

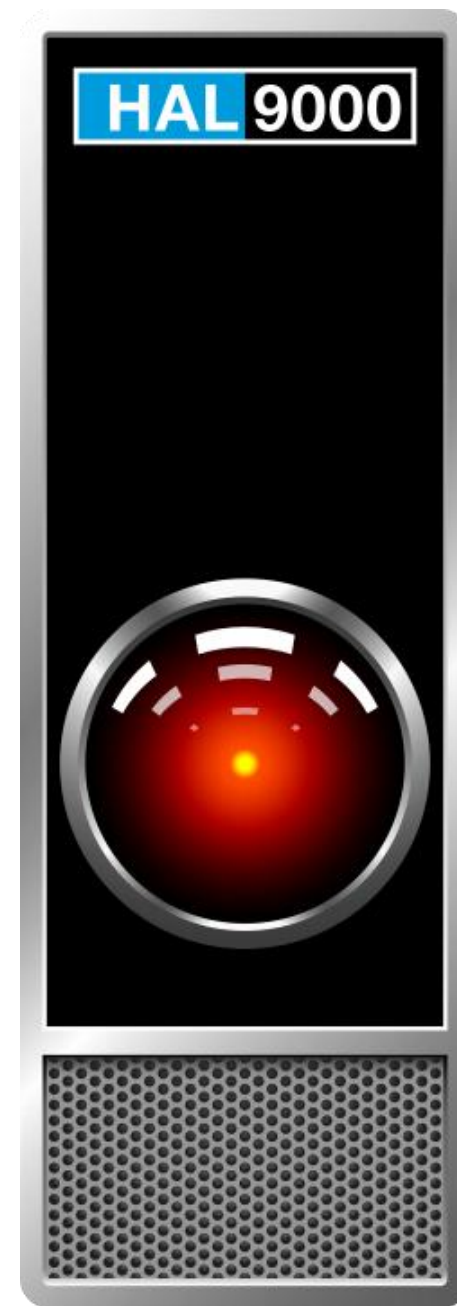


Parler à ses données

De la science-fiction à la réalité avec Microsoft Fabric

Christopher Maneu
Principal Cloud Advocate – Data, Microsoft
@cmaneu





New chat

Rechercher

Images

Apps

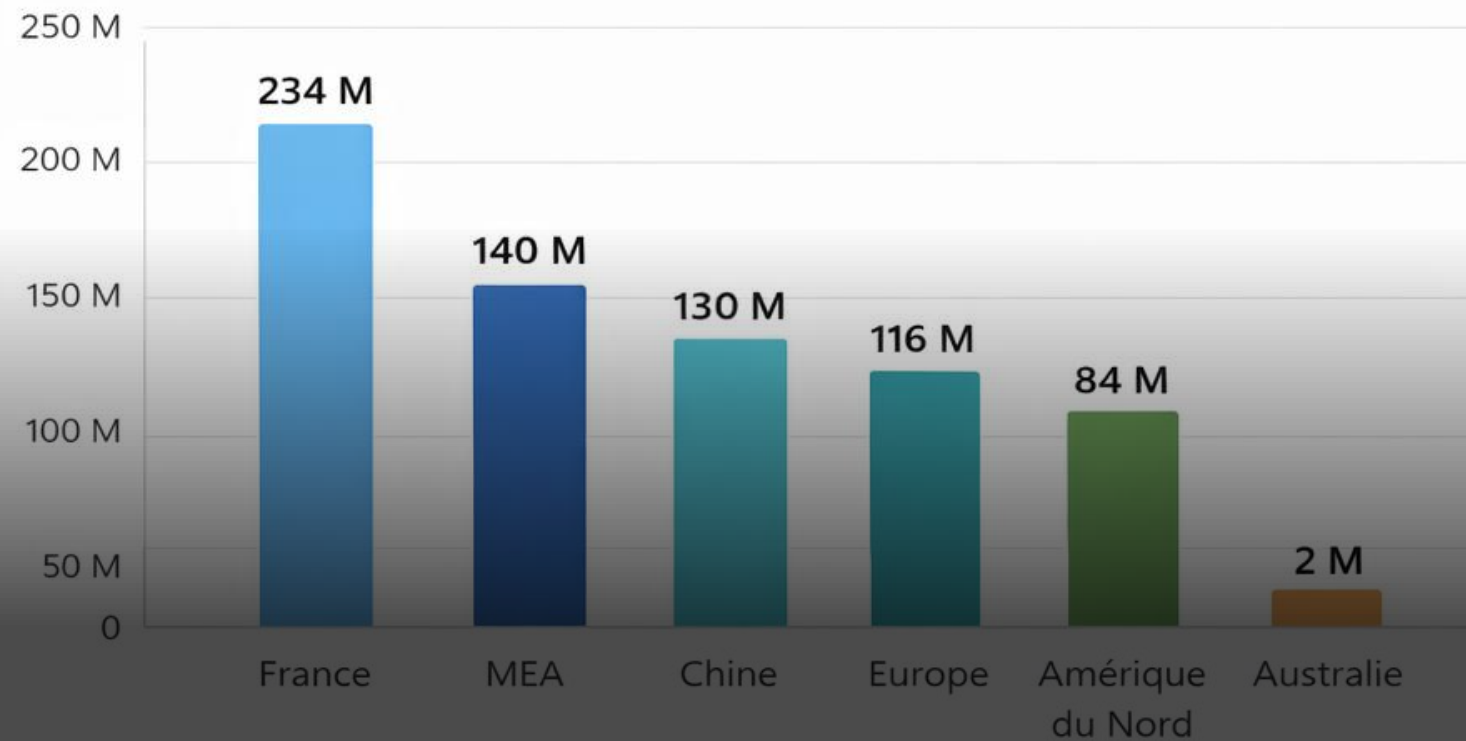
Recherche

approfondie

Exploration

La France arrive en tête avec 234M, 18 % au dessus de la prévision. Les 5 regions MEA affiche une progression stable par rapport aux années précédentes. Par contre, je n'ai que deux ventes pour l'Australie, ce qui ne semble pas statistiquement correct.

