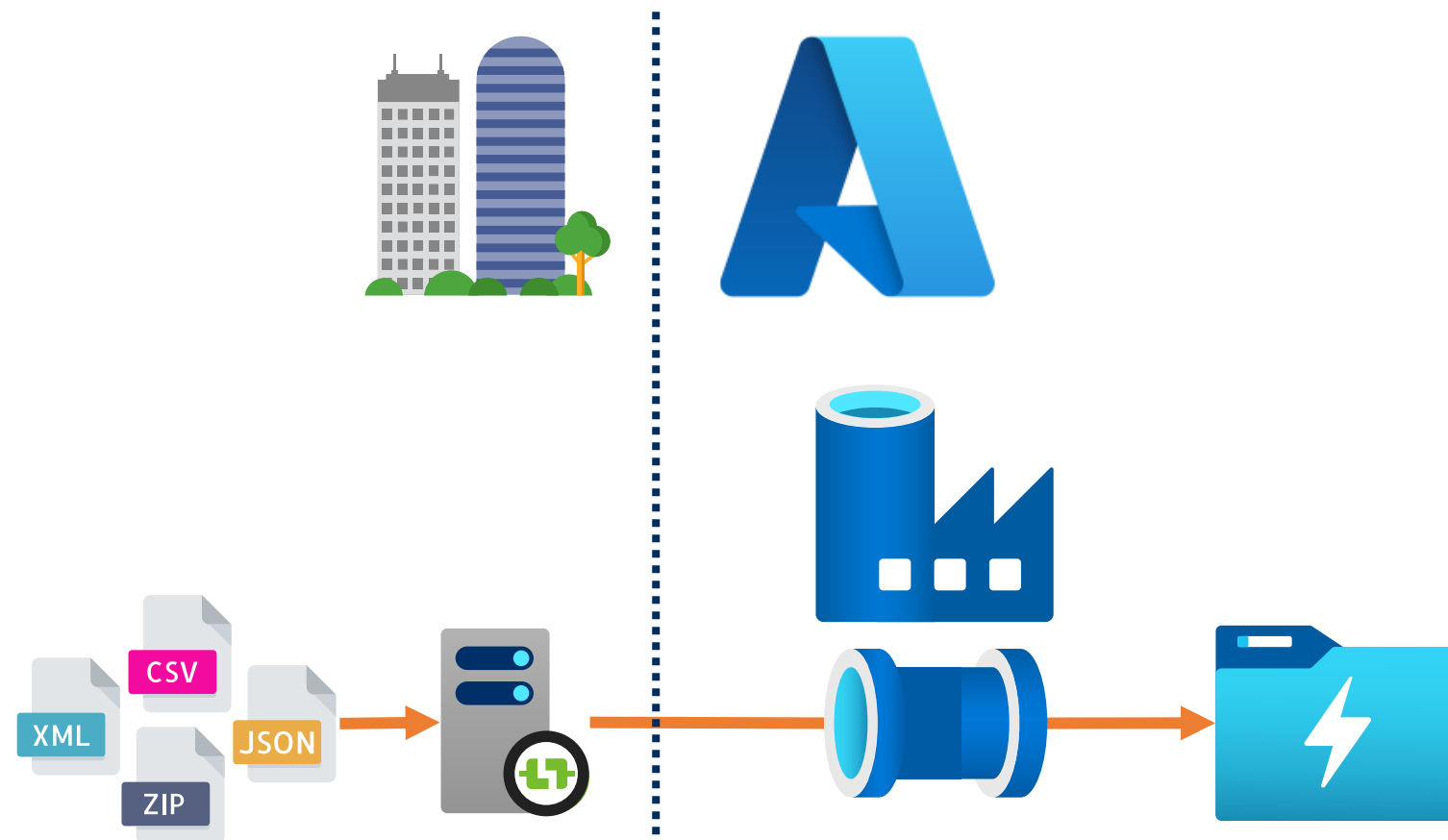
Orchestrator
Fixed Region

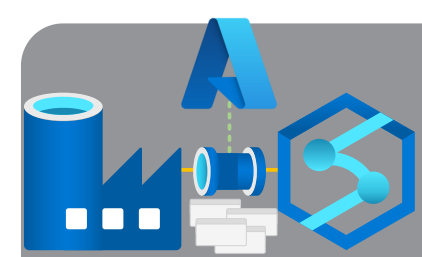


Runtime
Flexible Region

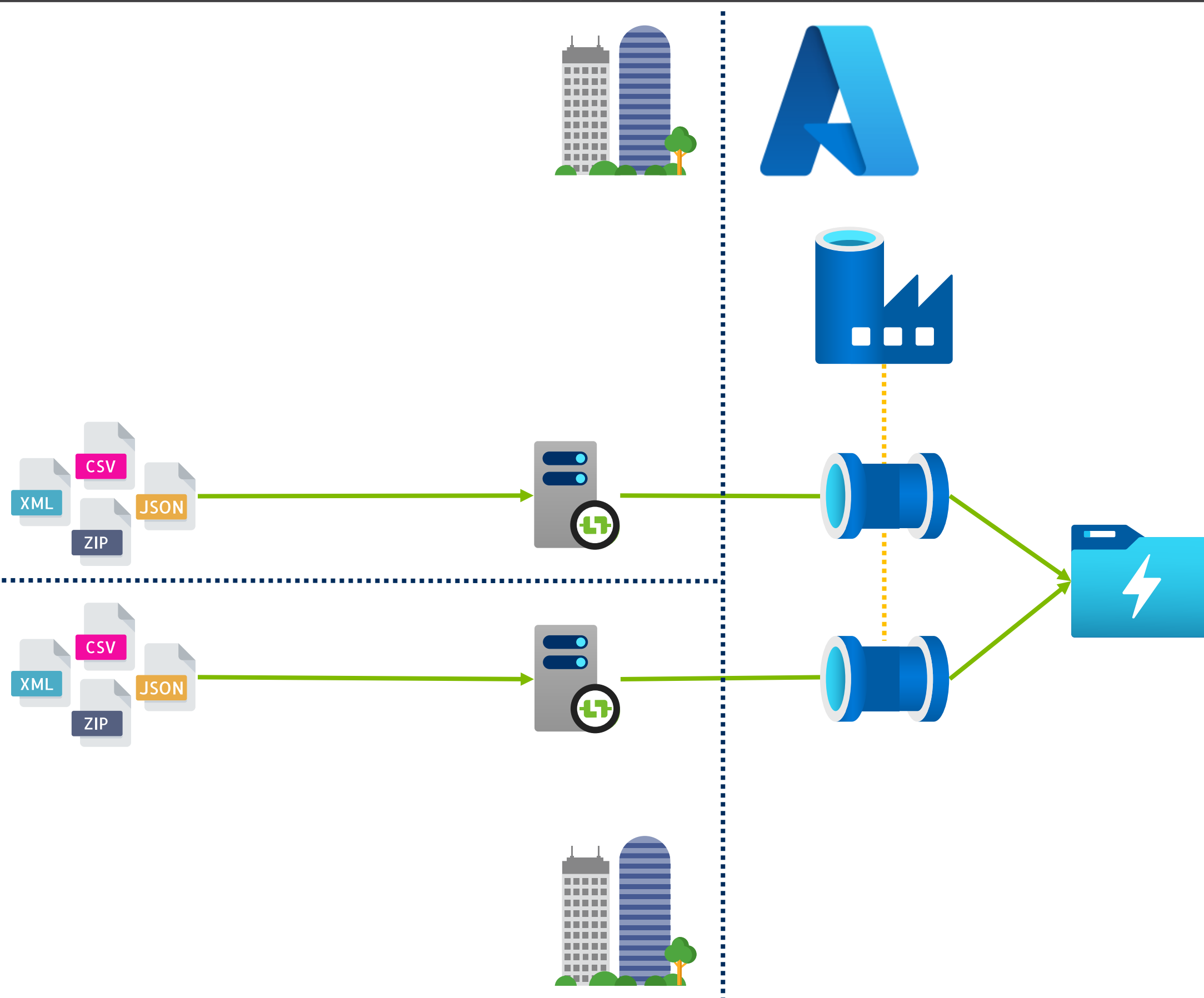


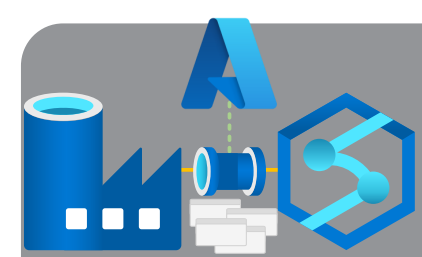
Single Hosted IR



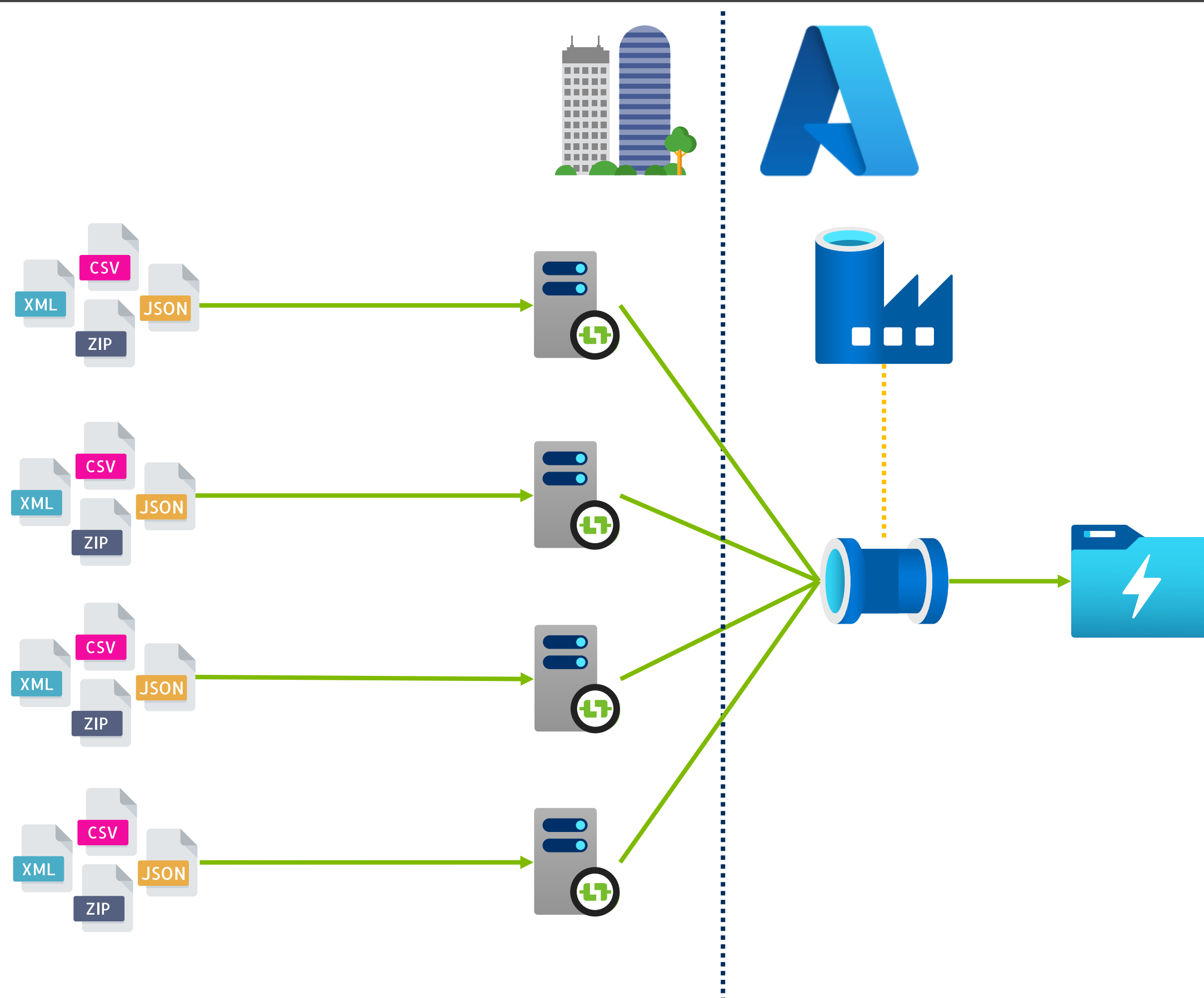


