Module 9

Monitoring & Alerting

```sql
BEGIN --get ready

    SELECT
        [Contents]
    FROM
        [Training]
    WHERE
        [Module] = '9';
```

- Studio Monitoring
- Log Analytics & Kusto Queries
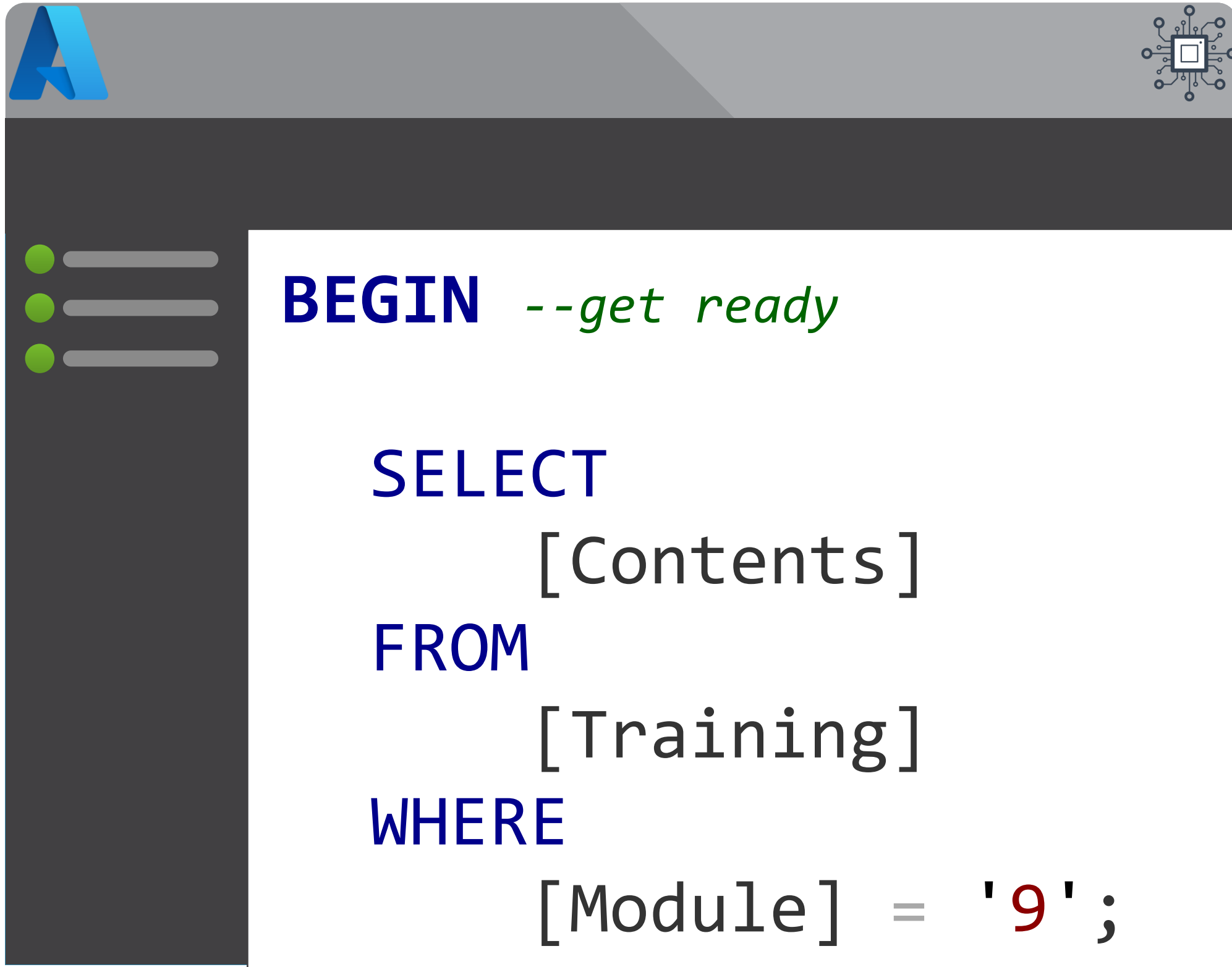- Operational Dashboards
- Advanced Alerting