Ventes 2025 par région



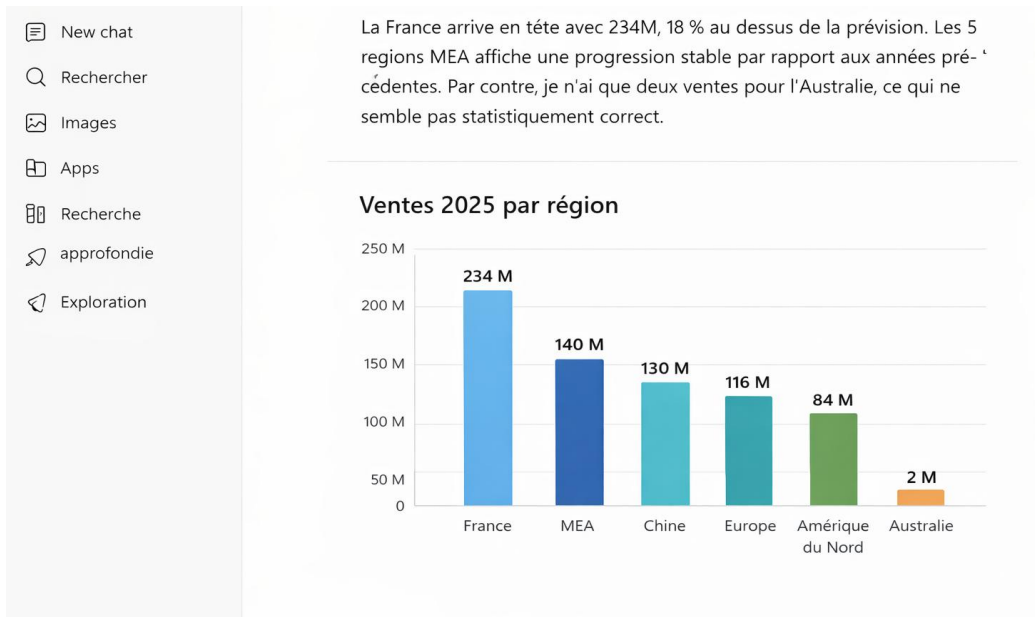
La réponse idéale

L'imagination à l'épreuve de la réalité

// *Donne moi les ventes
de 2025 par région* //