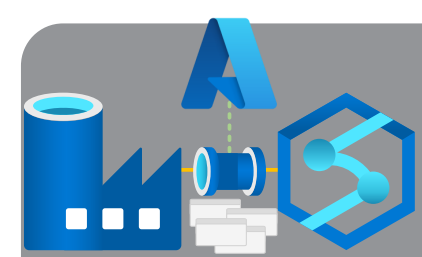
Multiple Hosted IR's at Different Sites



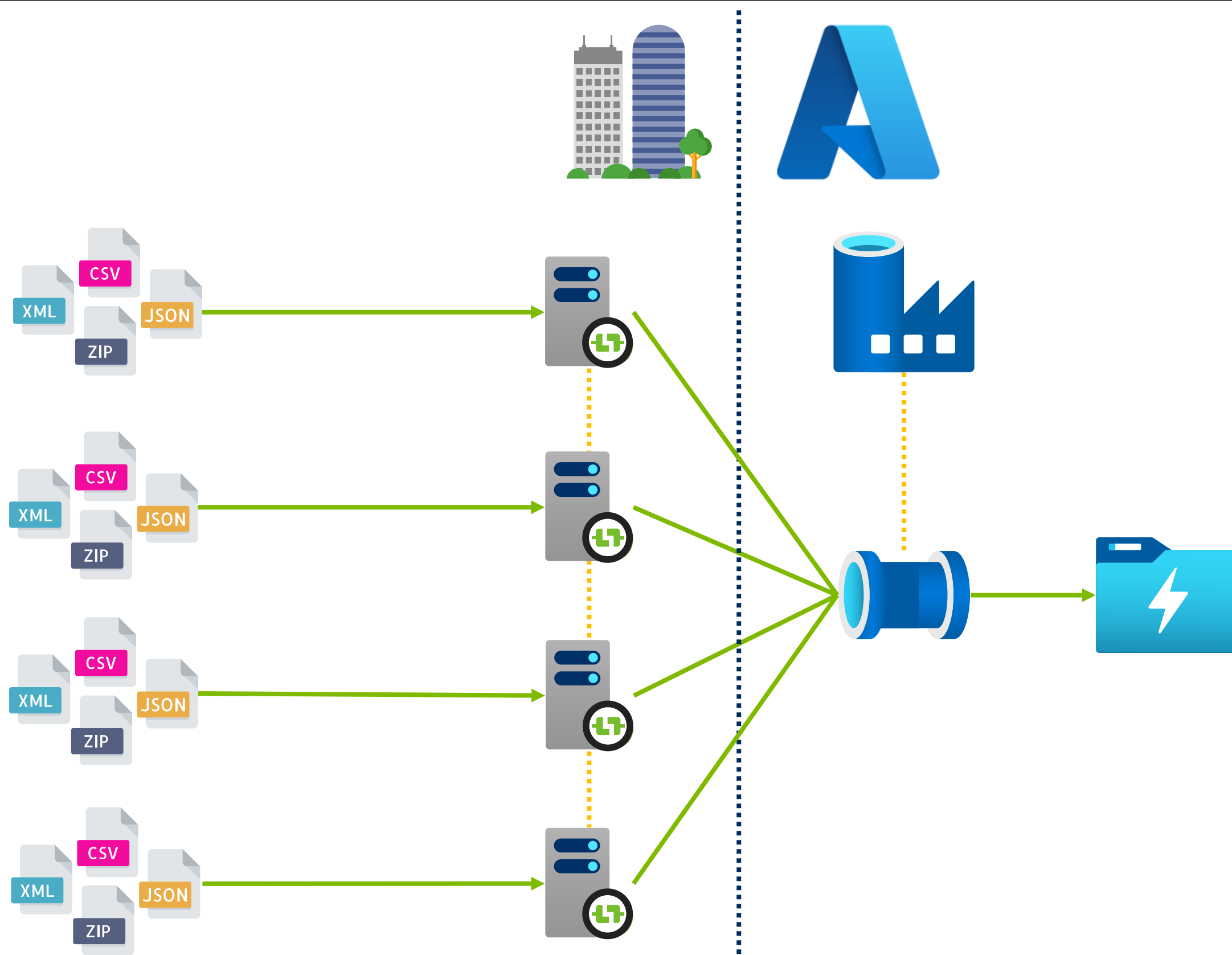


Multiple Hosted IR's as Separate Endpoints

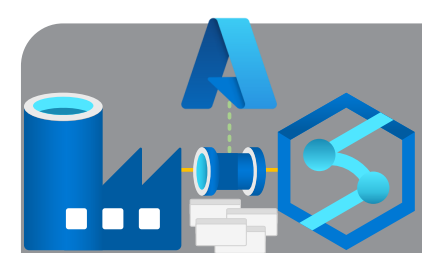




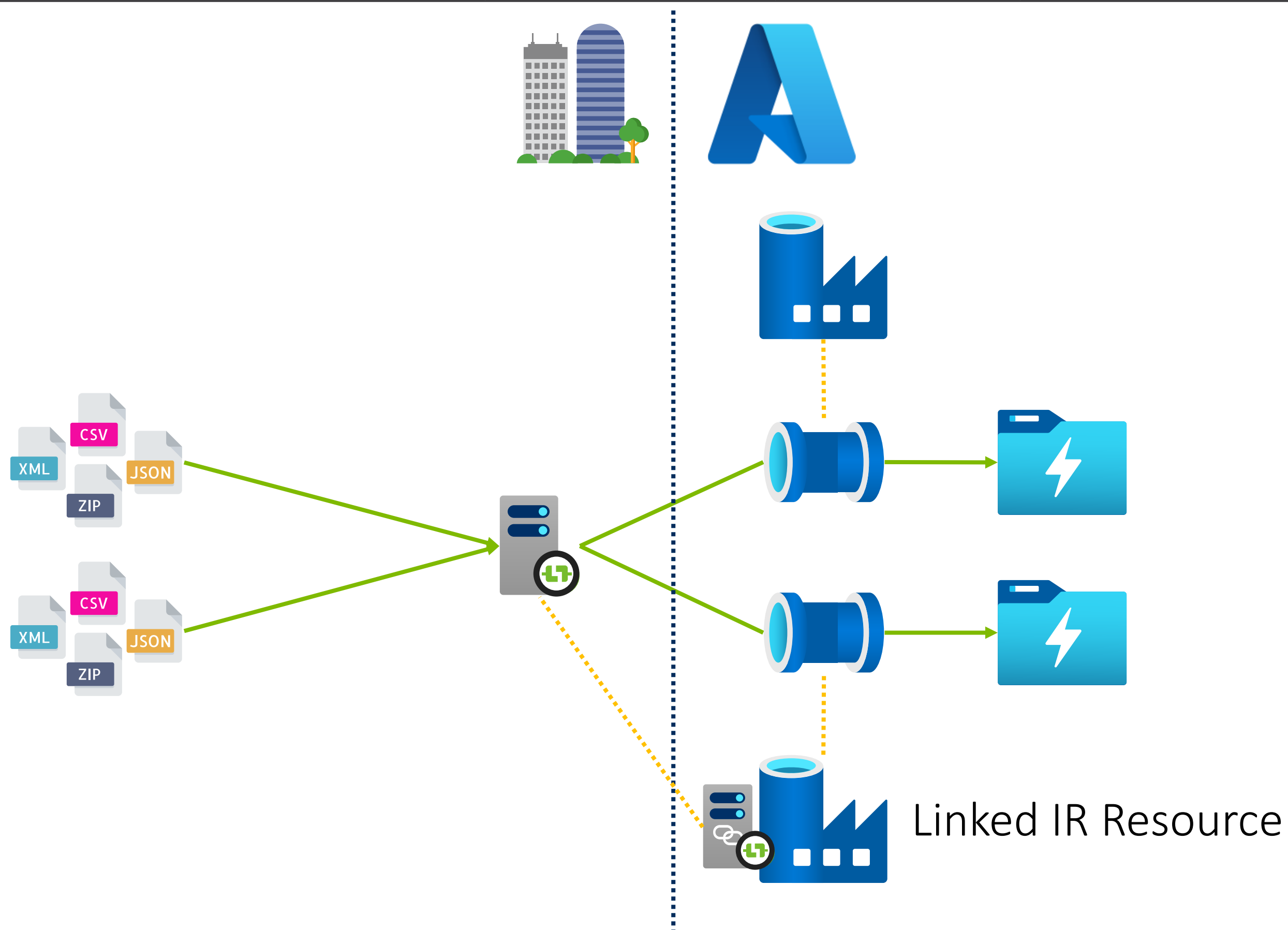
Single Hosted IR with Multiple Nodes