Module 9
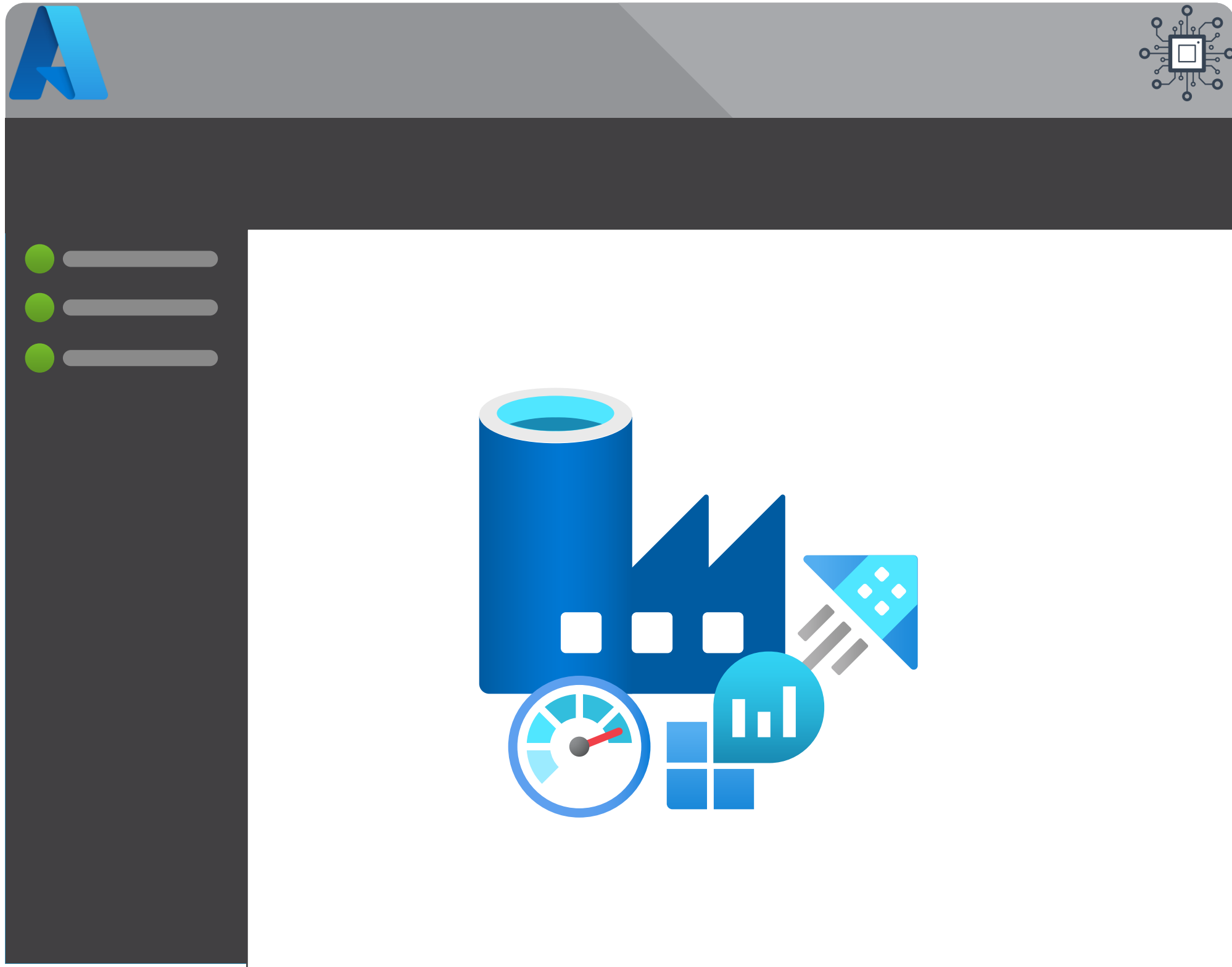
Monitoring & Alerting

- Studio Monitoring
- Log Analytics & Kusto Queries
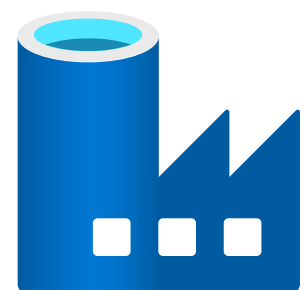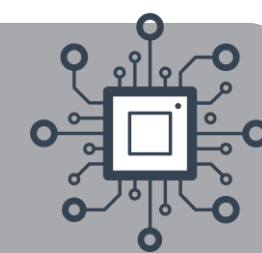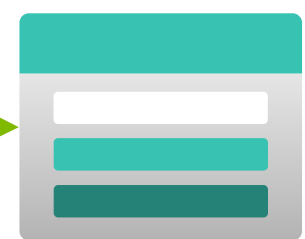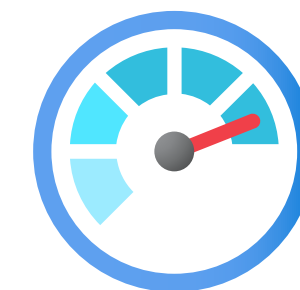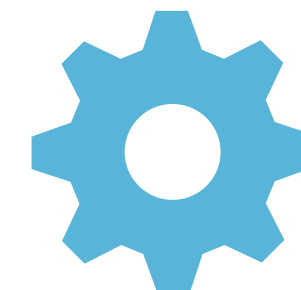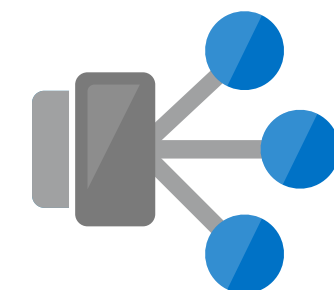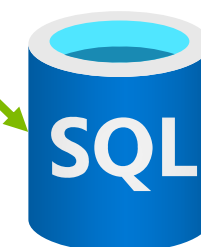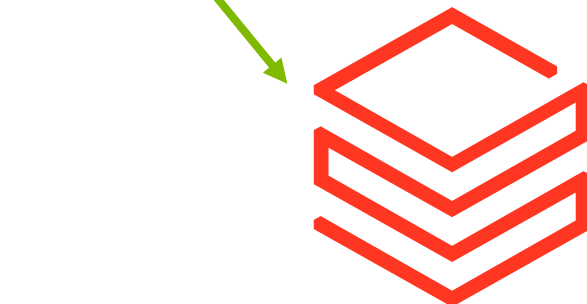- Operational Dashboards
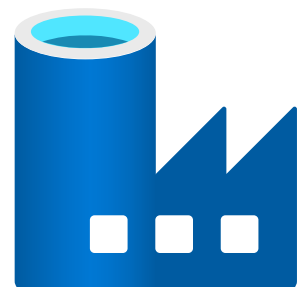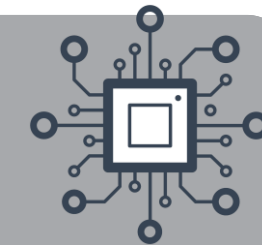- Advanced Alerting