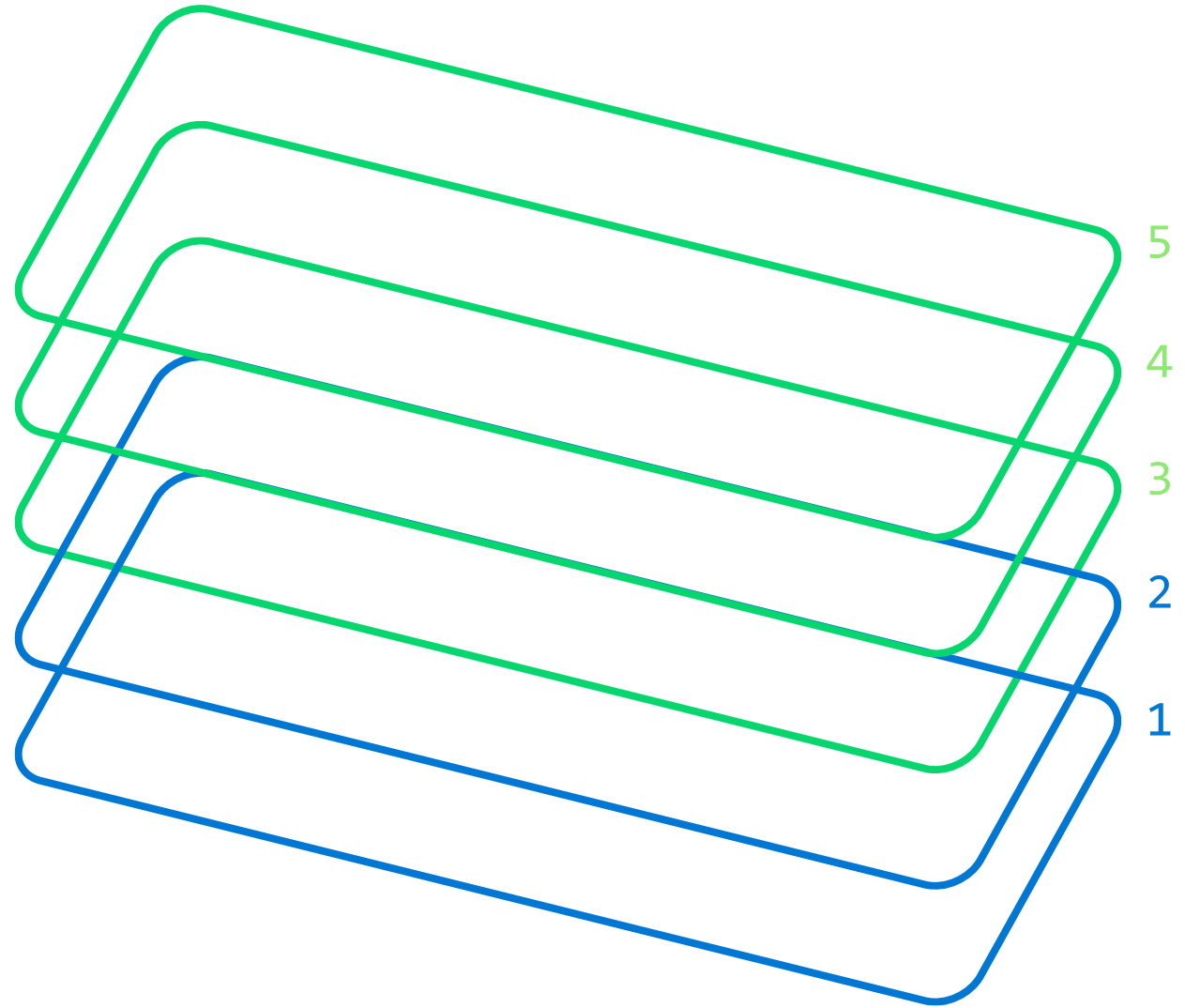
Ce que l'on imagine

Ce que l'on déploie

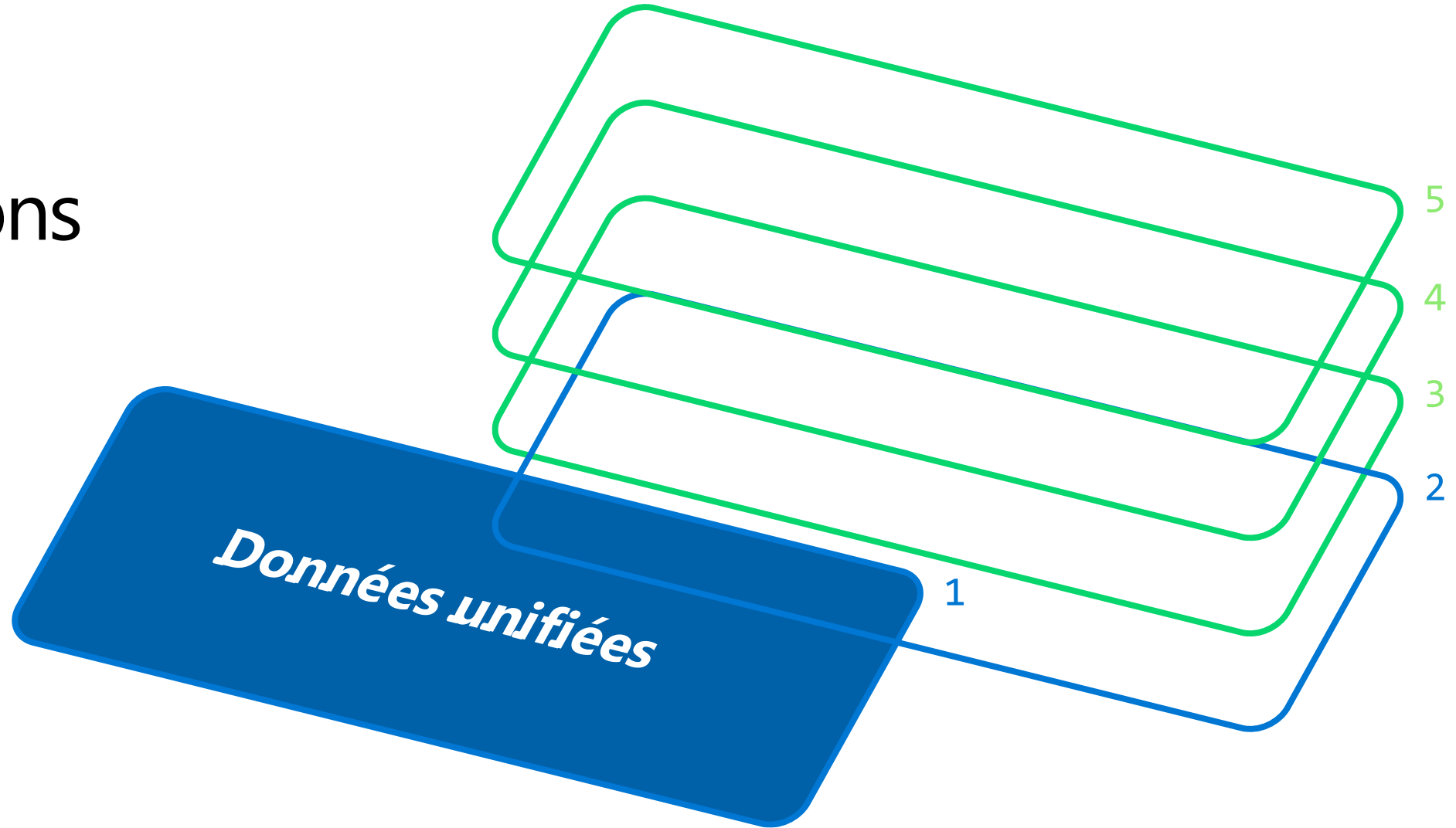


```
1 SELECT SUM(revenue)
2 FROM sales
3 WHERE year = 2025
4 GROUP BY region;
```

