

Module 12

Final Thoughts



```
BEGIN  --get ready
```

```
SELECT
```

```
    [Contents]
```

```
FROM
```

```
    [Training]
```

```
WHERE
```

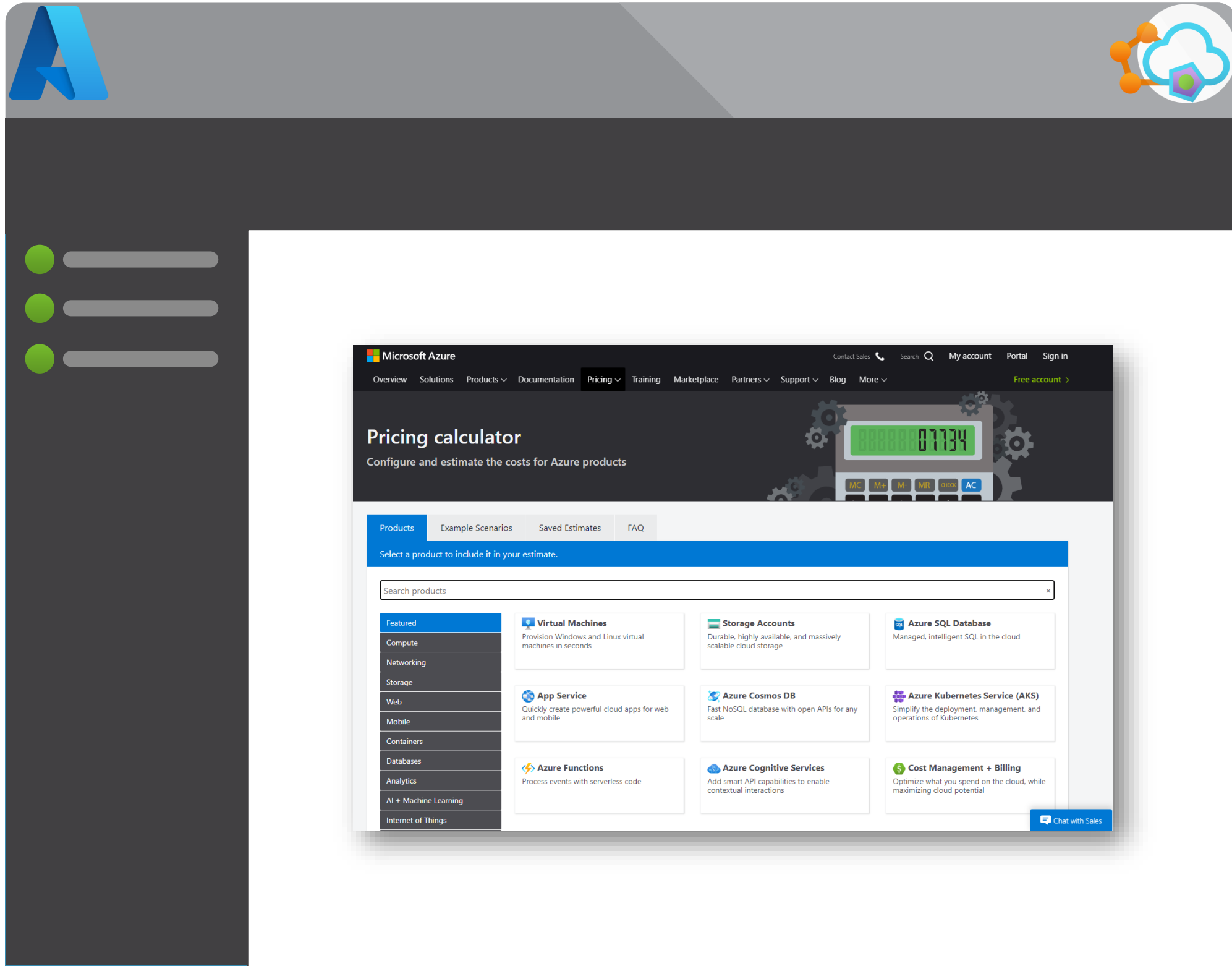
```
    [Module] = '12';
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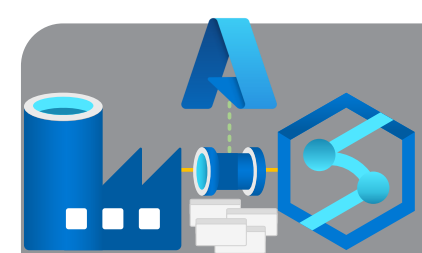
- Running Costs
- Best Practices
- Conclusions

Module 12

Final Thoughts

- Running Costs
- Best Practices
- Conclusions





Azure Price Calculator – Data Factory



Microsoft Azure

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Pricing calculator

Configure and estimate the costs for Azure products



Products Example Scenarios Saved Estimates FAQ

Select a product to include it in your estimate.

Search products

Featured

Compute

Networking

Storage

Web

Mobile

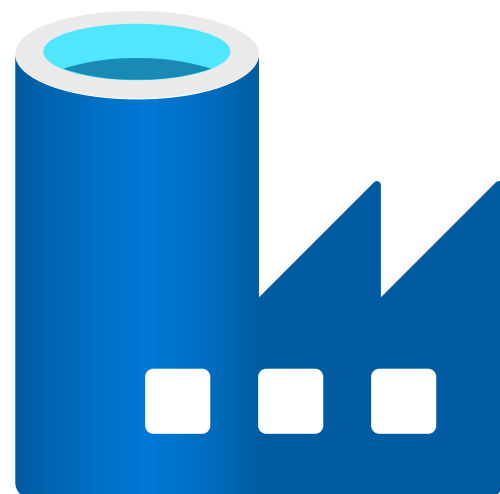
Containers

Databases

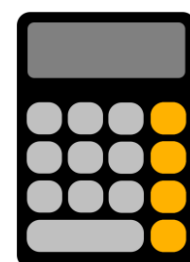
Analytics

AI + Machine Learning

Internet of Things



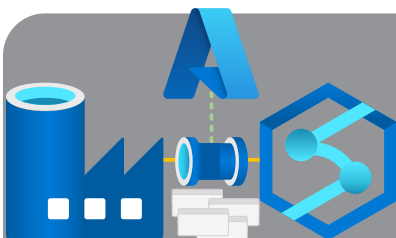
X






= £ ???