Diagnostic Settings

Log Analytics

Storage

Event Hub

Diagnostic Settings
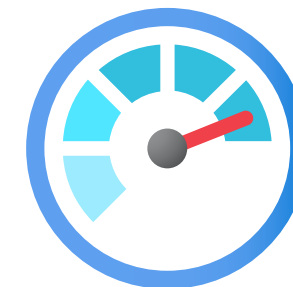
Log Analytics

Using Log Analytics

```kql
ADFPipelineRunDurations
| project
        TimeGenerated,
        Start,
        End,
        ['DataFactory'] = substring(ResourceId, 121, 100),
        Status,
        PipelineName,
        Parameters,
        ["RunDuration"] = datetime_diff('Minute', End, Start)
| where

        TimeGenerated > ago(1h)
        and Status !in ('InProgress','Queued','Cancelling')
```
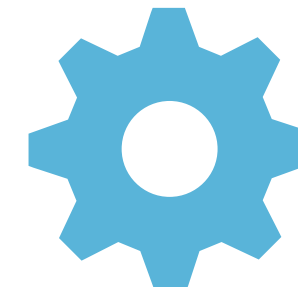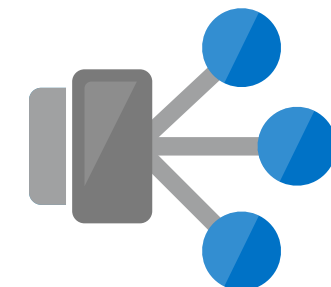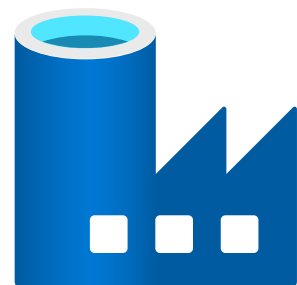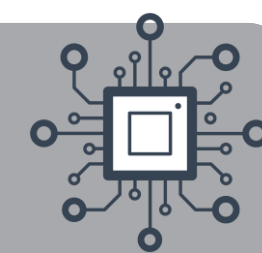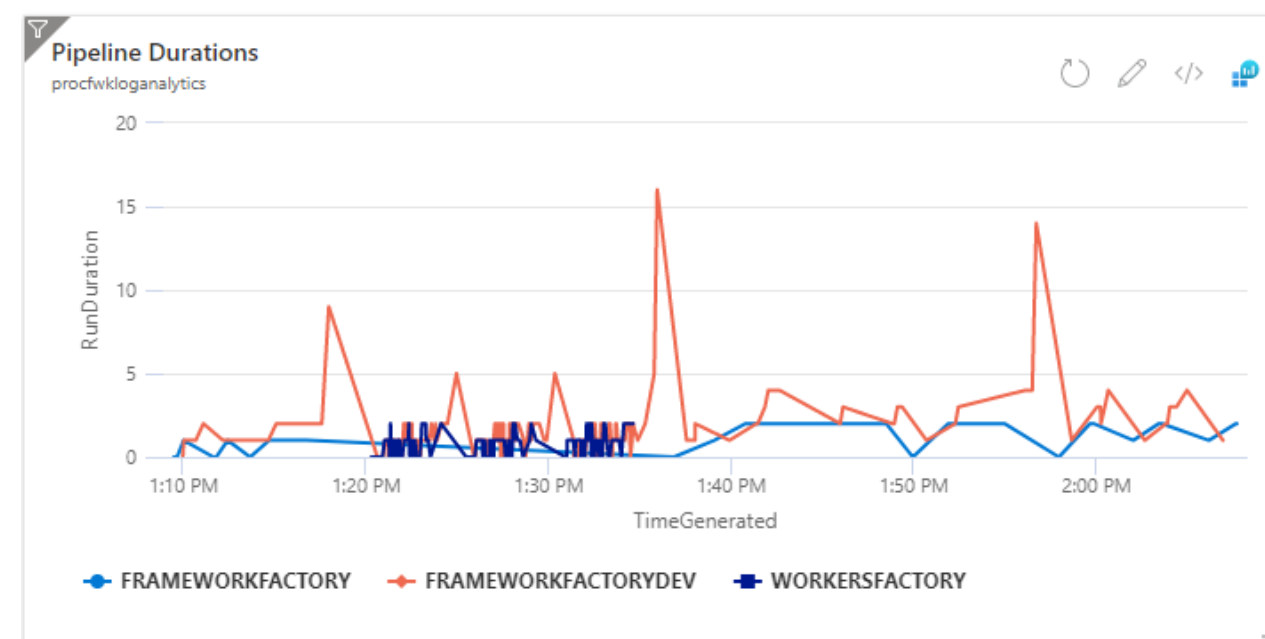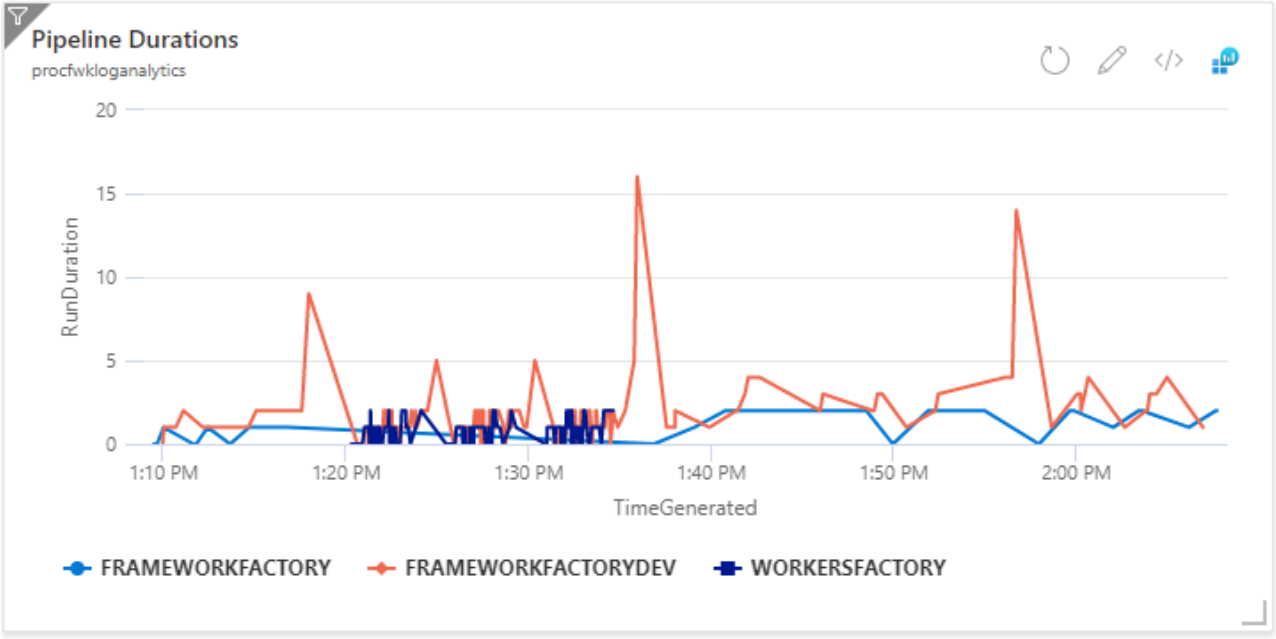