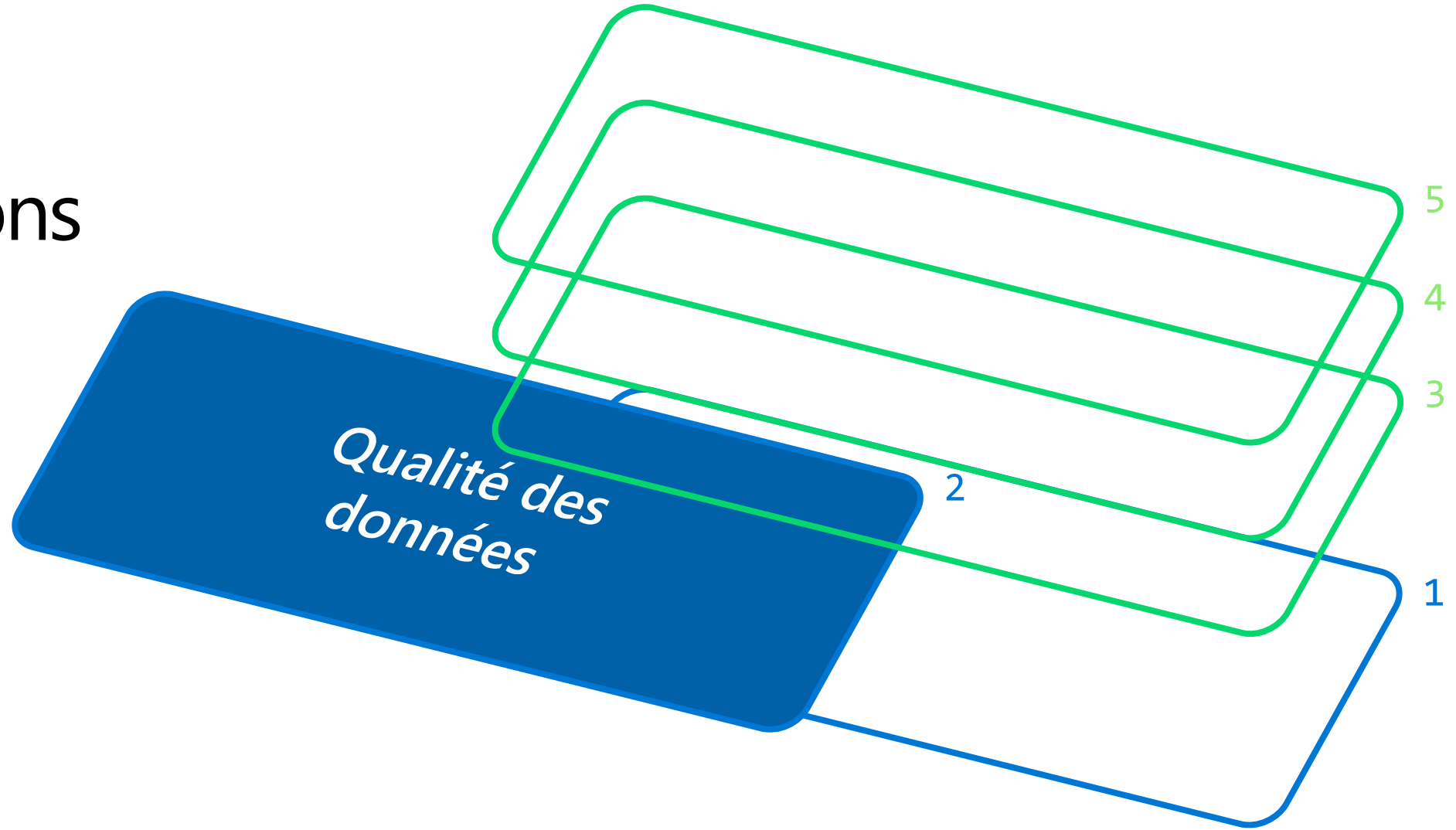
La pyramide des agents data



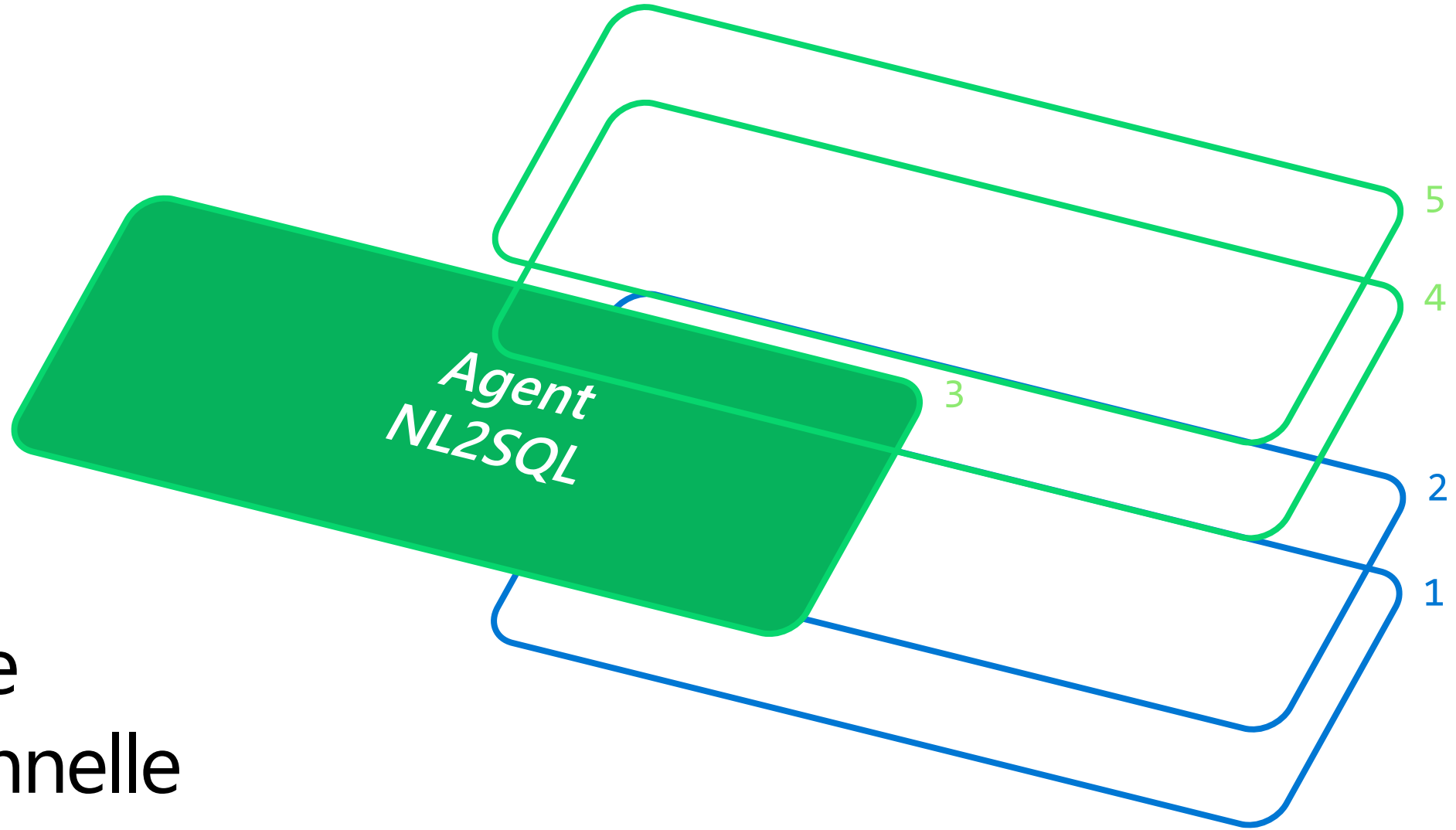
Les fondations



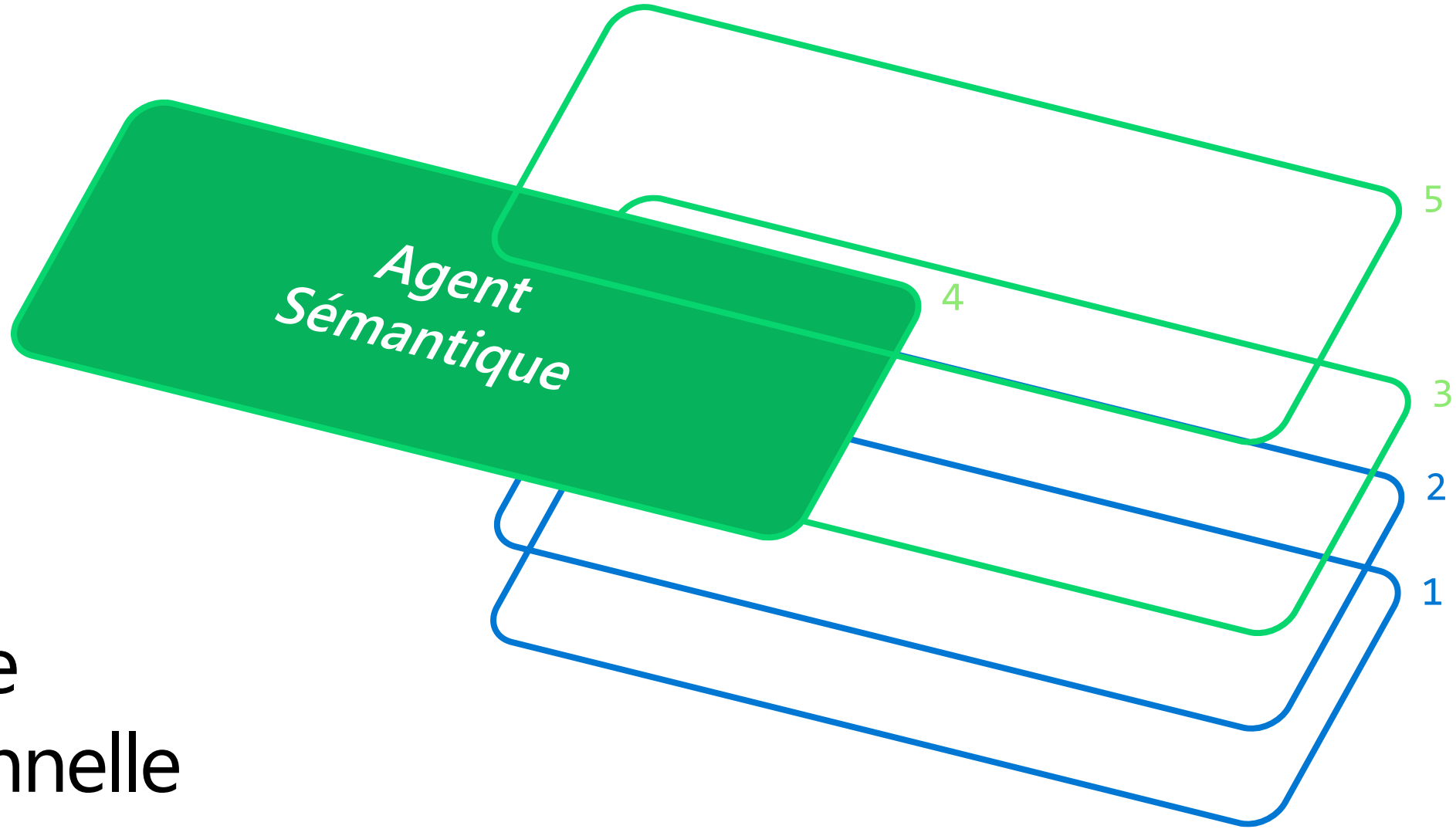
Les fondations



