

## Microsoft Cloud Workshop : Real-time data with Azure Database for PostgreSQL Hyperscale

In this workshop, you will learn how to use advanced features of the managed PostgreSQL PaaS service on Azure to make your database more scalable and able to handle the rapid ingest of streaming data while simultaneously generating and serving pre-aggregated data for reports. You will design a resilient stream processing pipeline to ingest, process, and save real-time data to Postgres. Next, you will learn how to explore and gain insights from flat files at scale, perform aggregates, and save the valuable information to your database. Finally, you will create complex reports containing advanced visualizations, using a drag-and-drop interface, and use them to build a customizable dashboard that gets updated in real-time.

### Détails

- **Code** : Cloud-Hyper
- **Durée** : 1 jour ( 7 heures )

Public

Pré-requis

- Connaissances de PostgreSQL

### Objectifs

- Implement a highly scalable, managed open source database solution.
- Ensure that it can handle real-time, roll-up and serve data for advanced visualizations.

### Programme

#### Module 1: Whiteboard Design Session – Real-time data with Azure Database for PostgreSQL Hyperscale

- **Lessons**
  - Review the customer case study
  - Design a proof of concept solution
  - Present the solution

#### Module 2: Hands-on Lab – Real-time data with Azure

#### Database for PostgreSQL Hyperscale

- **Lessons**
  - Connect to and set up your database
  - Add secrets to Key Vault and configure Azure Databricks
  - Send clickstream data to Kafka and process it in real time
  - Rollup real-time data in PostgreSQL
  - Create advanced visualizations in Power BI

### Modalités

- **Type d'action** :Acquisition des connaissances
- **Moyens de la formation** :Formation présentielle – 1 poste par stagiaire – 1 vidéo projecteur – Support de cours fourni à chaque stagiaire
- **Modalités pédagogiques** :Exposés – Cas pratiques – Synthèse
- **Validation** :Exercices de validation – Attestation de stages