Pipeline Durations
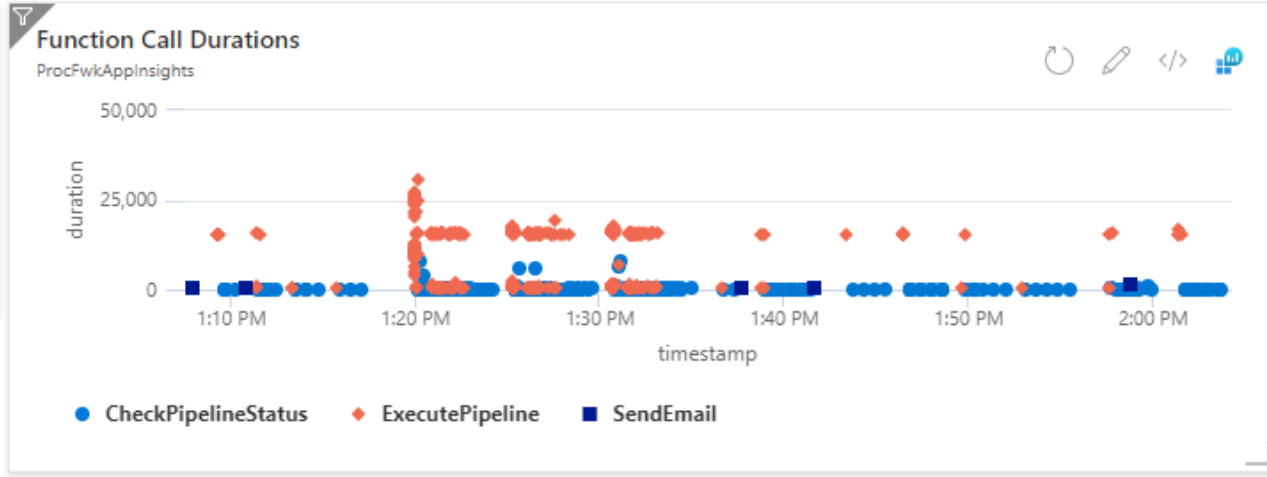procfwkloganalytics

FRAMEWORKFACTORY   FRAMEWORKFACTORYDEV   WORKERSFACTORY

Pipeline Durations
procfwkloganalytics

Monitoring Dashboard 1
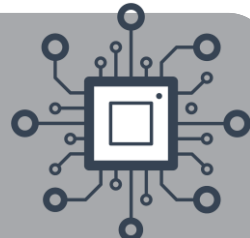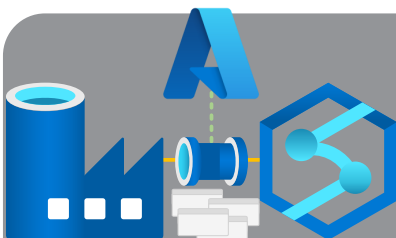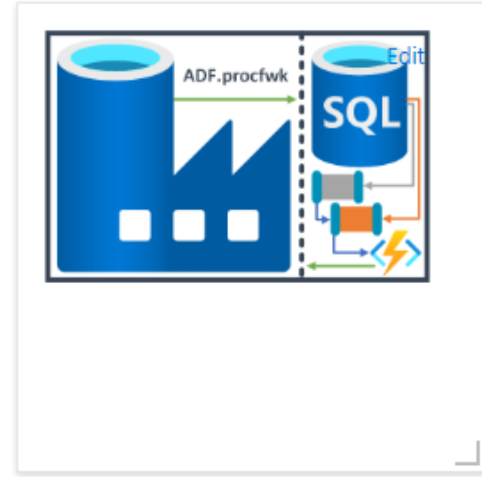
Resources and Content

ADF.procfwk   Edit

	Blogs	mrpaulandrew.com/ADF.procfwk
	GitHub	github.com/mrpaulandrew/ADF.procfwk
	Twitter	#ADFprocfwk

FrameworkSupportF...
Function App

Running

Function Call Durations
ProcFwkAppInsights

50,000

duration 25,000

0
1:10 PM   1:20 PM   1:30 PM   1:40 PM   1:50 PM   2:00 PM
timestamp
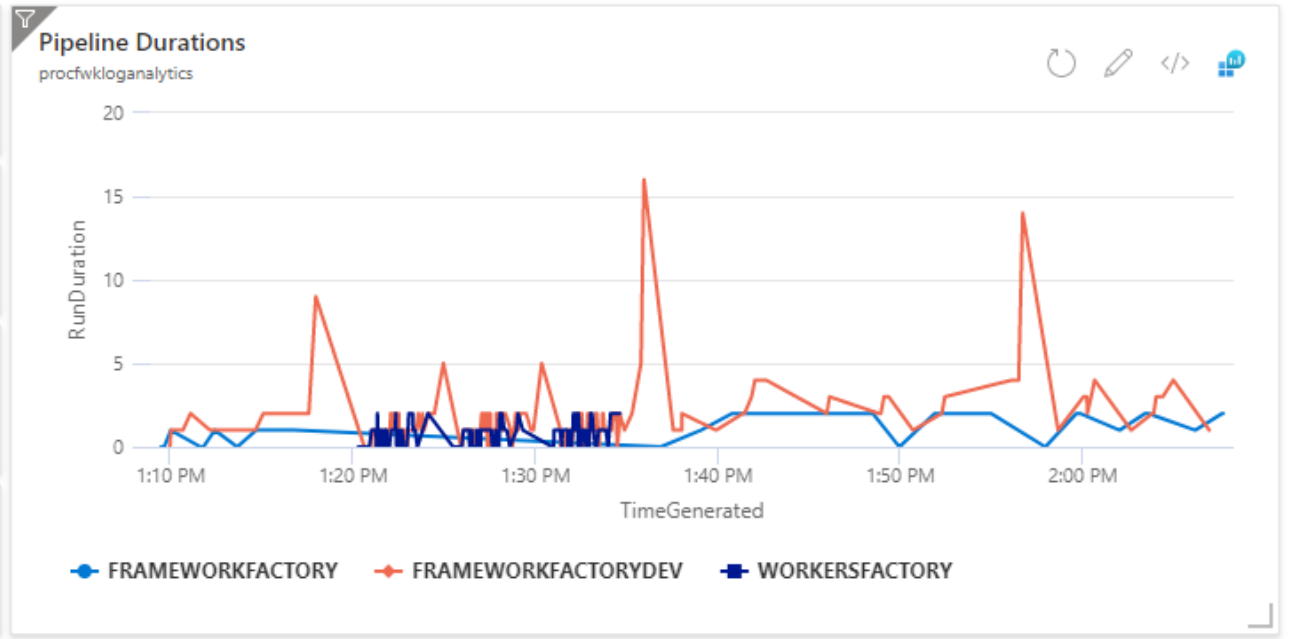
● CheckPipelineStatus   ◆ ExecutePipeline   ■ SendEmail