* Max of 4 Nodes per IR Endpoint

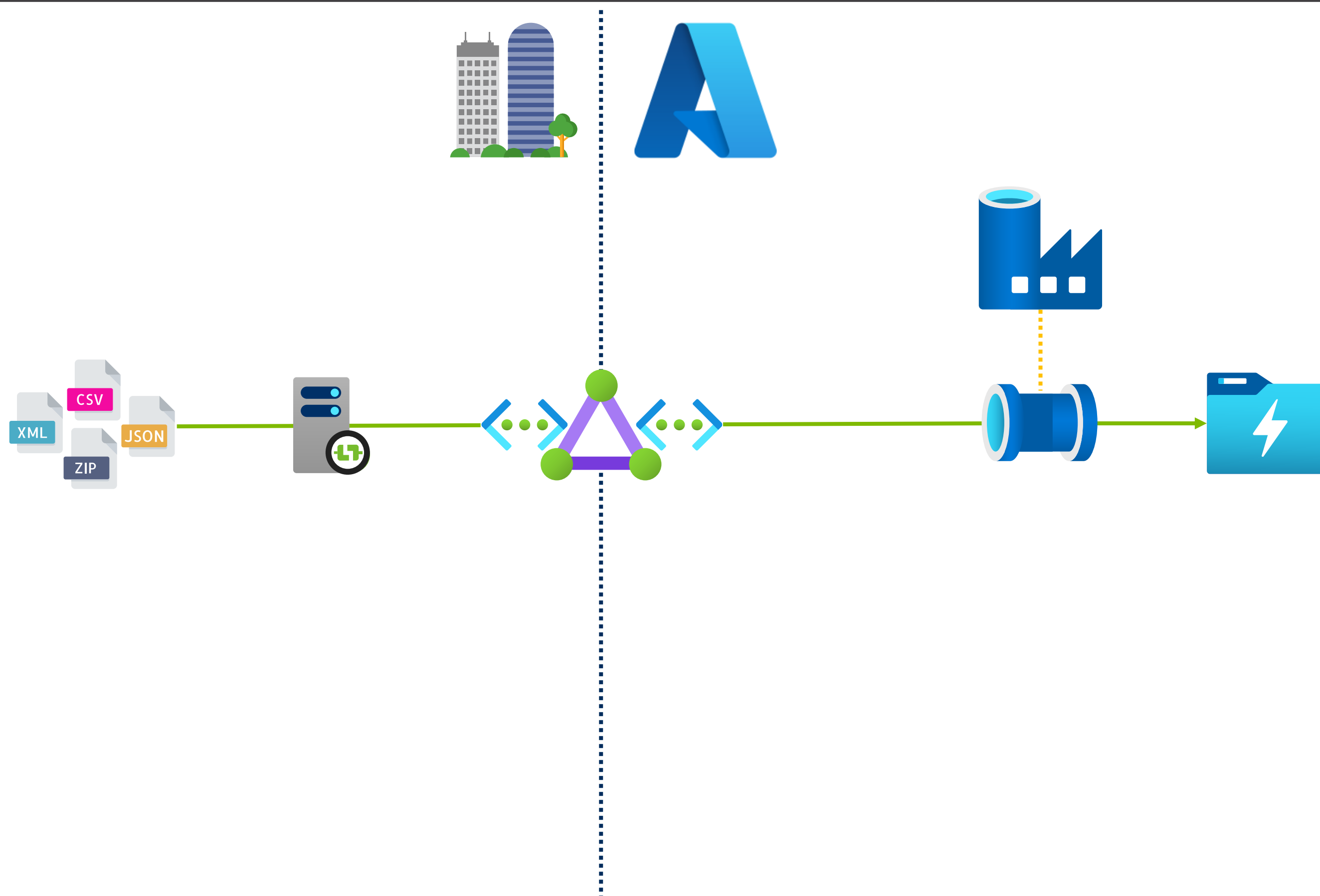


Single Hosted IR Linked to Multiple Data Factories



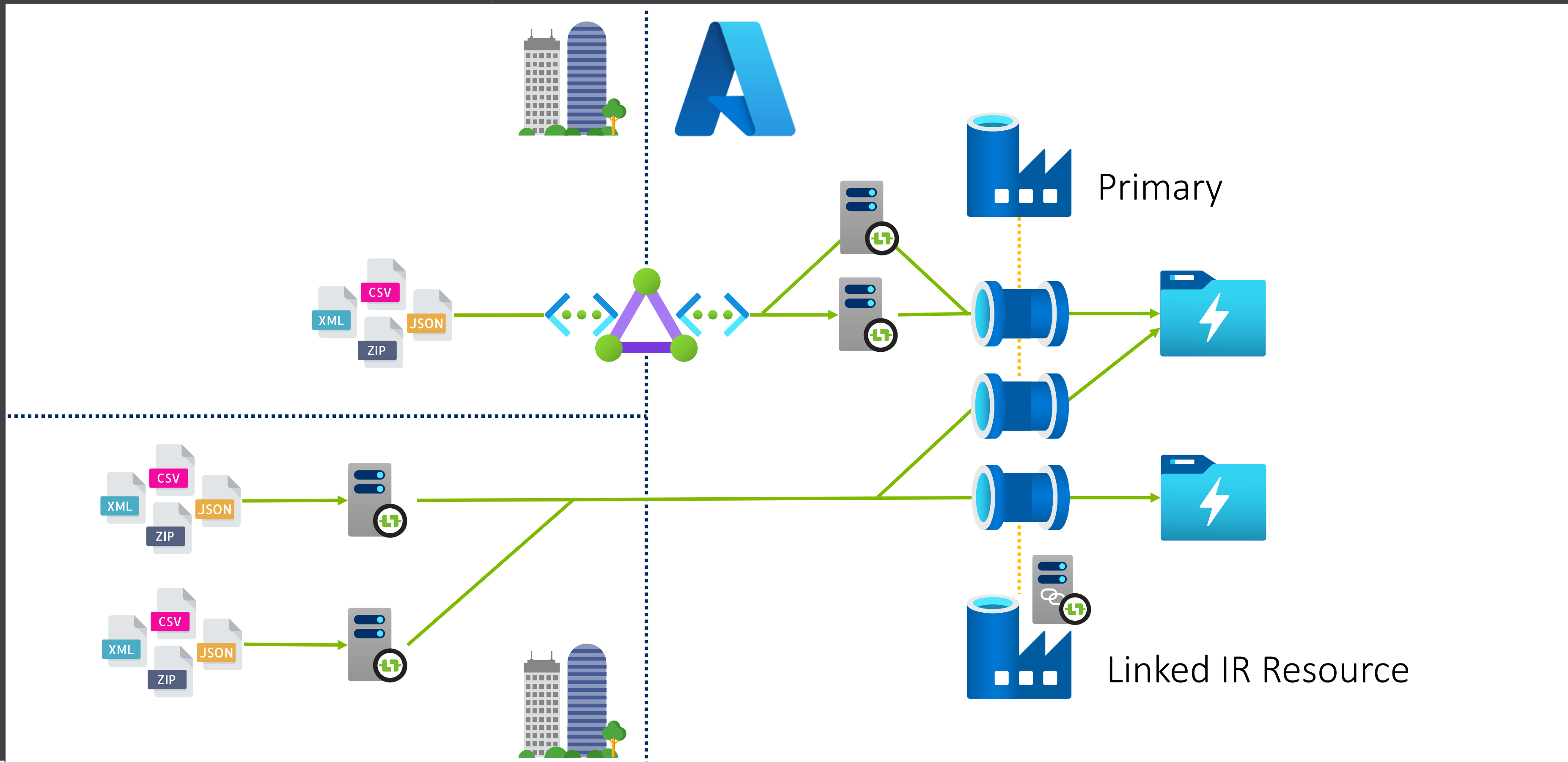


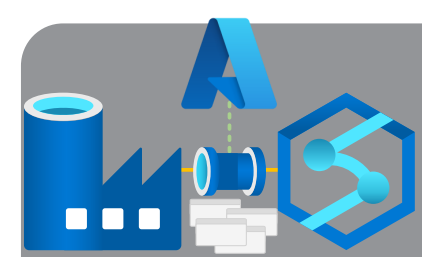
Hosted IR's with Express Route Connections