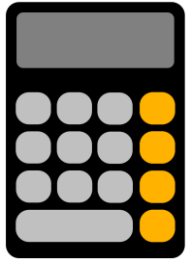
Chat with Sales

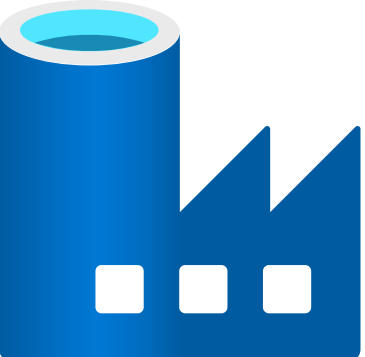

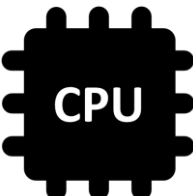


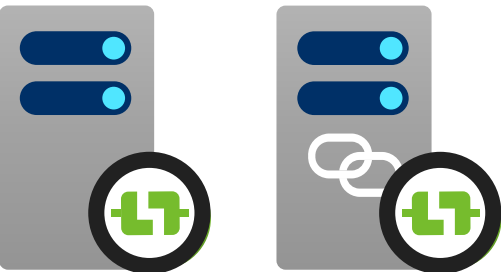
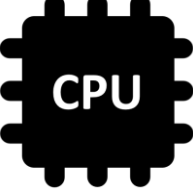


<https://azure.microsoft.com/en-us/pricing/calculator/>





Based on 1 Hour Running






	Activity Runs	Data Handling Compute per Hour	Pipeline Activity Execution Duration per Hour	
<div> Azure IR</div>	<div>x1000</div> <div>£0.75</div>	<div> CPU</div> <div>£0.19</div>	<div> Int.</div> <div>£0.004</div>	<div> Ext.</div> <div>£0.00019</div>
<div> Hosted IR</div>	<div>x1000</div> <div>£1.12</div>	<div> CPU</div> <div>£0.07</div>	<div> Int.</div> <div>£0.001</div>	<div> Ext.</div> <div>£0.0001</div>

 Copy A to B

 Delete File

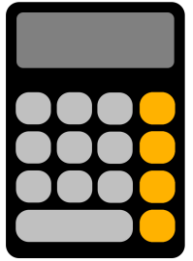


 Run Function

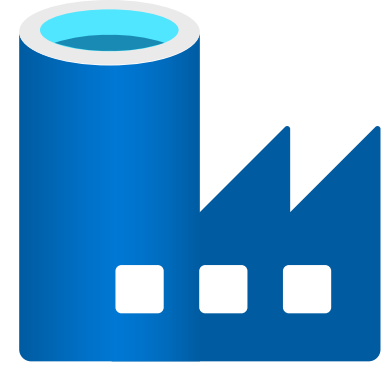

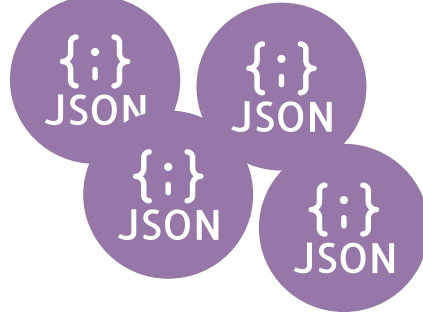

£2.13 per Month

* Prices quoted for UK South Azure Region charged in Pounds Sterling (£) captured on 26th Feb 2022.

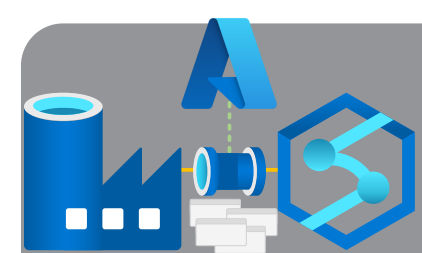
	Number of Compute Cores	Number of VM Instances	VM Uptime Per Hour	SQL Server Licence Type	
Data Flows				N/A	8x Cores General Purpose 8 Hours a day £426.30 per Month
SSIS IR				<ul style="list-style-type: none"> Standard Enterprise 	8x Cores Standard 8 Hours a day £443.97 per Month

* Prices quoted for UK South Azure Region charged in Pounds Sterling (£) captured on 26th Feb 2022.

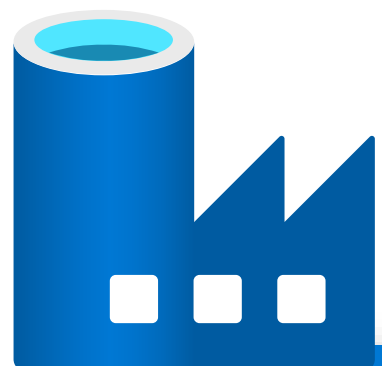


	Entity Read/Write	Monitoring
 Operations		
	Per 50,000 = £0.37	Per 50,000 = £0.19

* Prices quoted for UK South Azure Region charged in Pounds Sterling (£) captured on 26th Feb 2022.

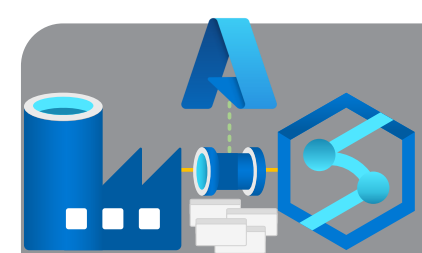


How Much Does My Pipeline Cost?

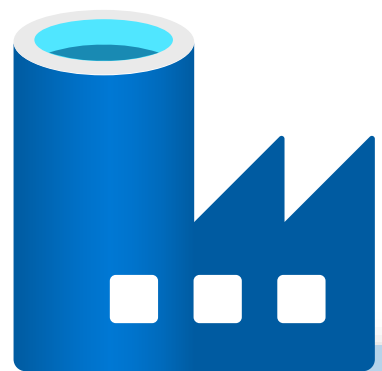


Consumption

Microsoft Azure Data Factory FrameworkFactory						
<div>>></div> <div>Dashboards</div> <div>Runs</div> <div>Pipeline runs</div> <div>Trigger runs</div> <div>Runtimes & sessions</div> <div>Integration runtimes</div> <div>Data flow debug</div> <div>Notifications</div> <div>Alerts & metrics</div>	Pipeline runs					
	Triggered Debug Rerun Cancel Refresh Edit columns List Gantt					
	Search by run ID or name Local time : Last 24 hours Status : All Runs : Latest runs Add filter					
	Showing 1 - 19 items					
	<input type="checkbox"/>	Pipeline name	Run start ↑↓	Run end	Duration	Triggered by Status Parameters
	<input type="checkbox"/>	03-Child	9/26/20, 8:31:00 PM	9/26/20, 8:31:04 PM	00:00:04	2647c753-3099-4442-b7 ✓ Succeeded [📎]
	<input type="checkbox"/>	Wait 8	9/26/20, 8:29:53 PM	9/26/20, 8:30:03 PM	00:00:09	Manual trigger ✓ Succeeded [📎]
	<input type="checkbox"/>	04-Infant	9/26/20, 8:29:46 PM	9/26/20, 8:30:50 PM	00:01:04	c283b771-c589-4667-8e ✓ Succeeded [📎]
	<input type="checkbox"/>	03-Child	9/26/20, 8:29:41 PM	9/26/20, 8:30:52 PM	00:01:10	69615837-3077-4f05-8b ✓ Succeeded [📎]
	<input type="checkbox"/>	Wait 7	9/26/20, 8:28:40 PM	9/26/20, 8:28:44 PM	00:00:04	Manual trigger ✓ Succeeded [📎]
	<input type="checkbox"/>	Wait 4	9/26/20, 8:28:38 PM	9/26/20, 8:28:40 PM	00:00:01	Manual trigger ✓ Succeeded [📎]
	<input type="checkbox"/>	04-Infant	9/26/20, 8:28:32 PM	9/26/20, 8:29:09 PM	00:00:36	e4d9a228-ad1b-4ac6-b8 ✓ Succeeded [📎]
	<input type="checkbox"/>	04-Infant	9/26/20, 8:28:32 PM	9/26/20, 8:29:31 PM	00:00:58	89dacd6c-9e08-473e-a0 ✓ Succeeded [📎]
	<input type="checkbox"/>	03-Child	9/26/20, 8:28:19 PM	9/26/20, 8:29:33 PM	00:01:14	6d8ad6c6-d97e-4a85-93 ✓ Succeeded [📎]
	<input type="checkbox"/>	Wait 1	9/26/20, 8:27:02 PM	9/26/20, 8:27:05 PM	00:00:02	Manual trigger ✓ Succeeded [📎]



How Much Does My Pipeline Cost?