ProcFwkAppInsights
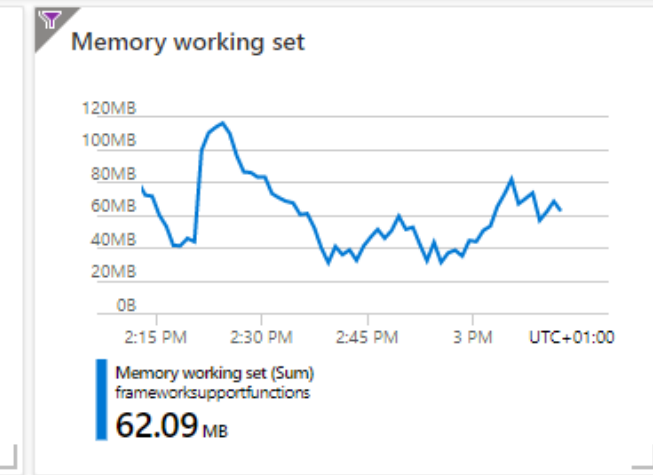Application Insights

procfwkloganalytics
Workspace

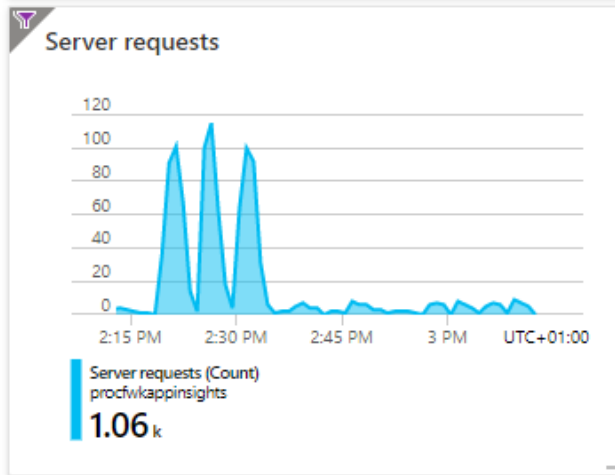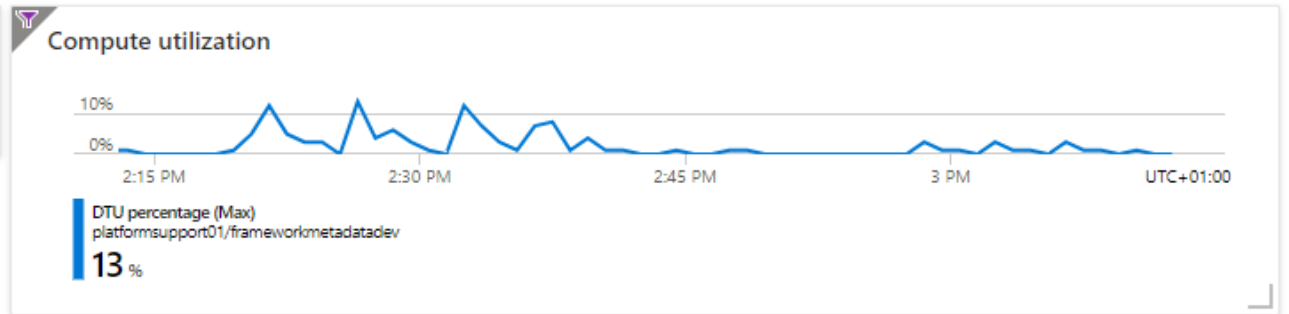### FrameworkFactor
Data factory

FrameworkFactor
Data factory

FrameworkFactor
Data factory

WorkersFactory
Data factory

Pipeline Durations
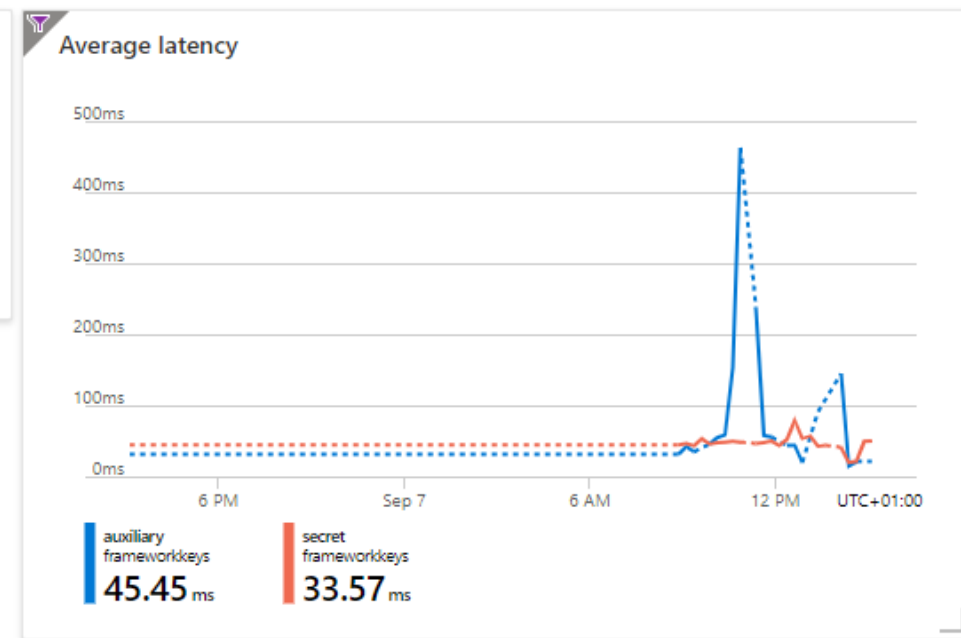procfwkloganalytics

20

15

RunDuration 10

5

0
1:10 PM   1:20 PM   1:30 PM   1:40 PM   1:50 PM   2:00 PM
TimeGenerated

─●─ FRAMEWORKFACTORY   ─●─ FRAMEWORKFACTORYDEV   ─■─ WORKERSFACTORY

Server requests

120
100
80
60
40
20
0
2:15 PM   2:30 PM   2:45 PM   3 PM   UTC+01:00

Server requests (Count)
procfwkappinsights
1.06 k

Memory working set

120MB
100MB
80MB
60MB
40MB
20MB
0B
2:15 PM   2:30 PM   2:45 PM   3 PM   UTC+01:00

Memory working set (Sum)
frameworksupportfunctions
62.09 MB

Resources
ADF.procfwk

- ProcFwkLogAnalytics
- FrameworkFactory
- FrameworkFactoryDev
- FrameworkKeys
- platformsupport01
- FrameworkMetadataDev (pl...
- frameworksupportstore
- frameworkstorage01
- FrameworkSupportFunctions
- FrameworkFactoryTest
- WorkersFactory
- frameworkonsynapse
- UKSouthPlan
- FrameworkMetadataTest (pl...
- ProcFwkAppInsights
- 9a4fe00e-39d9-4ec8-8f88-5...
- frameworkdatalake01
- sqlvaexht4i7t63enw