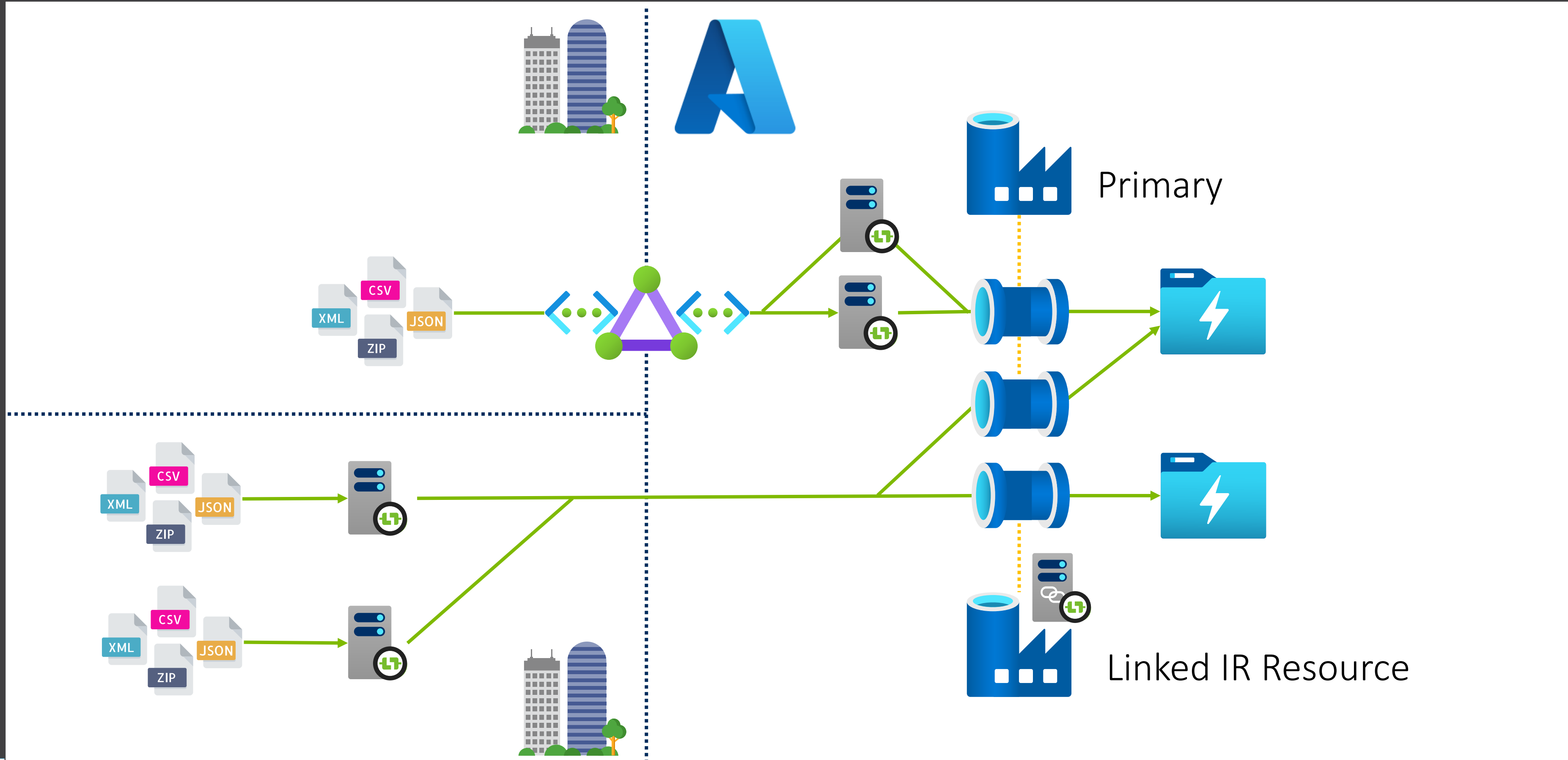


Hosted IR Combinations



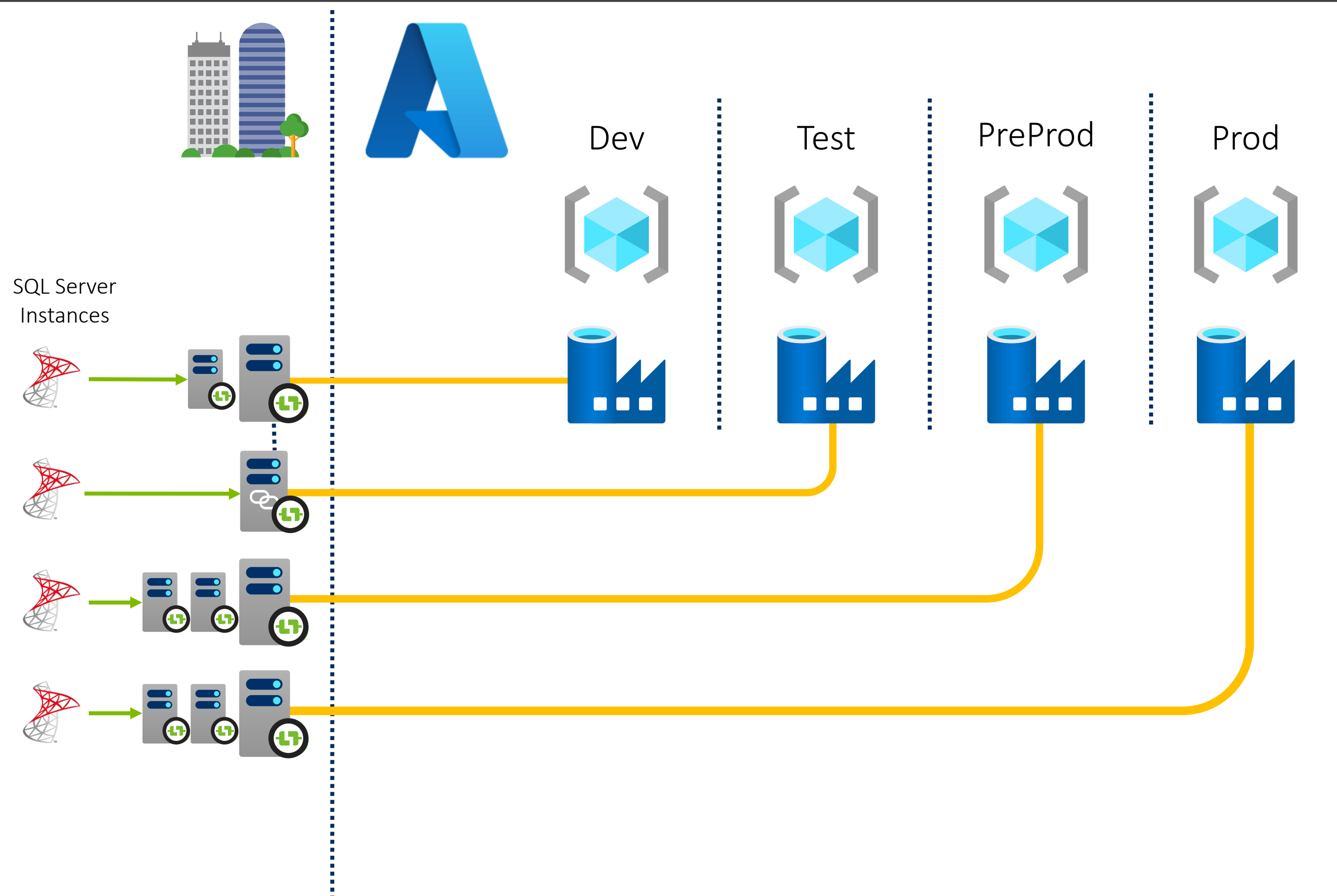


Horizontal vs Vertical Environment Processing





Hosted IR's vs Environments

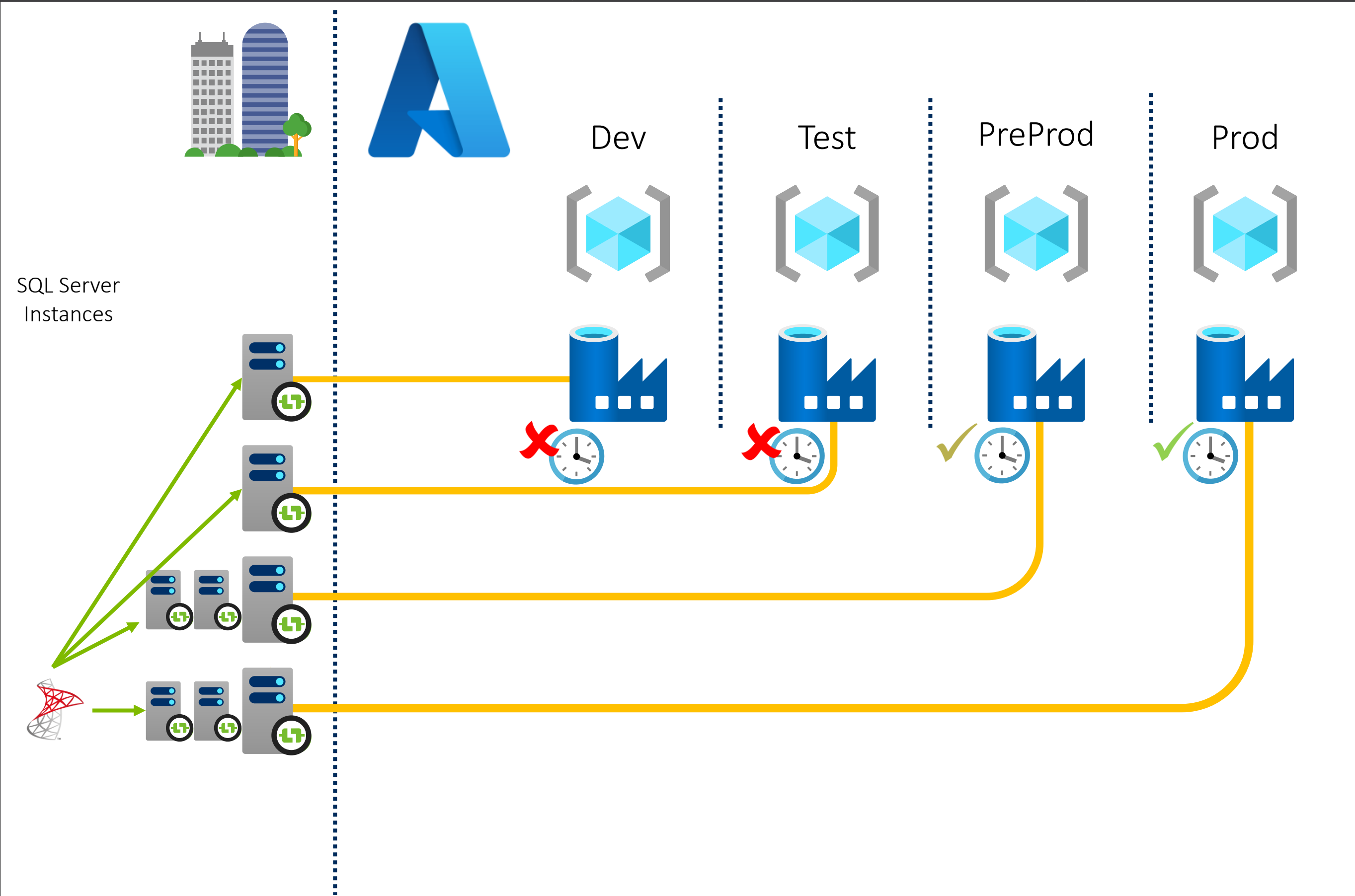


25x Sites
4x Environments

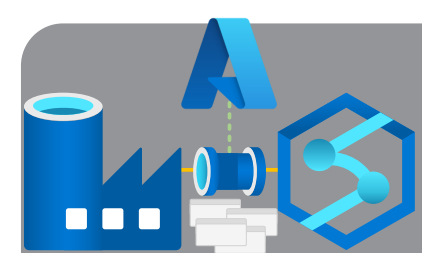
2x IR's for Dev
1x Linked IR for Test (from Dev)

3x IR's for PreProd
3x IR's for Prod

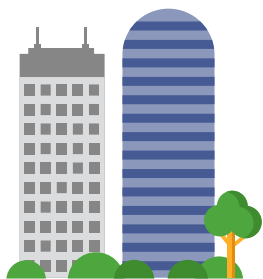
8x Virtual Machines per Site
200x Virtual Machines Total



- 25x Sites
- 4x Environments
- 2x IR's for Dev
- 1x Linked IR for Test (from Dev)