Microsoft Azure | Data Factory | FrameworkFactory

Pipeline runs

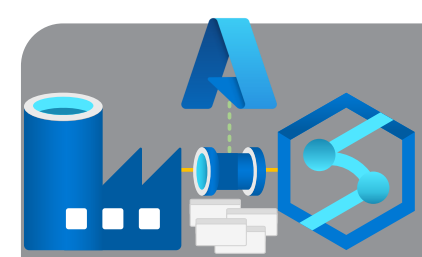
Triggered Debug Rerun Cancel Refresh Edit columns List Gantt

Search by run ID or name Local time: Last 24 hours Status: All Runs: Latest runs Add filter

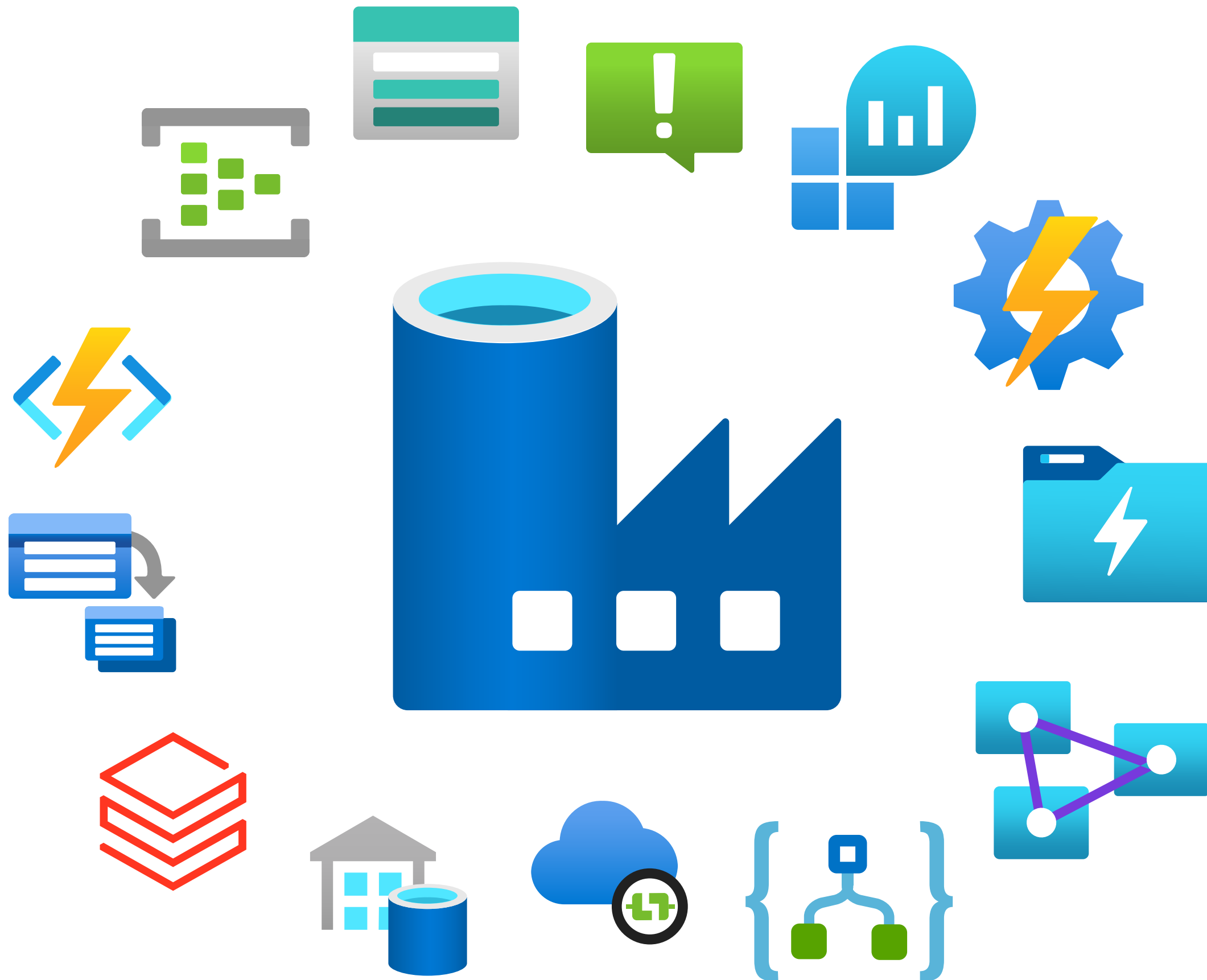
Showing 1 - 19 items

<input type="checkbox"/> Pipeline name	Run status	Quantity	Unit	Status	Parameters
<input type="checkbox"/> 03-Child	9/26/20	Pipeline run consumption			
<input type="checkbox"/> Wait 8	9/26/20	Pipeline orchestration			