Les niveaux
d'autonomie
conversationnelle



Les niveaux
d'autonomie
conversationnelle



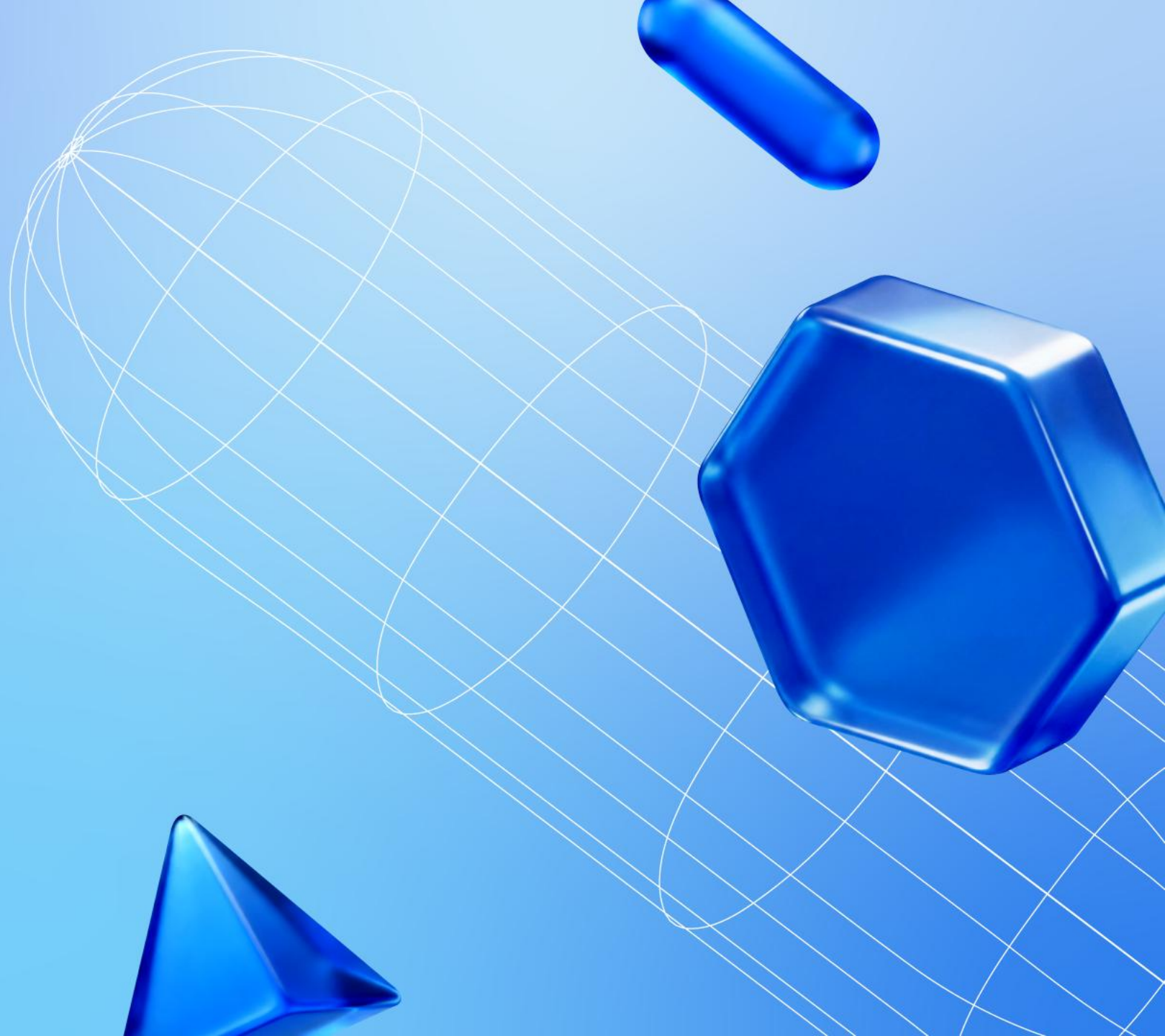
Les niveaux
d'autonomie
conversationnelle