FrameworkMetadat...
SQL database
Online

Compute utilization

10%

0%
2:15 PM   2:30 PM   2:45 PM   3 PM   UTC+01:00

DTU percentage (Max)
platformsupport01/frameworkmetadatadev
13 %

FrameworkKeys
Key vault

Average latency

500ms
400ms
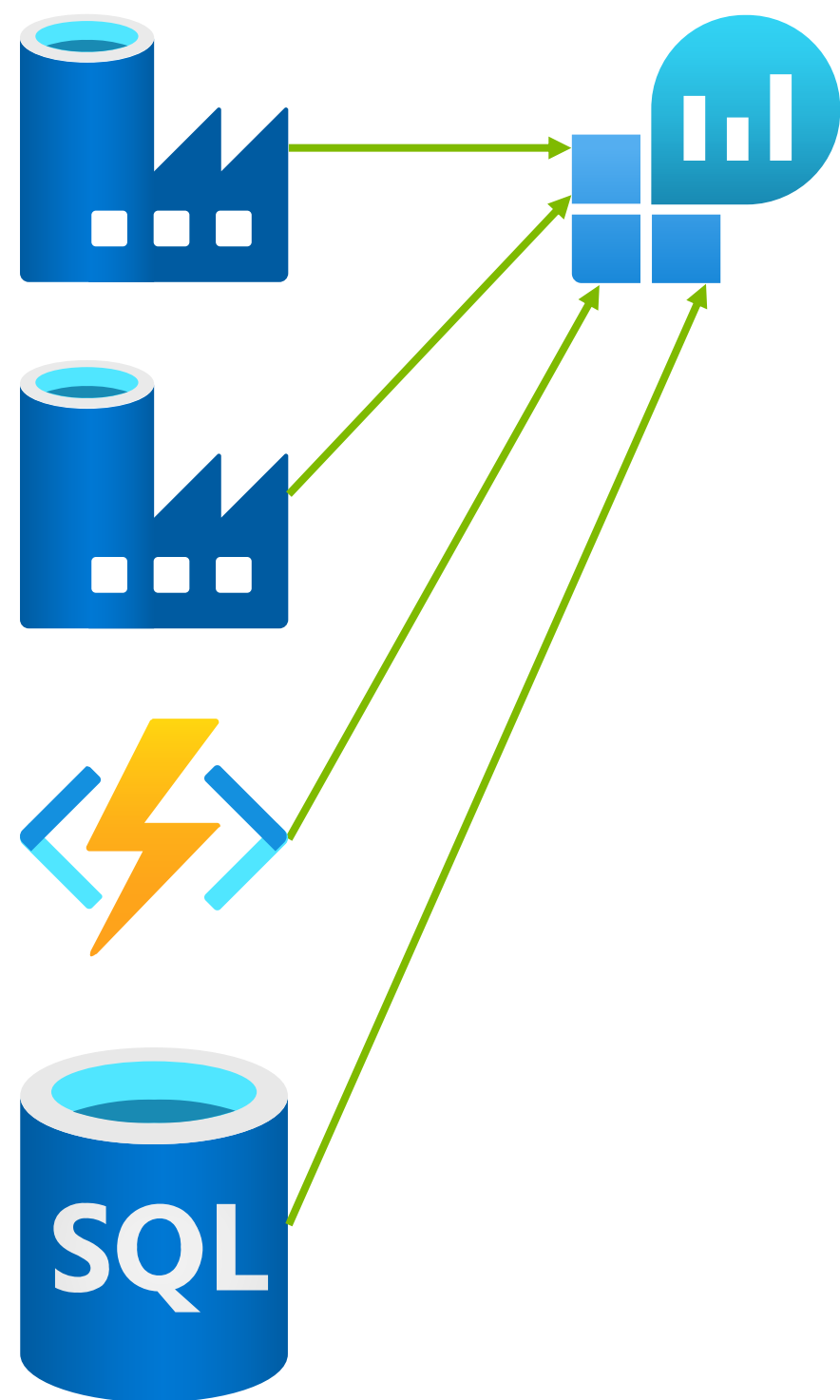300ms
200ms
100ms
0ms
6 PM   Sep 7   6 AM   12 PM   UTC+01:00