<input type="checkbox"/> 04-Infant	9/26/20	Activity Runs 24 Activity runs			
<input type="checkbox"/> 03-Child	9/26/20	Pipeline execution			
<input type="checkbox"/> Wait 7	9/26/20	Azure integration runtime			
<input type="checkbox"/> Wait 4	9/26/20	Data movement activities 0.0000 DIU-hour			
<input type="checkbox"/> 04-Infant	9/26/20	Pipeline activities 0.0833 Execution hours			
<input type="checkbox"/> 04-Infant	9/26/20	External activities 0.1000 Execution hours			
<input type="checkbox"/> 03-Child	9/26/20, 8:28:19 PM	9/26/20, 8:29:33 PM	00:01:14	6d8ad6c6-d97e-4a85-93	✓ Succeeded
<input type="checkbox"/> Wait 1	9/26/20, 8:27:02 PM	9/26/20, 8:27:05 PM	00:00:02	Manual trigger	✓ Succeeded

[Learn more](#) [Pricing calculator](#)

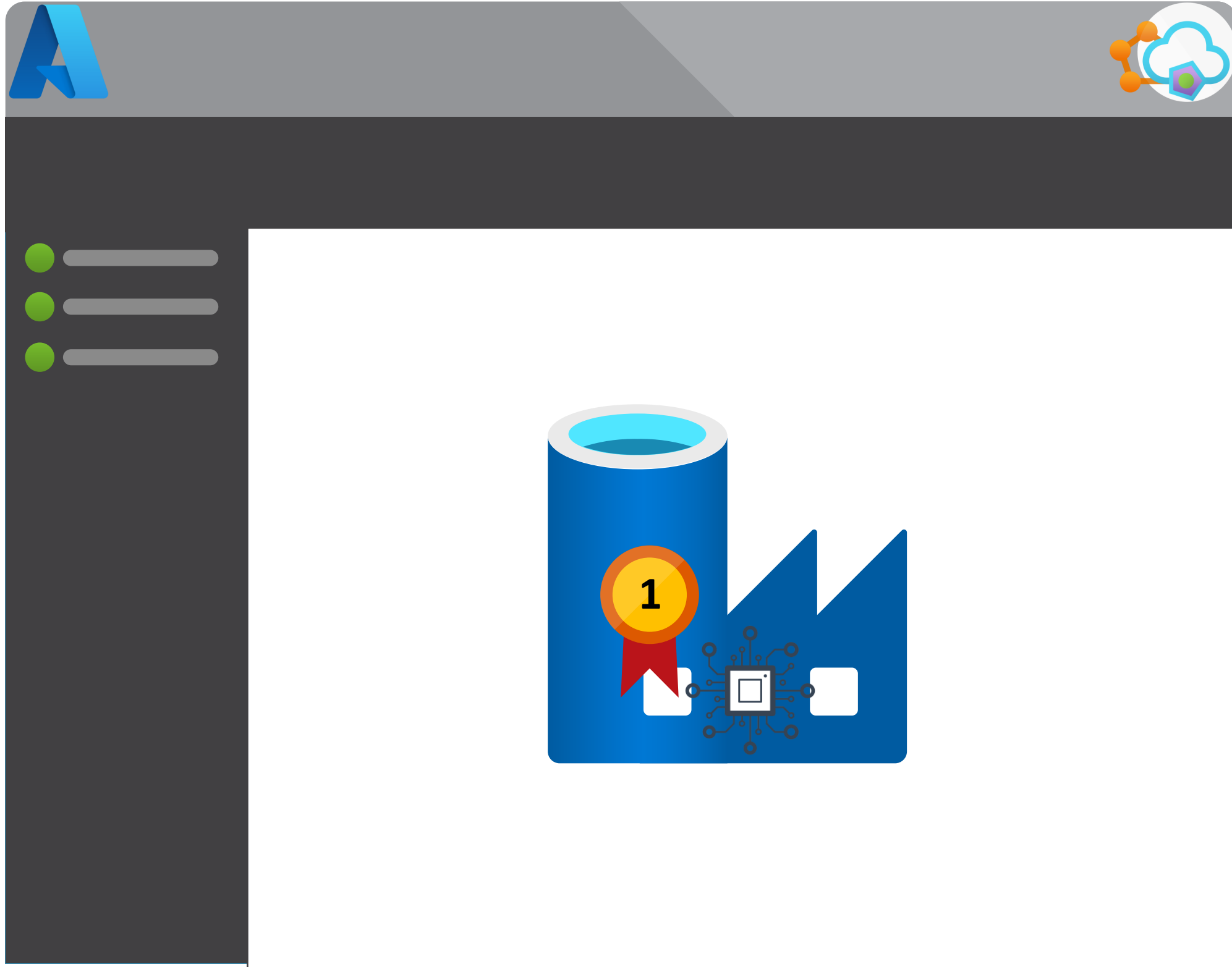


How Much Does My Data Platform Solution Cost?



Module 12

Final Thoughts



- Running Costs
- Best Practices
- Conclusions



Environment Setup & Developer Debugging

Deployments

Automated Testing

Naming Conventions

Pipeline Hierarchies

Pipeline & Activity Descriptions

Factory Component Folders

Linked Service Security via Azure Key Vault

Dynamic Linked Services

Generic Datasets