Agenda

Les fondations
Les conversations

Les fondations





Microsoft Fabric

La plateforme de données unifiée adaptée à la transformation par l'IA



Data
Factory



Analyse de
données



Bases de
données



Real-Time
Intelligence



Power BI



IQ



Solutions
partenaires



IA

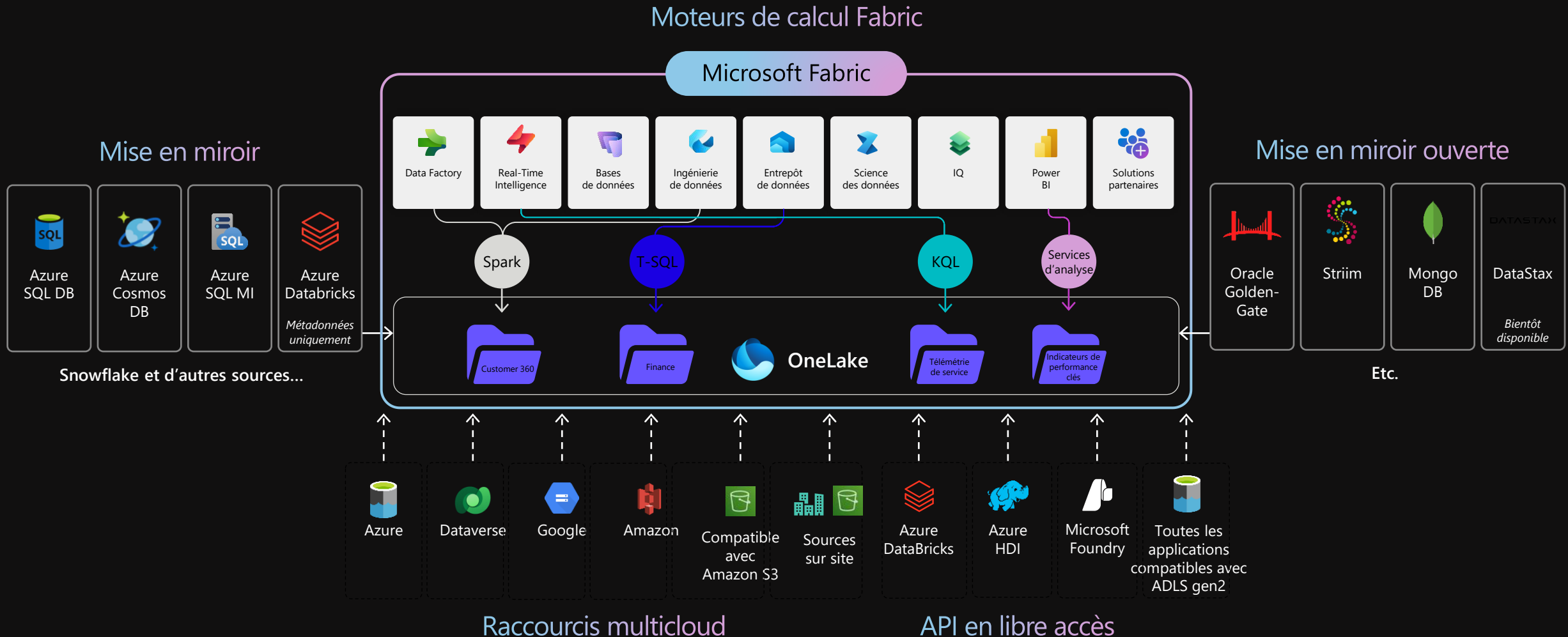


OneLake



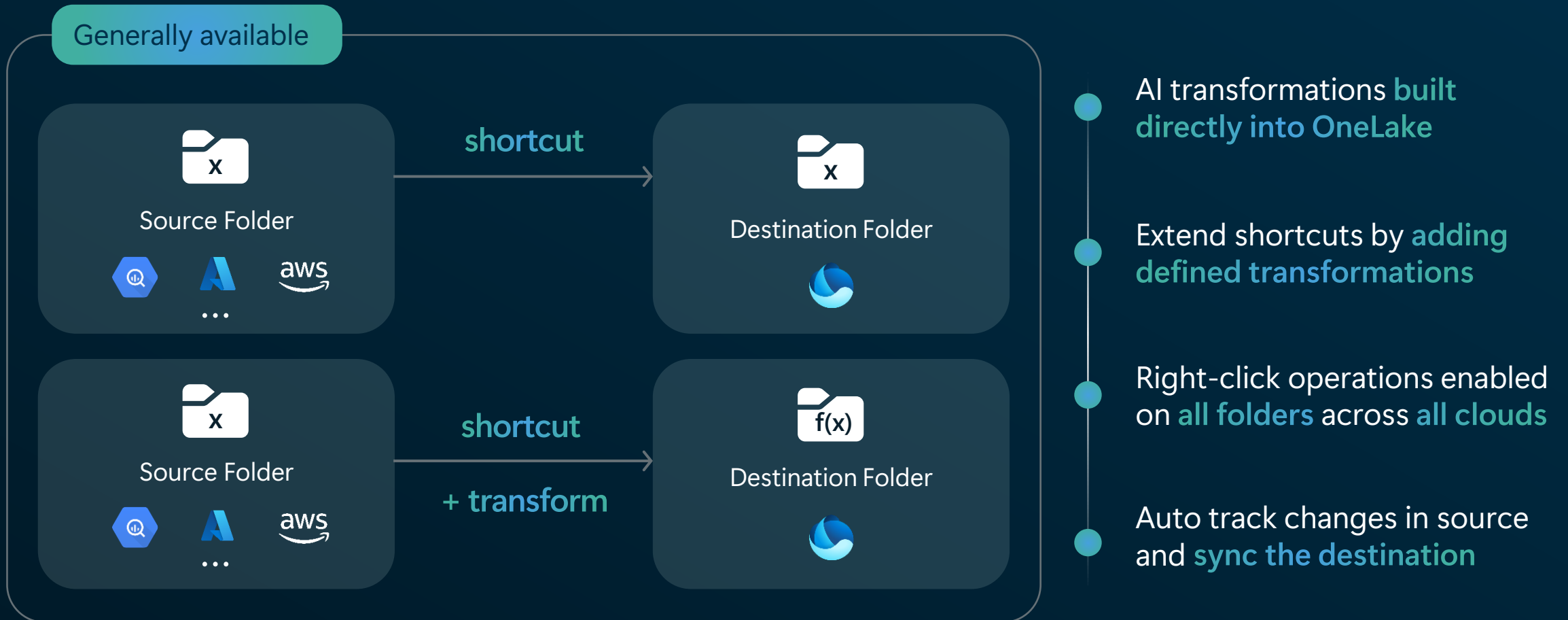
Purview

Importer des données de n'importe où



Shortcut transformations

Seamless enrichment with AI in OneLake



prdt-reviews x zavadata x

Upload Download Open Preview New Folder Select All Copy Paste Clone Properties Delete Undo Manage History Folder Statistics Refresh

Active blobs (default) prdt-reviews

Name	Access Tier	Access Tier Last Modified	Last Modified	Blob Type	Content Type	Size	Status
product_reviews_1.csv	Hot (inferred)		07/08/2025 13:36	Block Blob	application/vnd.ms-excel	28.33 KiB	Active
product_reviews_2.csv	Hot (inferred)		07/08/2025 13:36	Block Blob	application/vnd.ms-excel	26.02 KiB	Active
product_reviews_3.csv	Hot (inferred)		07/08/2025 13:36	Block Blob	application/vnd.ms-excel	32.18 KiB	Active
product_reviews_4.csv	Hot (inferred)		07/08/2025 13:36	Block Blob	application/vnd.ms-excel	28.67 KiB	Active