auxiliary   secret
frameworkkeys   frameworkkeys
45.45 ms   **33.57** ms

Using Data Explorer

Data Explorer

Operational Data Warehouse

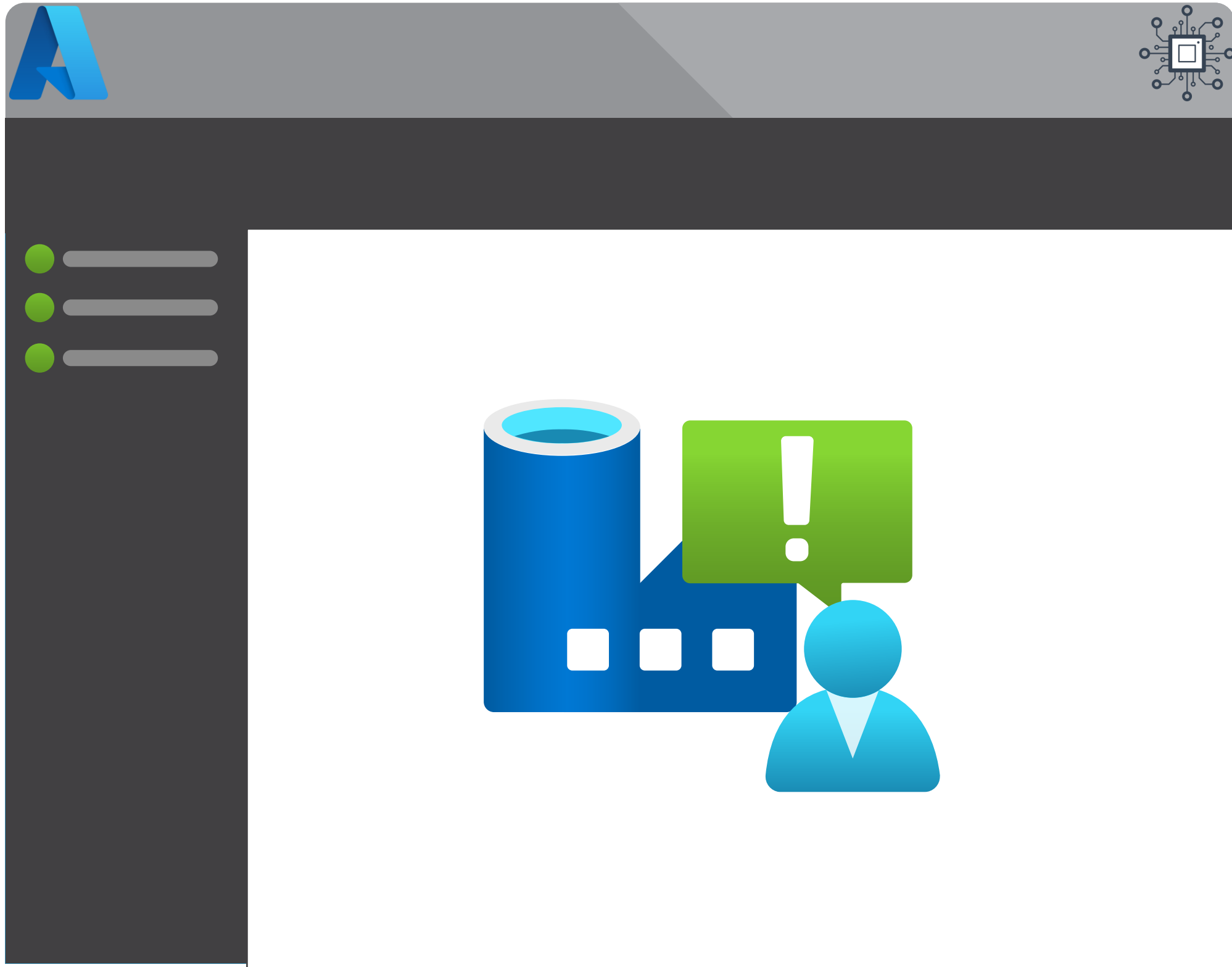Write KQL queries in Azure Data Studio Notebooks
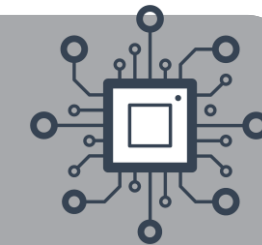
KQL