Metadata Driven Processing

Parallel Execution

Hosted Integration Runtimes

Azure Integration Runtimes

Wider Platform Orchestration

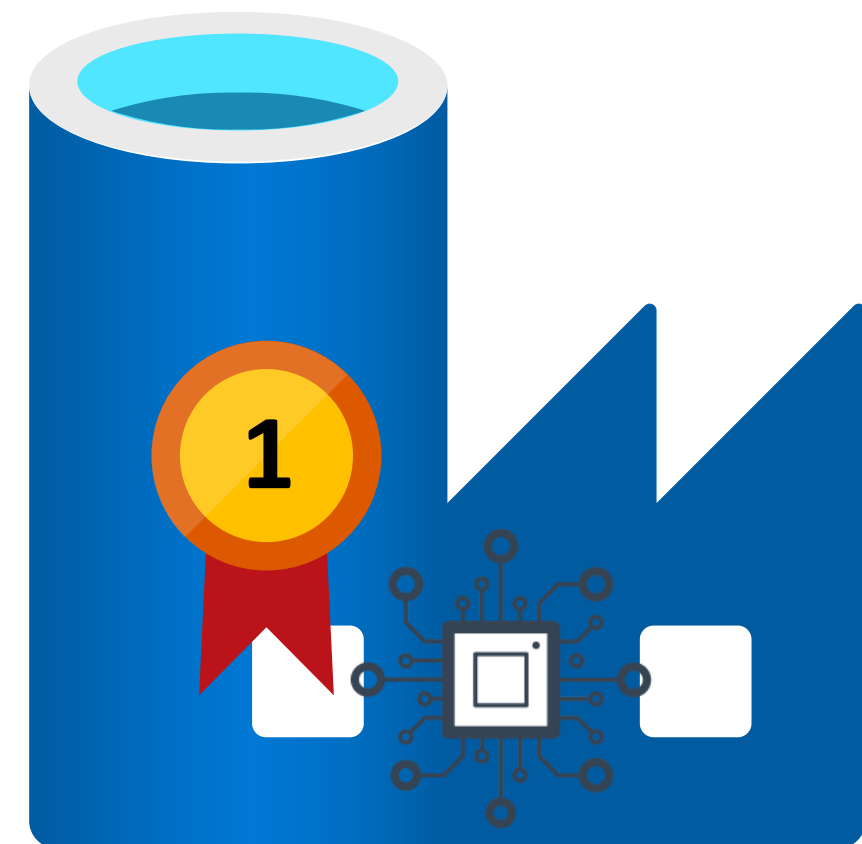
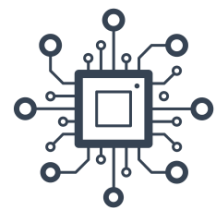
Custom Error Handler Paths

Monitoring via Log Analytics

Service Limitations

Using Pipeline Templates

Documentation





PowerShell

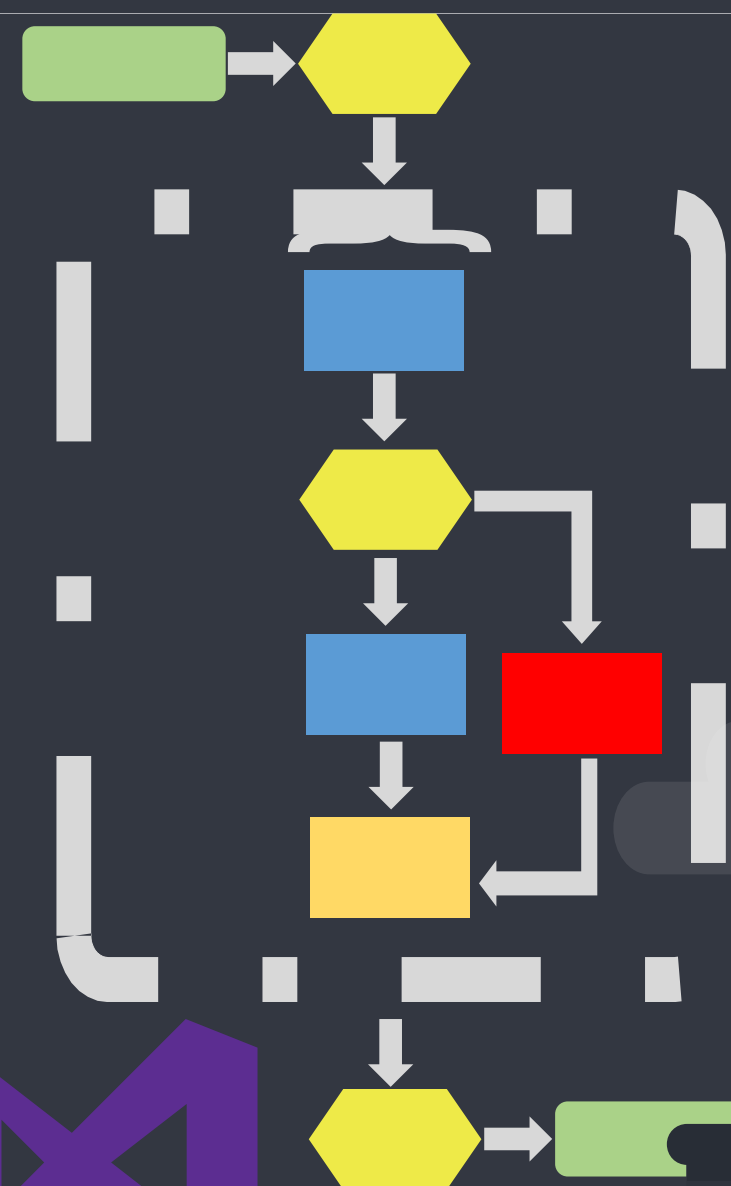
C#

XML

CSV

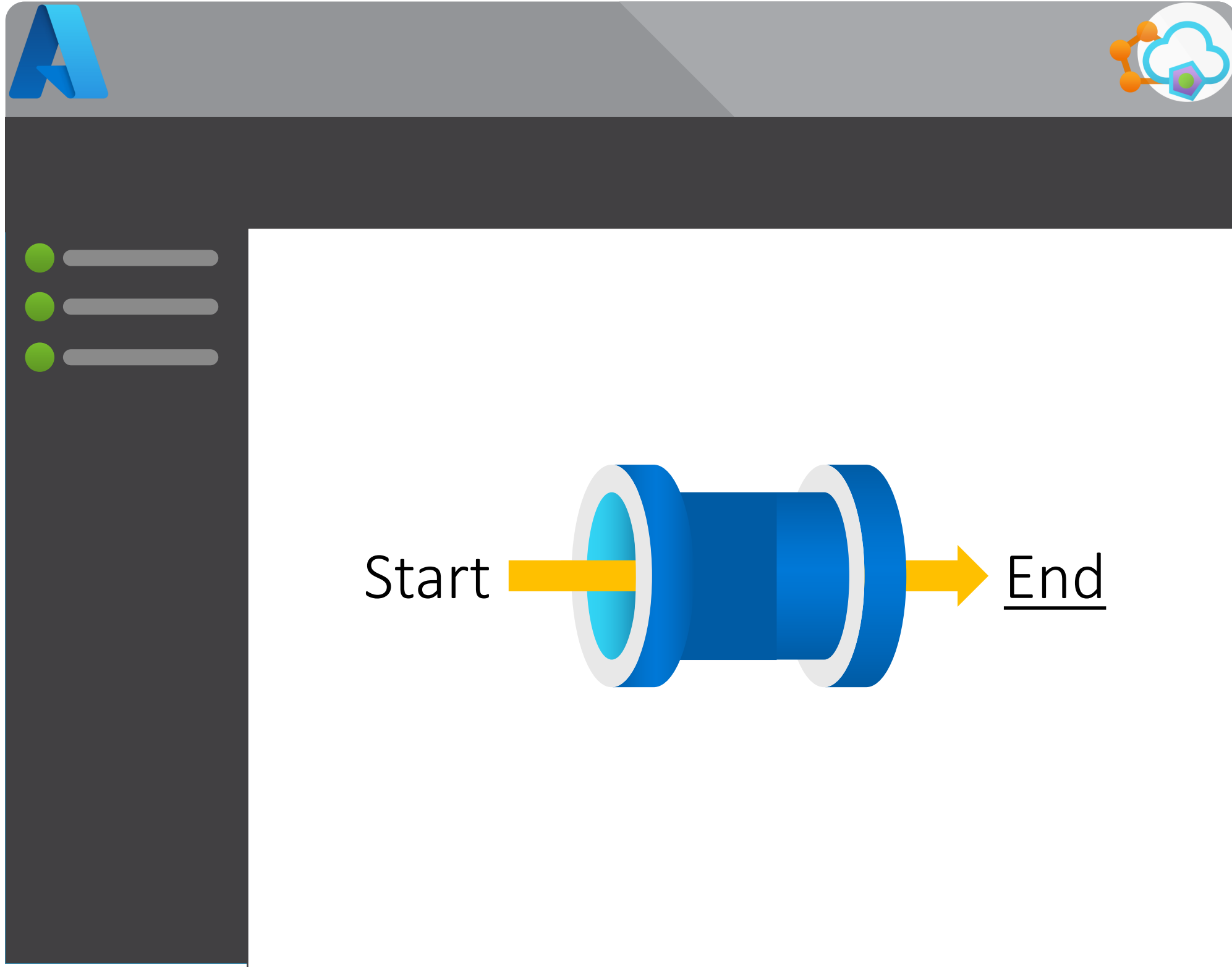
Scala

JSON

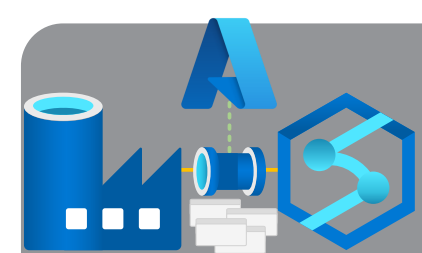


Module 12

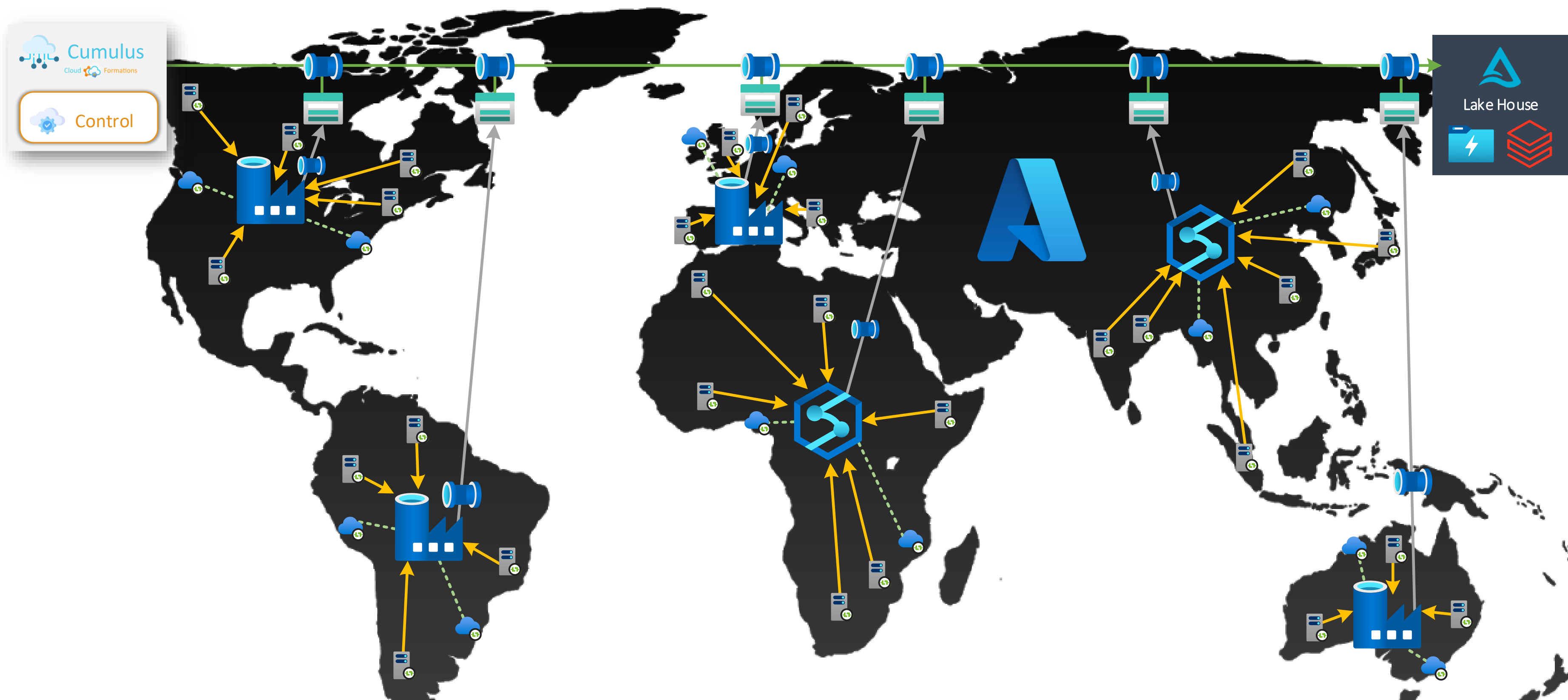
Final Thoughts