Showing 1 to 4 of 4 cached items

<< < 1 > >> Load more

Activities

Clear completed Clear successful

Shortcut transformations

Seamless enrichment with AI in OneLake

Convert Formats



CSV to Delta/Iceberg



JSON to Delta/Iceberg



Parquet to Delta/Iceberg

New



Excel to Table

Enhance with AI



Sentiment



PII
detection



Translate



Text
summary



Conversation



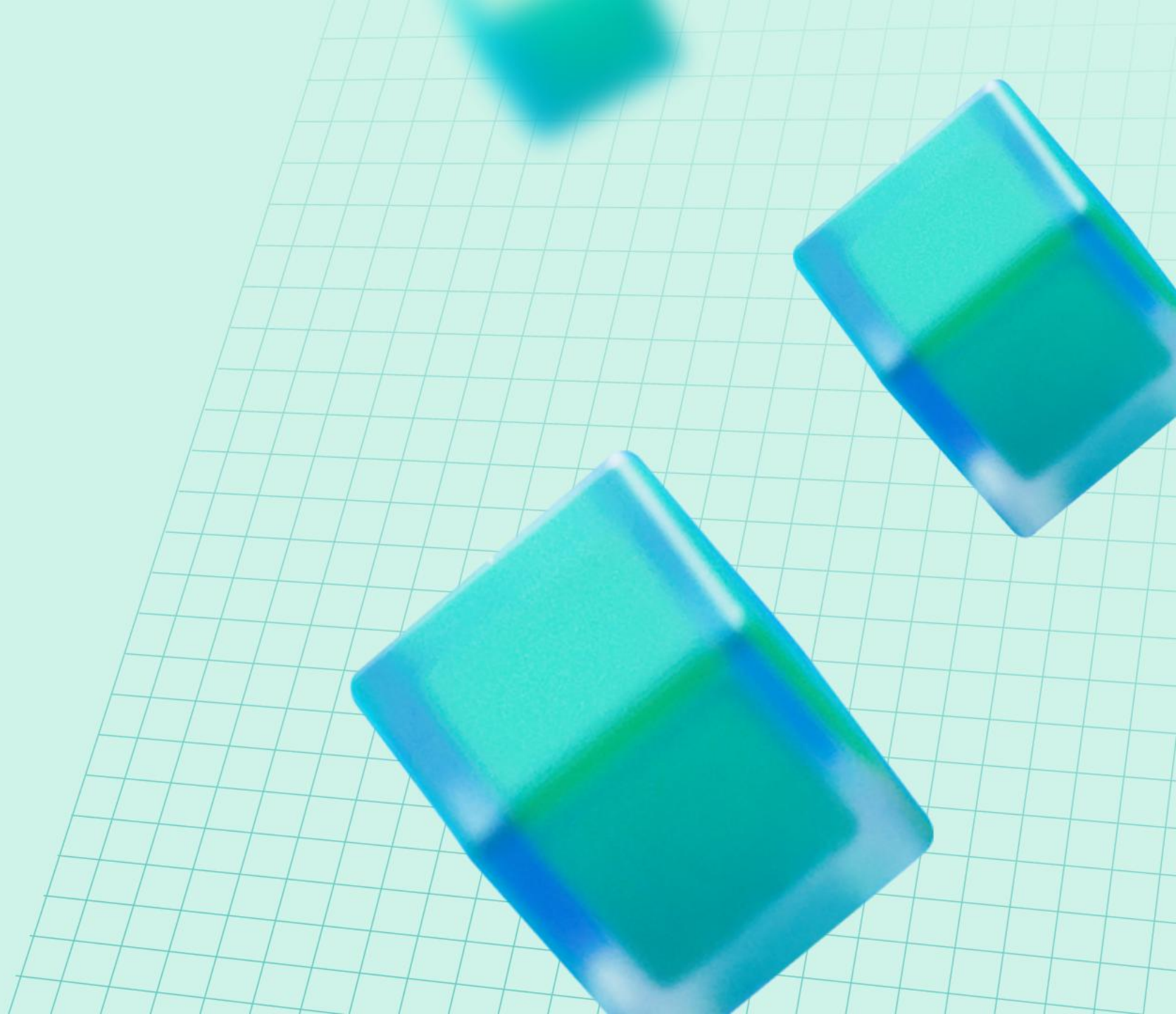
Name
recognition



Key phrase
extraction

Materialized Lake Views avec Data Quality
Sécurité avec OneLake security

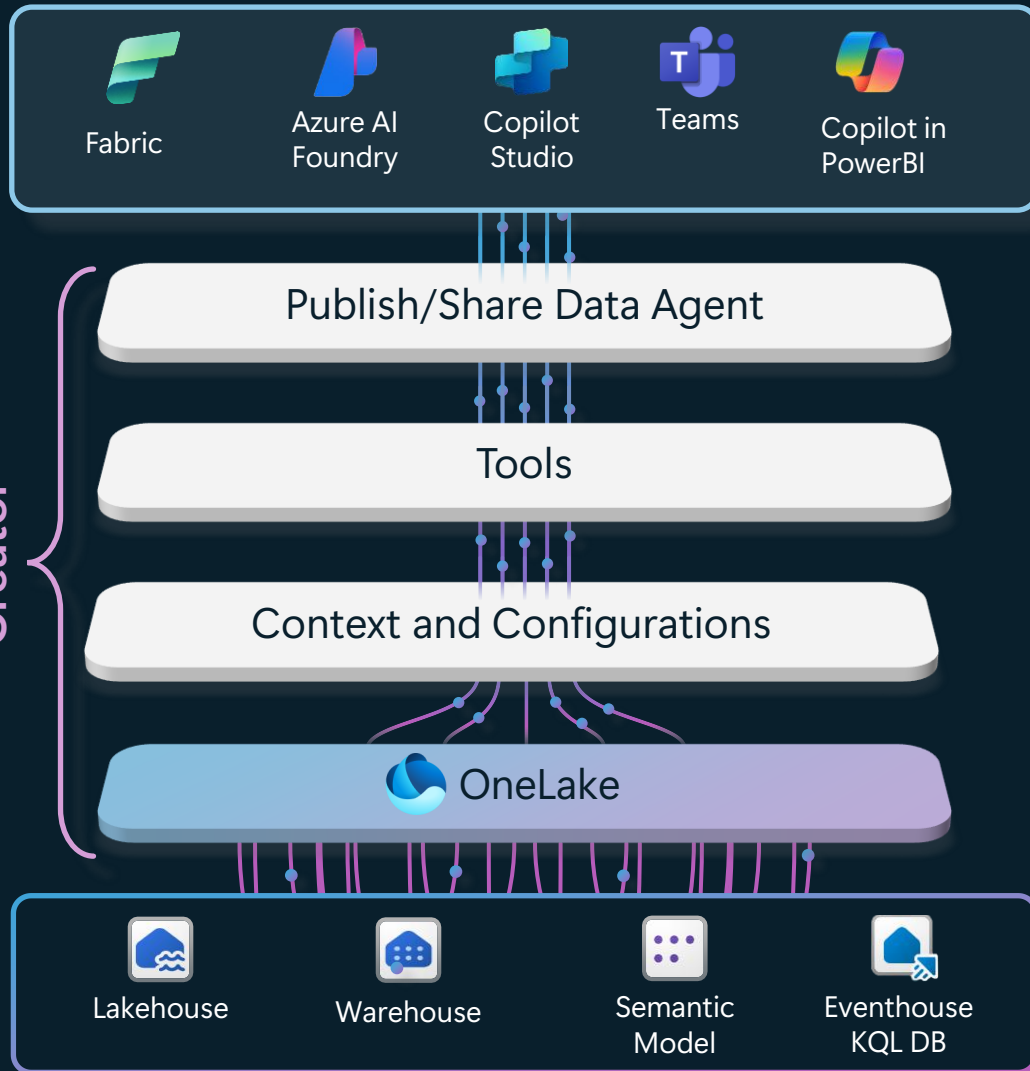
Les conversations



Niveau 1 – NL 2 x/SQL

Fabric data agents

 Consumer



The **conversational data agent** allows users to interact with data naturally, enhancing accessibility and usability.