- 3x IR's for PreProd
- 3x IR's for Prod
- 8x Virtual Machines per Site
- 200x Virtual Machines Total



Hosted IR's vs Environments

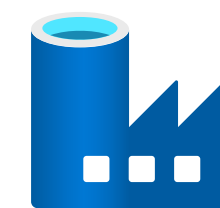
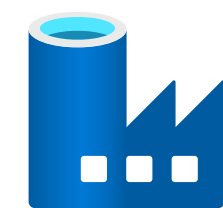
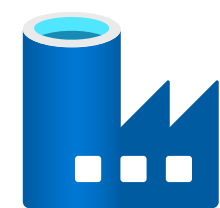
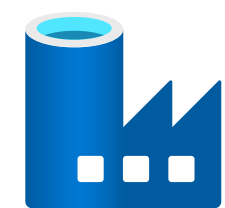
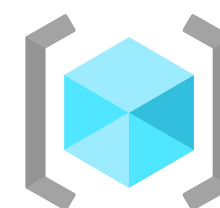
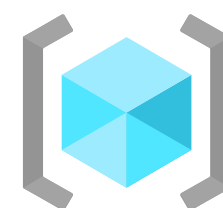
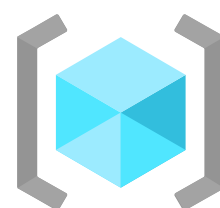
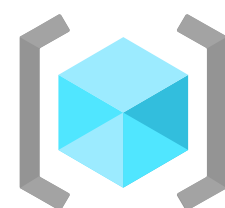


Dev

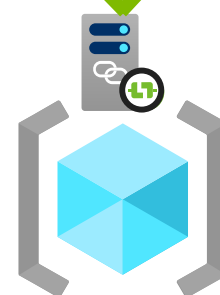
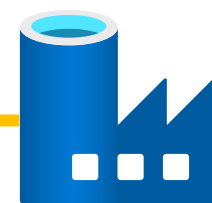
Test