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Exploring Data Factory at Enterprise Scale





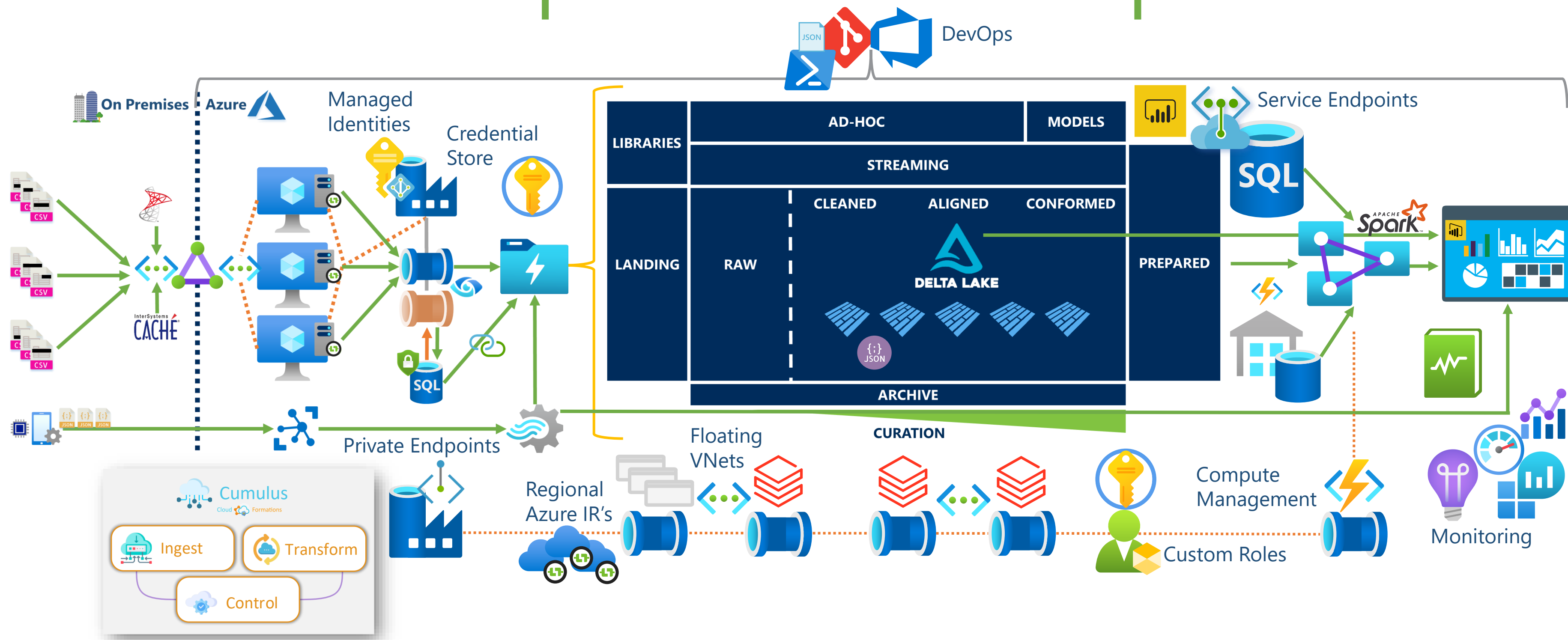
Overall Architecture



Extract

Transform

Load





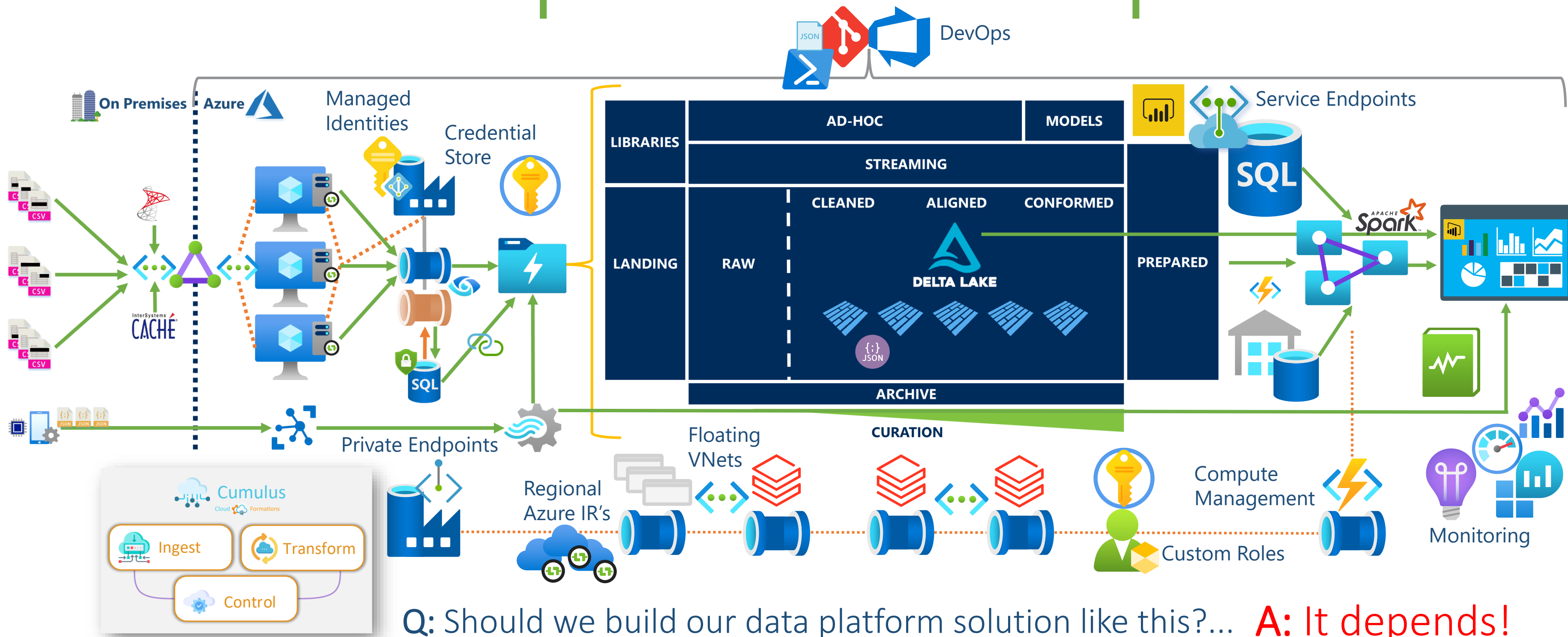
Overall Architecture

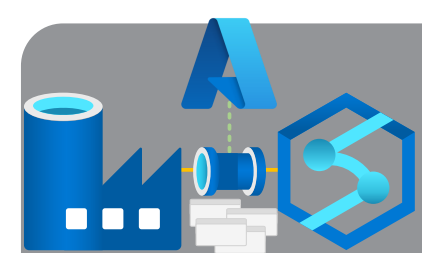


Extract

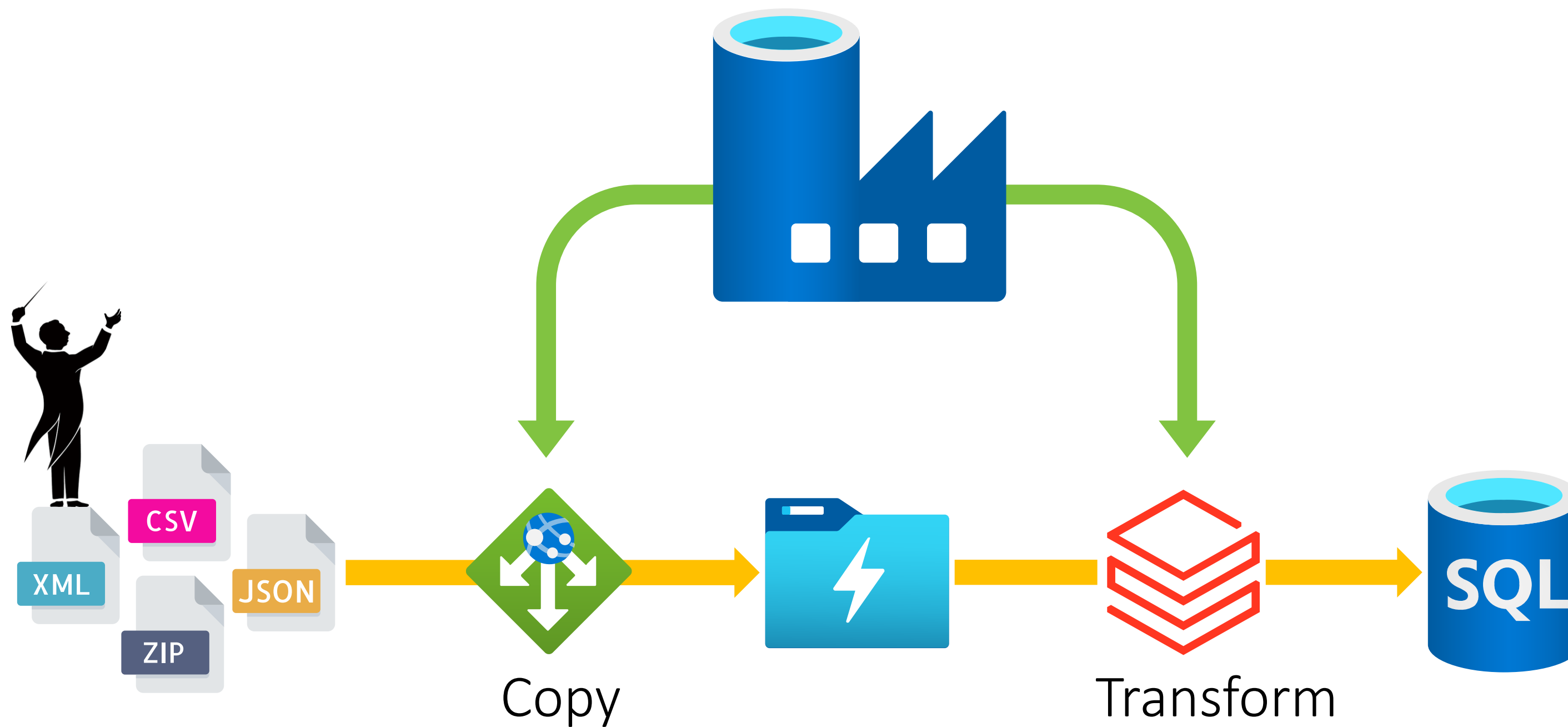
Transform

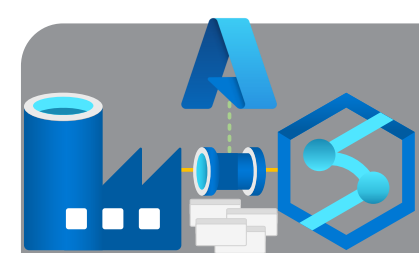
Load



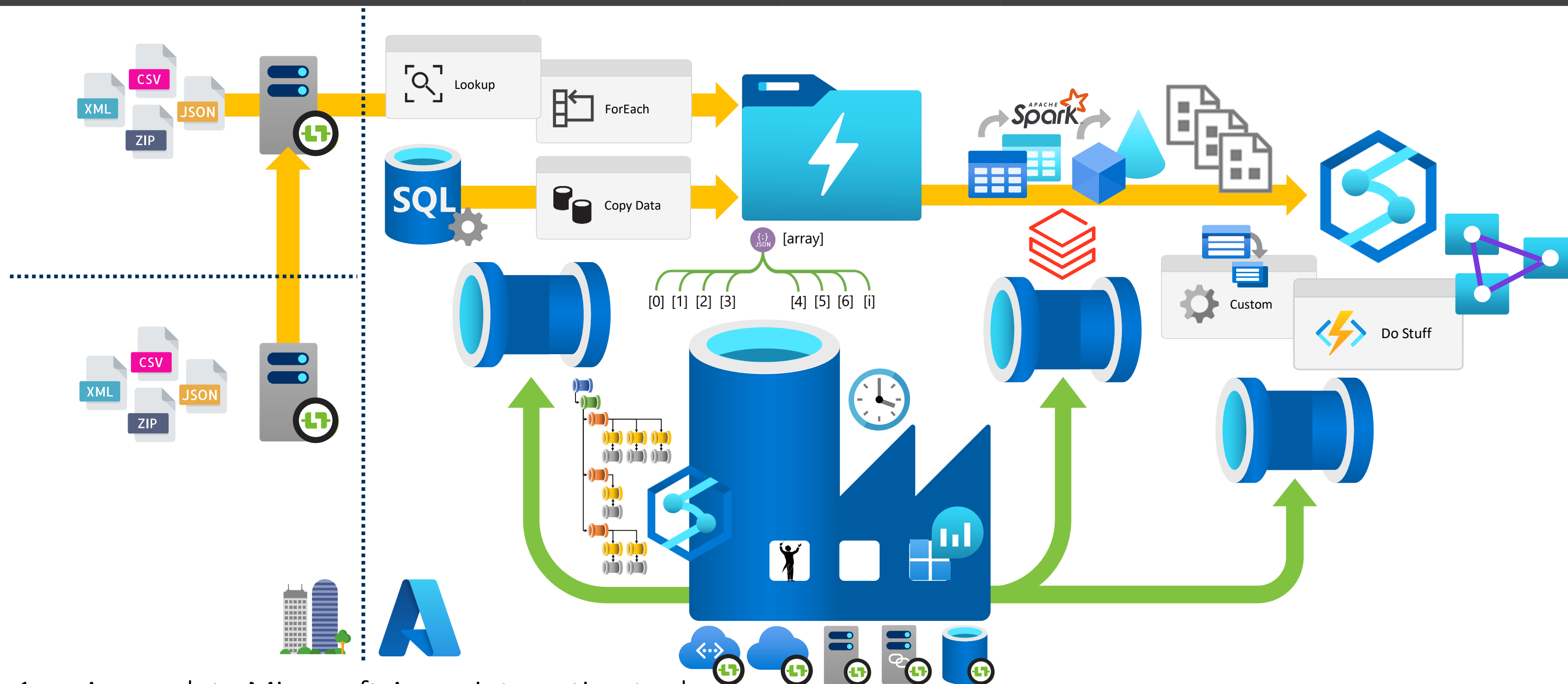


What is Azure Data Factory (ADF)?





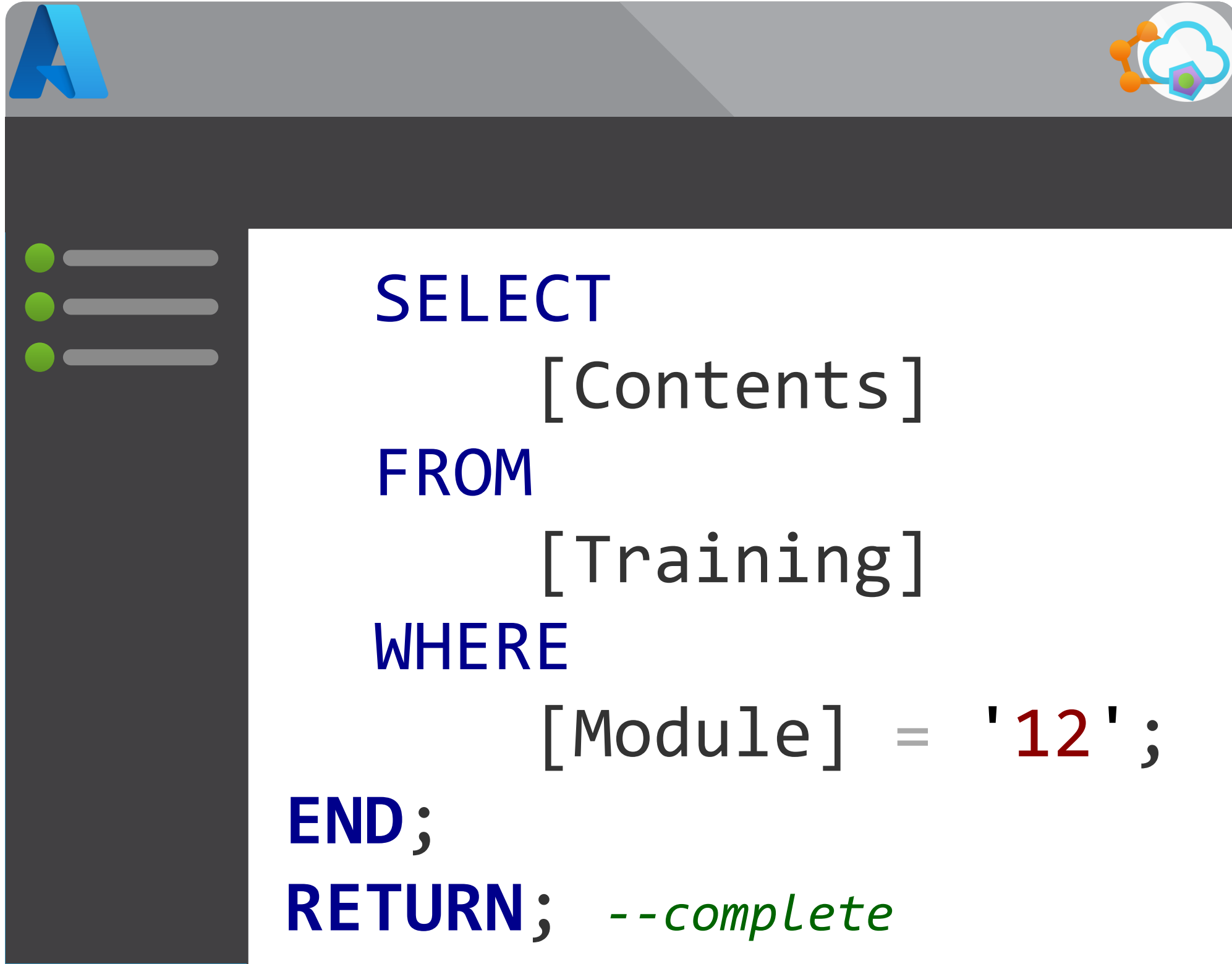
What are Azure Data Factory Integration Pipelines?



1. A complete Microsoft Azure integration tool.
2. Orchestrator of our Control Flow operations – with scale out Activities.
3. Orchestrator of our Data Flow transformations – using cloud native services.
4. The scheduler of solutions – using a variety of Pipeline Triggers and dynamic frameworks.

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Thank you for listening...

Paul Andrew



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LinkedIn: [In/mrpaulandrew](https://www.linkedin.com/company/mrpaulandrew)

GitHub: github.com/mrpaulandrew

sqlbits



Session Feedback