Small/Medium
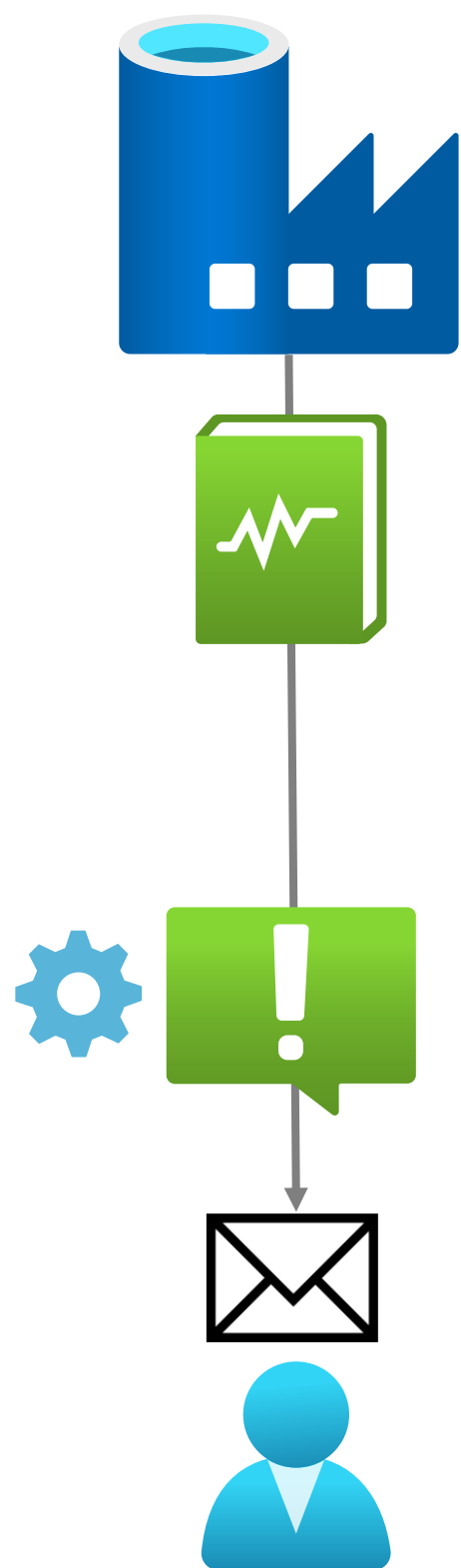
Large/Enterprise

Module 9

Monitoring & Alerting

- Portal Monitoring
- Log Analytics & Kusto Queries
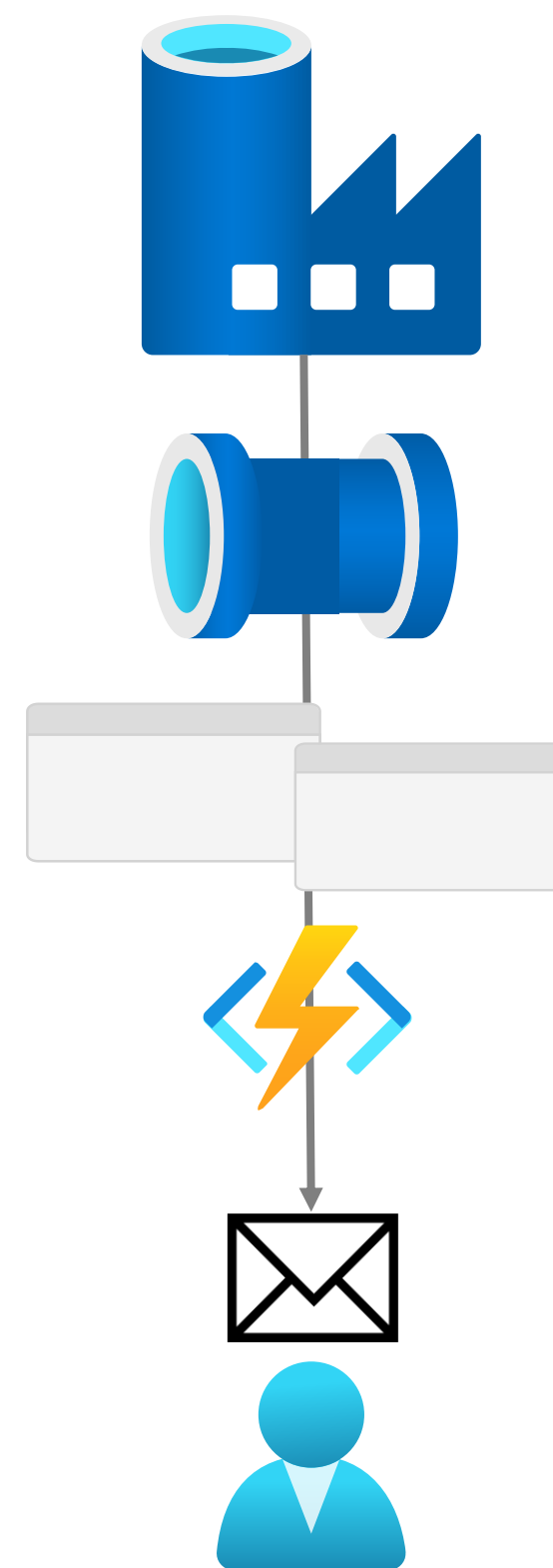- Operational Dashboards
- Advanced Alerting

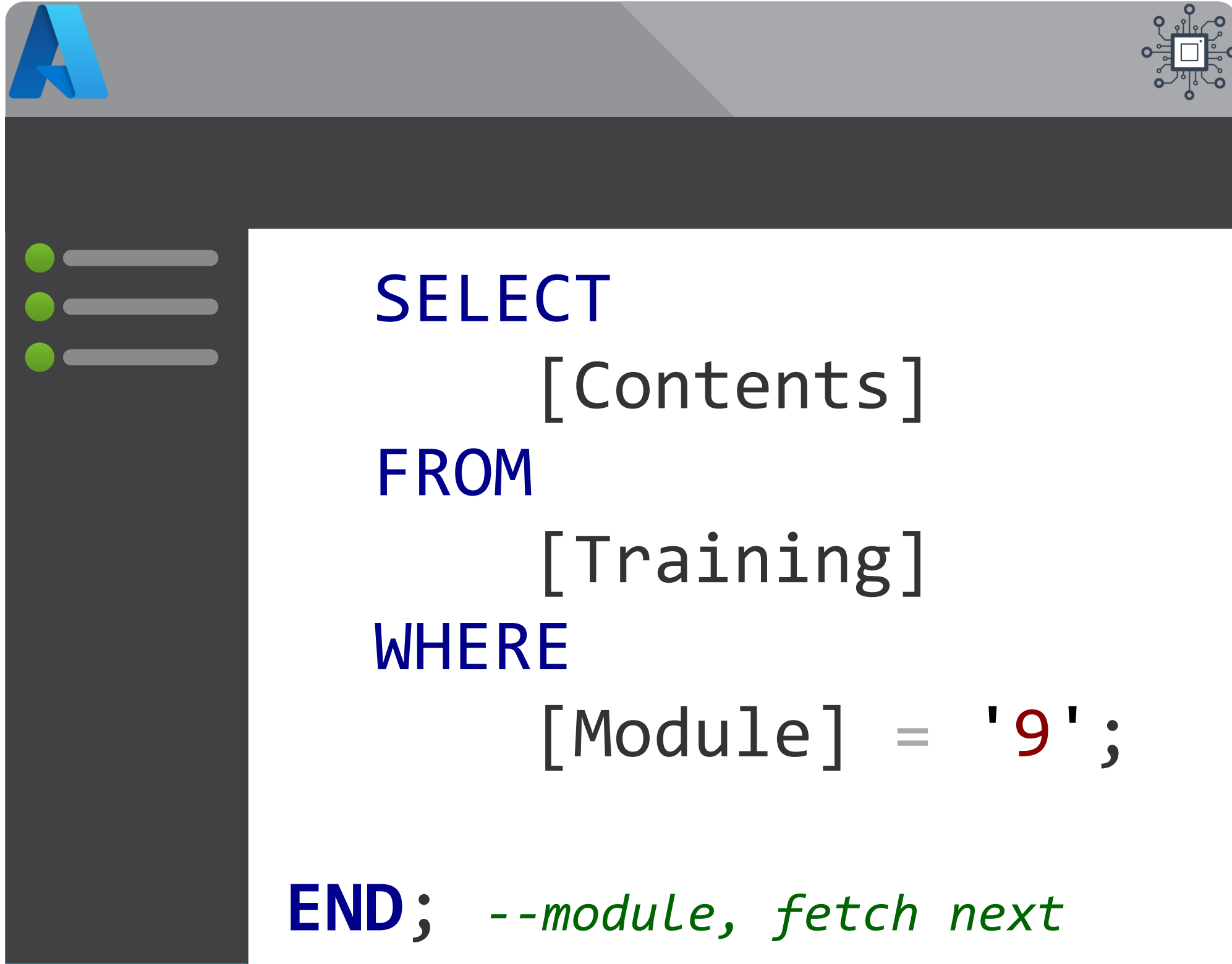# Alerting Options

Data Factory Defaults	Custom Queries	Custom Built Into Pipelines

Module 9

Monitoring & Alerting

```sql
SELECT
    [Contents]
FROM
    [Training]
WHERE
    [Module] = '9';

END; --module, fetch next
```

- Portal Monitoring
- Log Analytics & Kusto Queries
- Operational Dashboards
- Advanced Alerting