PreProd

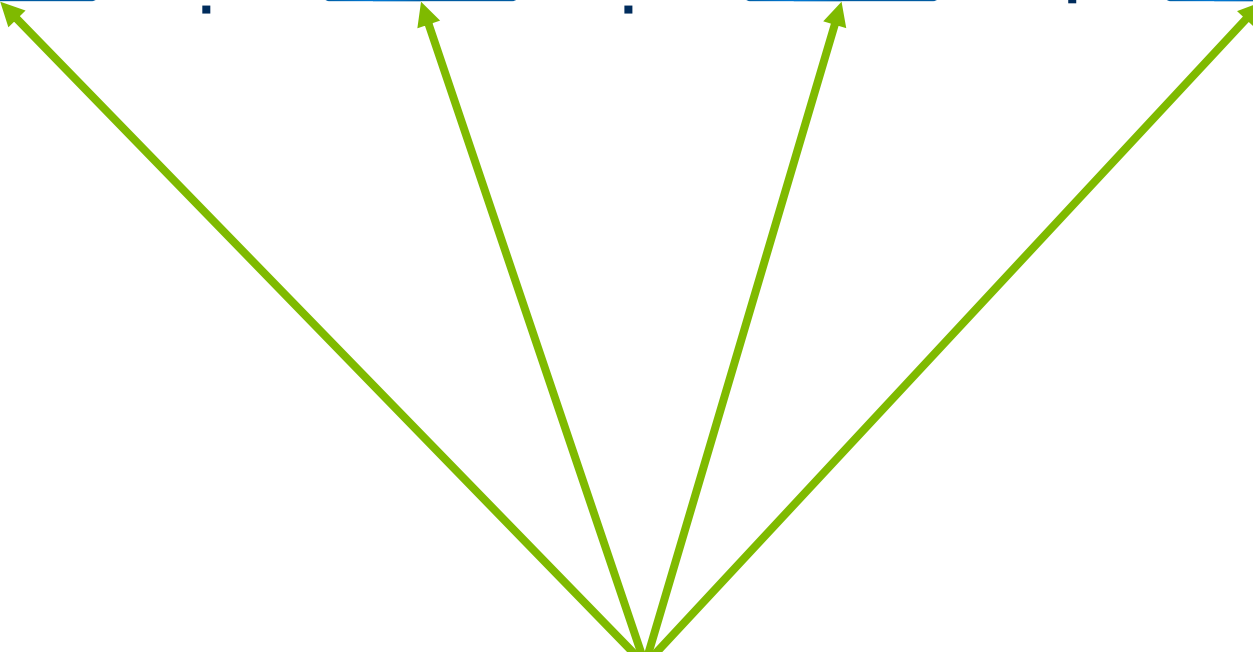
Prod

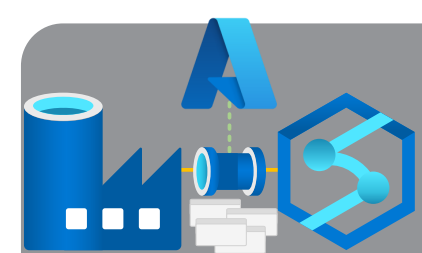


SQL Server
Instances

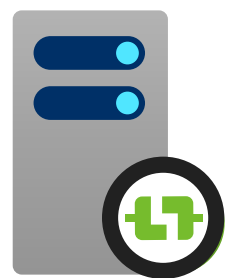


Common





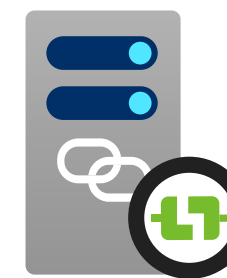
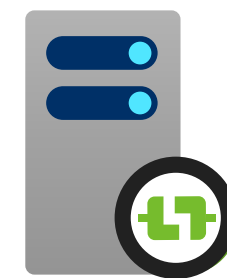
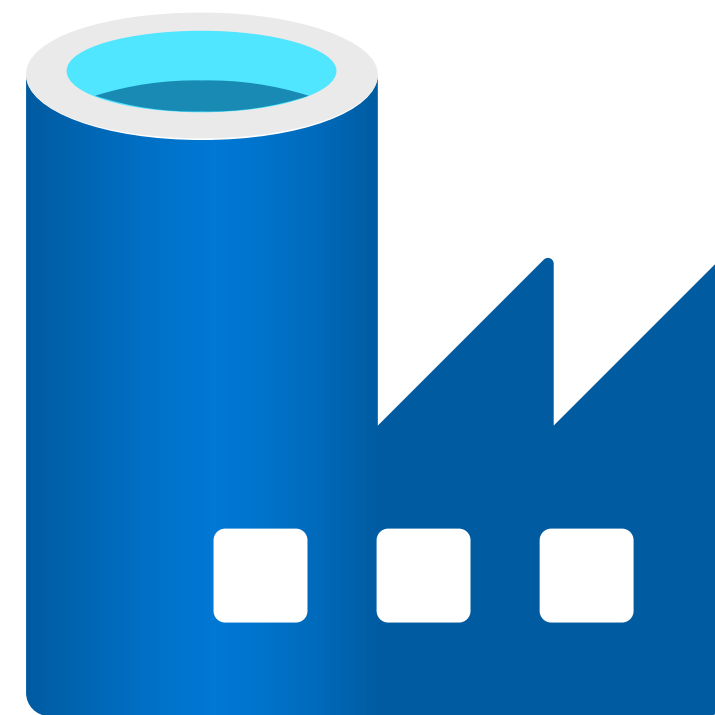
Orchestration vs Compute



Hosted IR



SSIS IR (Preview)



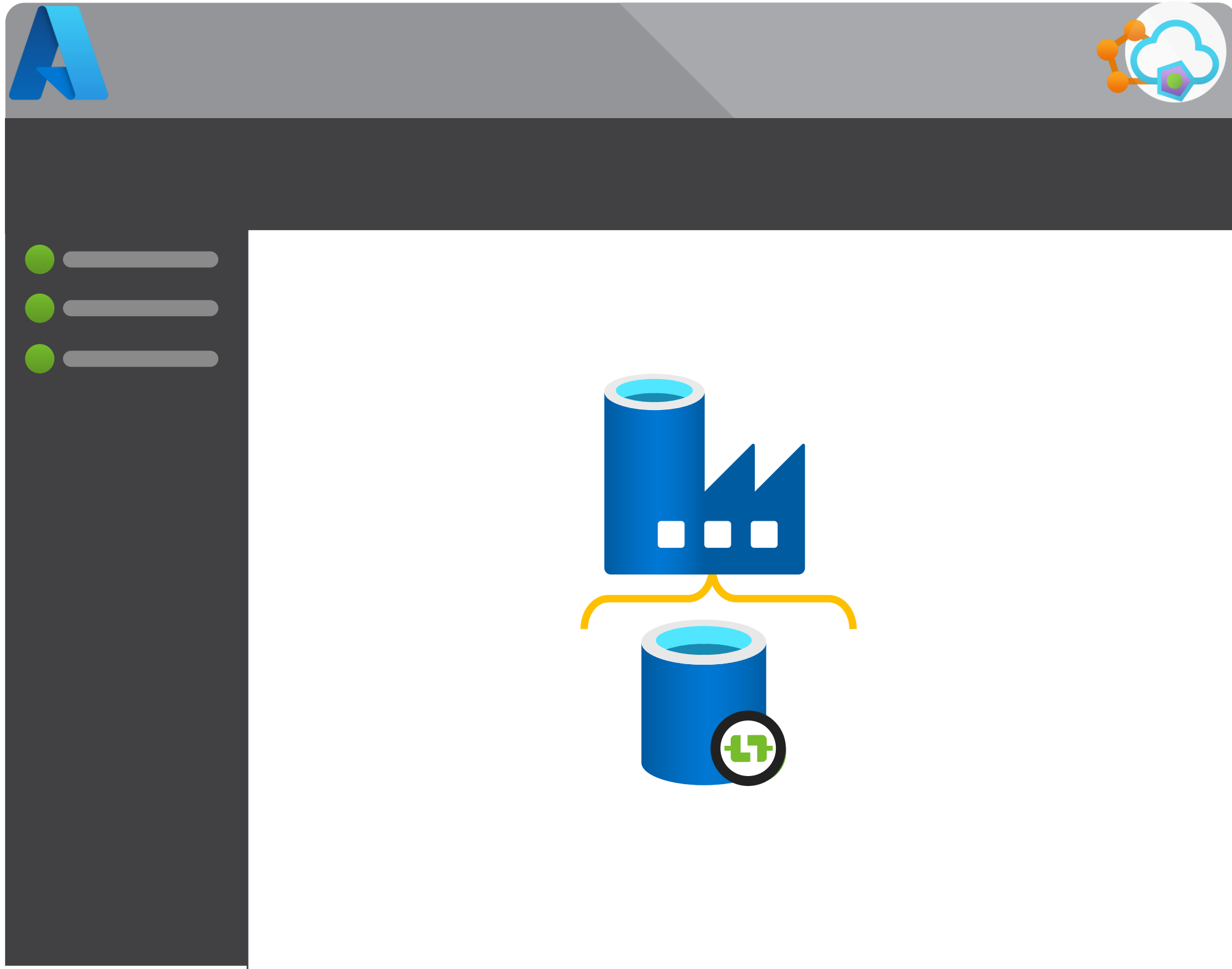
Hosted IR



SSIS IR

Module 2

Integration Runtime Design Patterns



- Compute Types

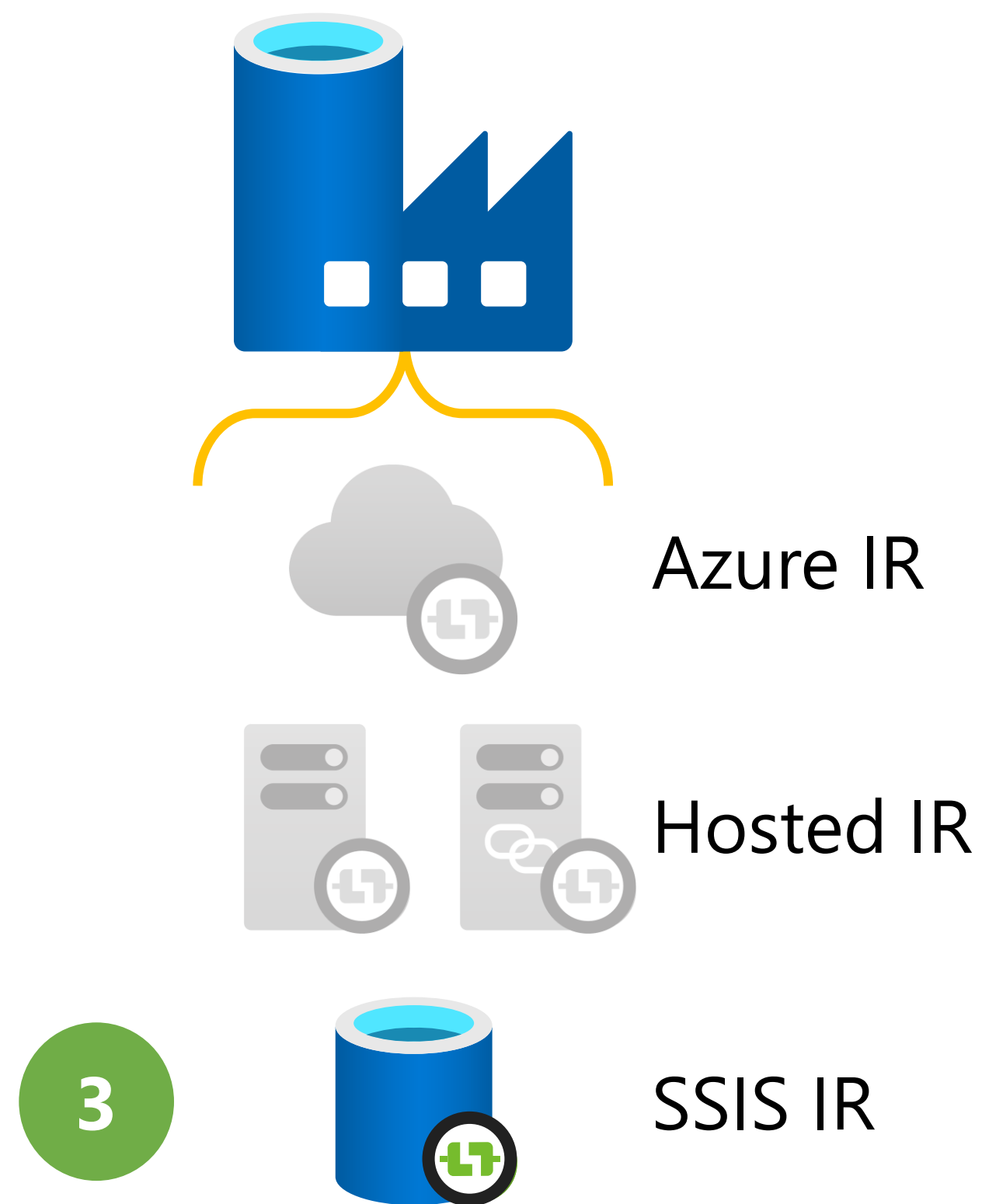
- Azure
- Hosted

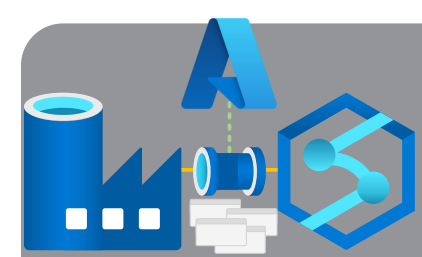
- SSIS

- Patterns & Configuration

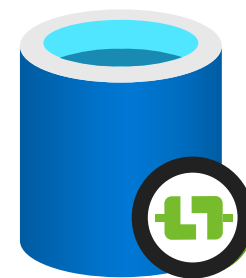


What can an Integration Runtime do?

