

K Database

K-Database (Kusto / temps réel / événements)

Outils

- Azure Data Explorer (Kusto)
- Microsoft Fabric – KQL Database
- Eventstream Fabric
- Data Explorer Web UI
- Power BI (mode DirectQuery Kusto)
- Azure Monitor Logs
- Azure Event Hub
- Azure IoT Hub

Langages

- KQL (Kusto Query Language)
→ langage principal
- SQL (support partiel, lecture)
- Python (SDK, notebooks)
- C# (SDK)
- REST API

👉 Usage typique : séries temporelles, IoT, logs, télémétrie, détection d'anomalies, quasi temps réel.

Lakehouse

Outils

- Microsoft Fabric – Lakehouse
- Notebooks Fabric
- Spark Engine Fabric
- Dataflow Gen2
- Shortcuts OneLake
- Delta Lake
- Power BI (Direct Lake)
- MLflow (tracking ML)

Langages

- Spark SQL
- PySpark
- Scala
- SQL (lecture via endpoint SQL)
- Python (ML, feature engineering)

👉 Usage typique : transformations massives, préparation Silver/Gold, feature engineering, machine learning, analytics avancées.

Datawarehouse

Outils

- Microsoft Fabric – Data Warehouse
- SQL Endpoint Fabric
- Power BI (Import / DirectQuery)
- Dataflow Gen2
- Pipelines Fabric
- SSMS / Azure Data Studio (connexion SQL)
- Azure DevOps / Git (CI/CD SQL)

Langages

- T-SQL → langage central
- SQL ANSI
- DAX (consommation via Power BI)

👉 Usage typique : schéma en étoile, faits/dimensions, KPI métier, reporting gouverné, performance BI.