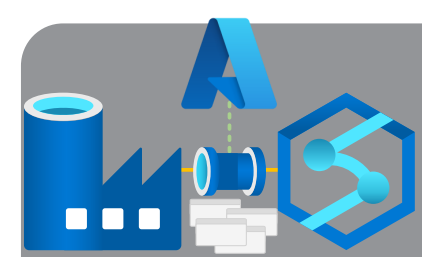




Running an SSIS Package in Azure



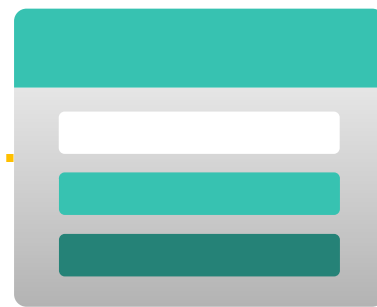
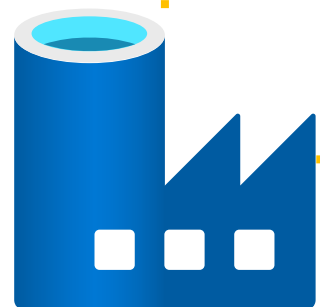
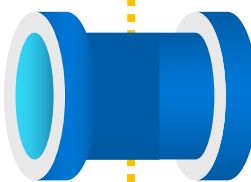
SSIS IR



Running an SSIS Package in Azure

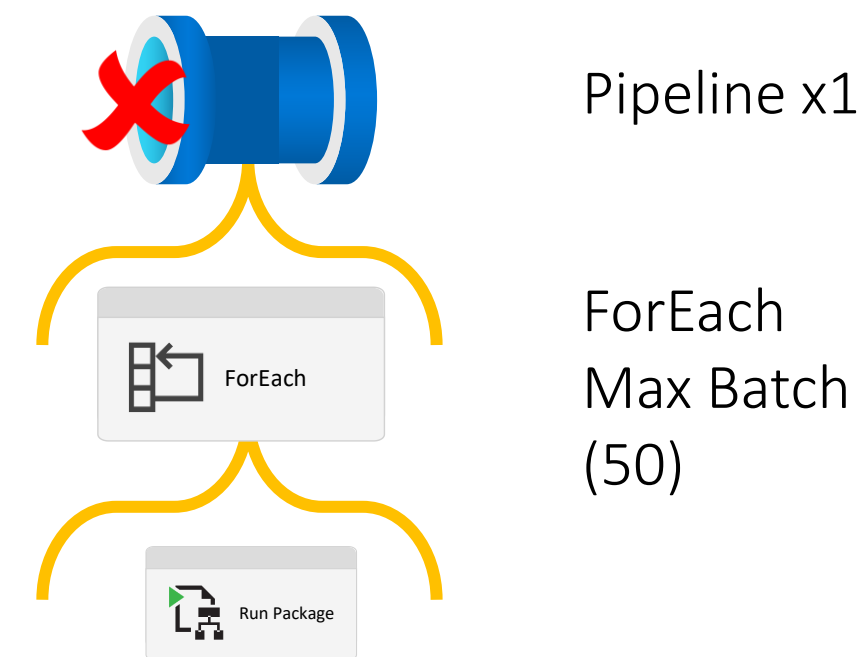
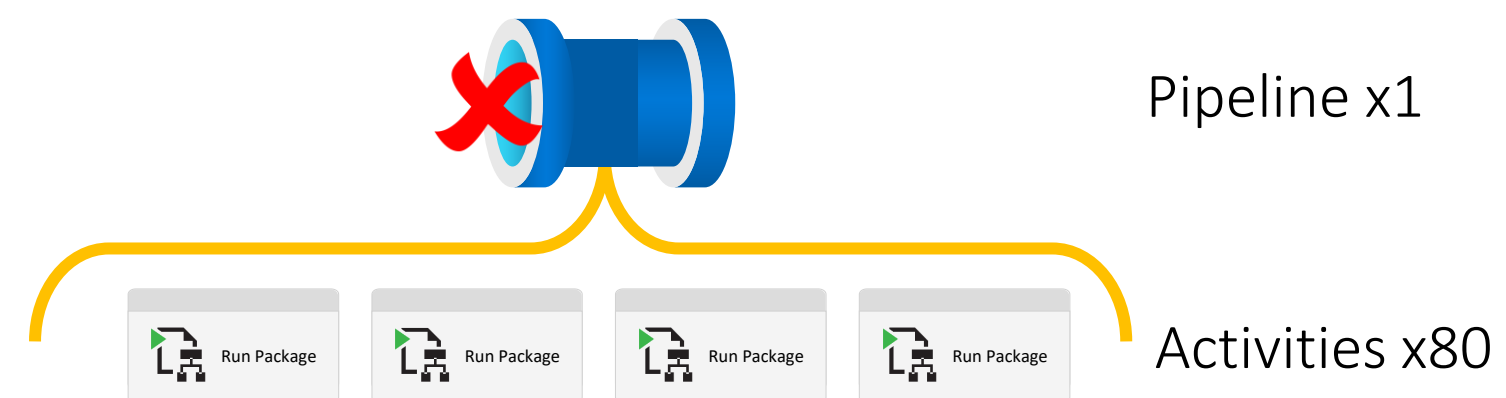
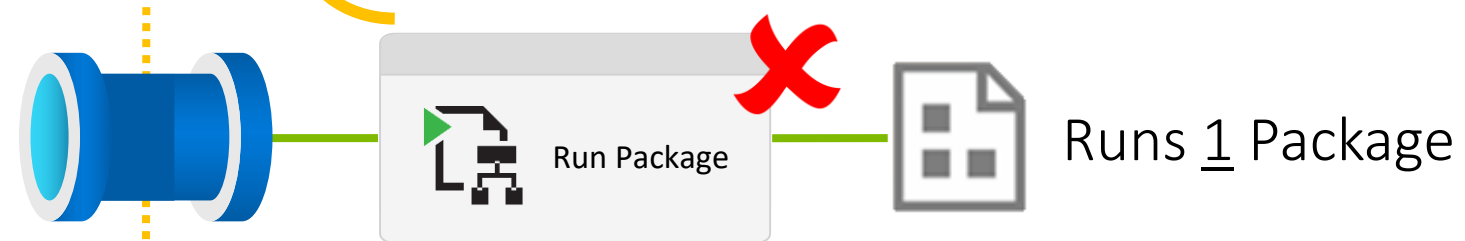
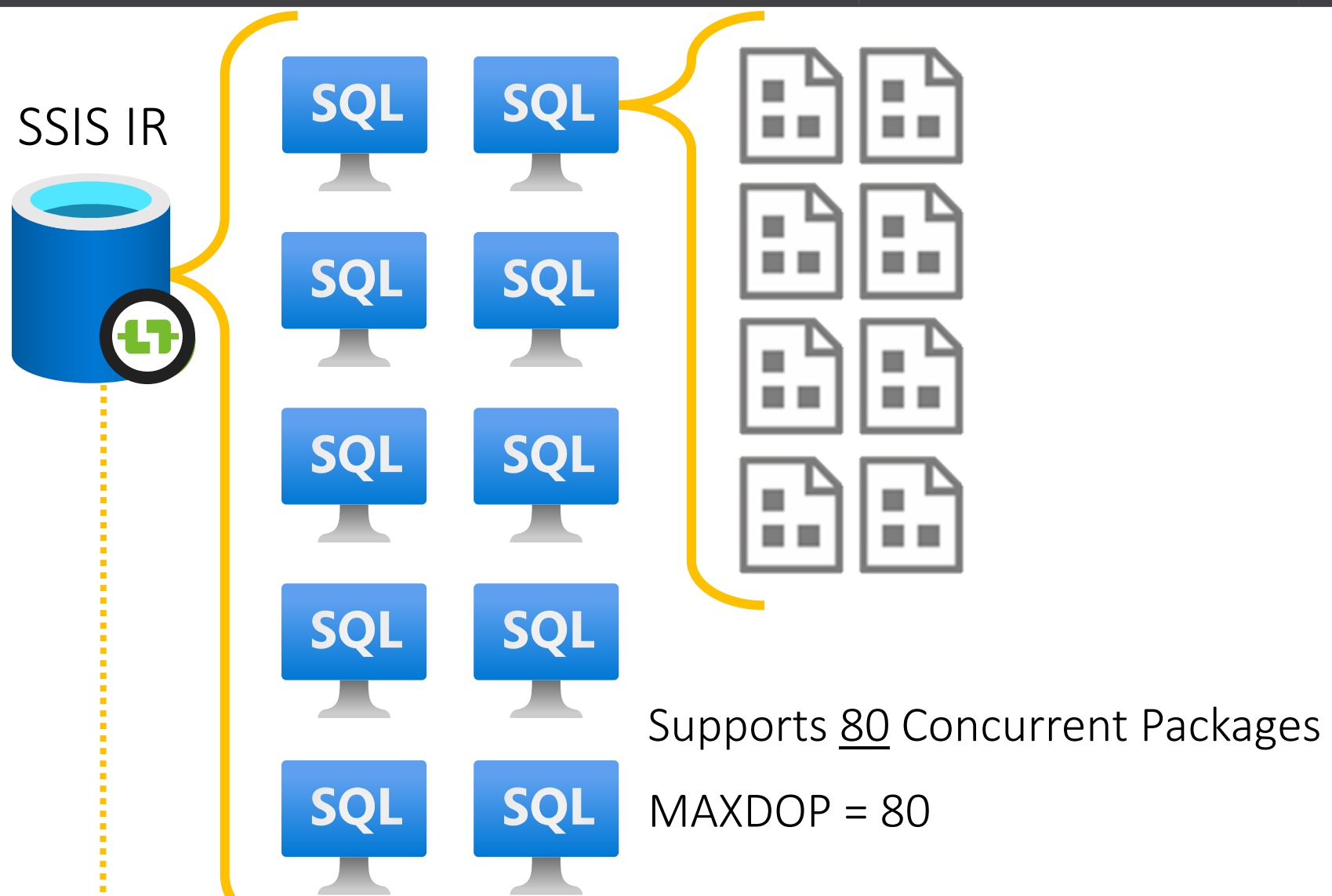


SSIS IR



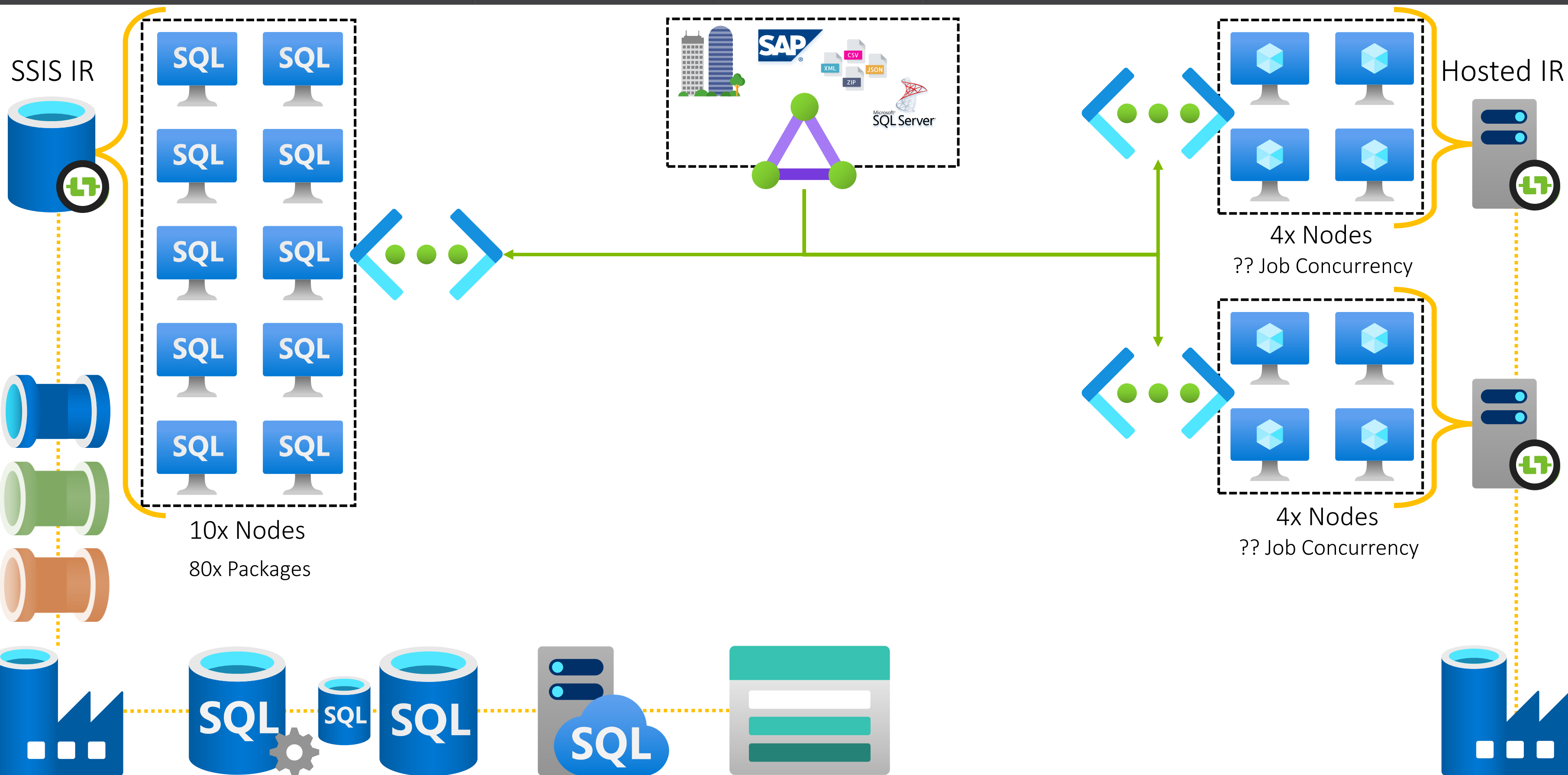


Problem: Using All Of The SSIS IR Compute



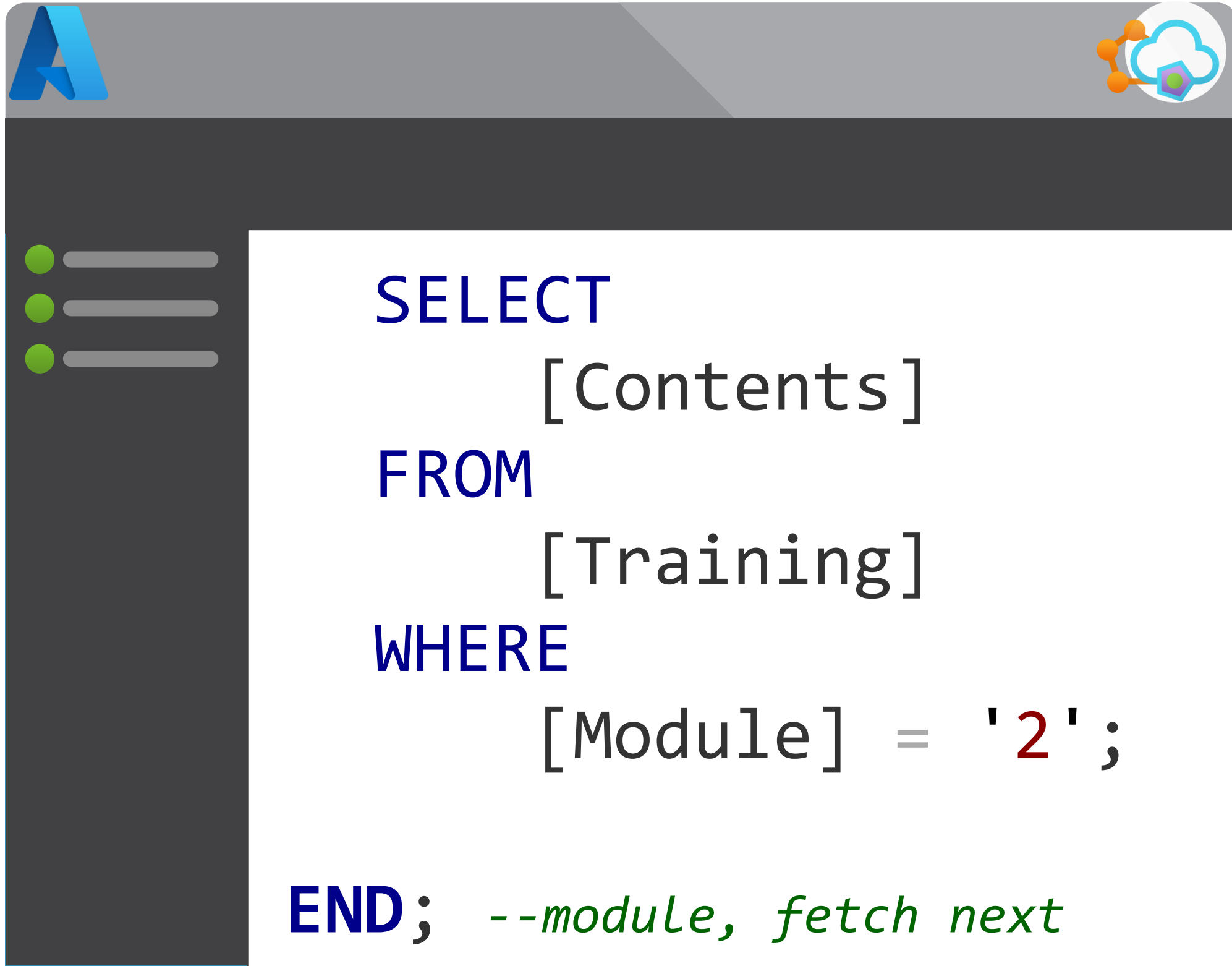


What are the advantages of using this pattern?



Module 2

Integration Runtime Design Patterns



- Compute Types
 - Azure
 - Hosted
 - SSIS
- Patterns & Configuration