Chat canvas for creators with **new debugging capabilities**, making it easier to understand and refine responses.



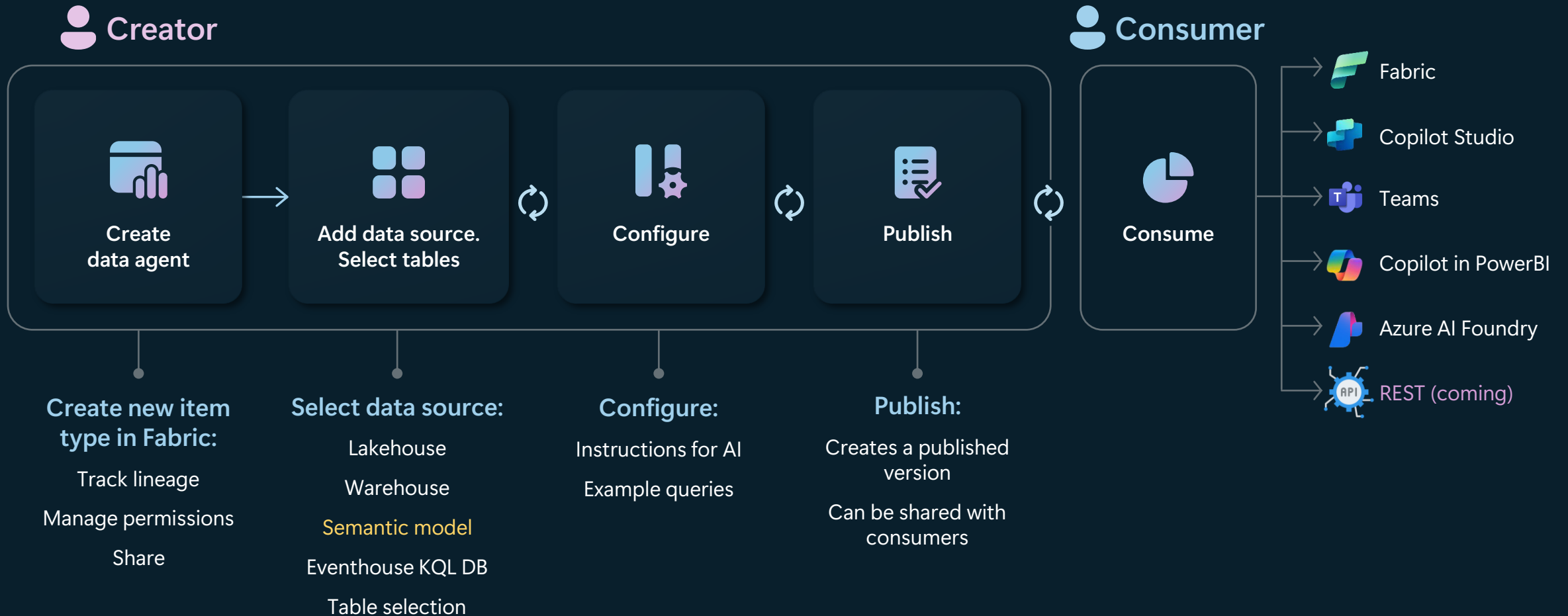
Seamlessly reason over **multiple** data sources, including Data Warehouse, Lakehouse, **Semantic models** and **Eventhouse KQL databases**, to create a powerful Data Expert tailored to your data domain.



Your Data Agent can be consumed inside and outside of Fabric. Stay tuned for **upcoming integrations** with your own custom applications.

Data agent end-to-end flow

End-to-end scenario



Prompt engineering

In which department zoe works?

No data was found for an employee named Zoe. This could mean there is no one with that name in the records, or there may be a different spelling. If you have more details, such as a last name or alternate spelling, please share them for a more accurate search.



1 step completed ✓

⌚ Response time: 8 sec

No data was found for an employee named Zoe. This could mean there is no one with that name in the records, or there may be a different spelling. If you have more details, such as a last name or alternate spelling, please share them for a more accurate search.



1 step completed ^

⌚ Response time: 8 sec

✓ Analyzed DataAgentLH Lakehouse for: "Which department does the employee named Zoe work in?"



📊 Query output

Variation 1

Sql



```
SELECT departement
FROM [dbo].[employees]
WHERE prenom = 'Zoe';
```

Prompt engineering

The screenshot shows the Microsoft Fabric Data Agent interface. At the top, there is a navigation bar with icons for saving, refreshing, settings, adding data, agent instructions (highlighted with a red box), publishing, and reverting to the published version. The main area is divided into two panes. The left pane, titled 'Explorer', shows a tree view of the data source 'DataAgentLH' with a sub-folder 'dbo' containing a table 'employee...' (checked with a green checkmark) and its columns: 'departem...', 'id', 'nom', and 'prenom'. The right pane, titled 'Data source description', contains a section 'Data source description' with a text box describing the table and its columns. Below this is a section 'Data source instructions' with a text box providing instructions on how to search for names with accents and case insensitivity, and an example SQL query. A red arrow points to the 'Data source instructions' section.

Agent instructions

Data source description

Describe what's in this data source, what it represents, and why someone might use it to answer a question. [Learn more](#)

This table contains all the employees.

- Id is the employee ID
- prenom is first name (can contains accents)
- nom is last name
- departement is department

Data source instructions

For each connected data source, help the data agent understand its data and how to use it most effectively. [Learn more](#)

We need to ensure that a first name can be searched with and without accent and case insensitive. Often, when people search for "Zoé", they type "zoe".

To alleviate that, please make the queries using a specific collation and a LIKE operator.

Example query:

```
Sql
SELECT id, prenom, nom, departement
FROM employees
WHERE prenom COLLATE Latin1_General_CI_AI LIKE '%zoe%'
```

In which department zoe works?

Zoe works in the HR department.



1 step completed ✓

🕒 Response time: 9 sec

Améliorer son agent

1. Travailler la qualité de ses données
2. Modeling/schema
 - Dénormaliser (aplatir N:N)
 - Eliminer les colonnes avec les mêmes noms ("date" qui apparaît 12 fois)
3. Agent instruction
4. Eliminer les ambiguïtés SCD – créer une vue avec les valeurs actuelles, et une table avec l'historique

Tout commence par le modèle sémantique

On ne demande plus à l'agent de redécouvrir ce que signifie le chiffre d'affaires à chaque question.

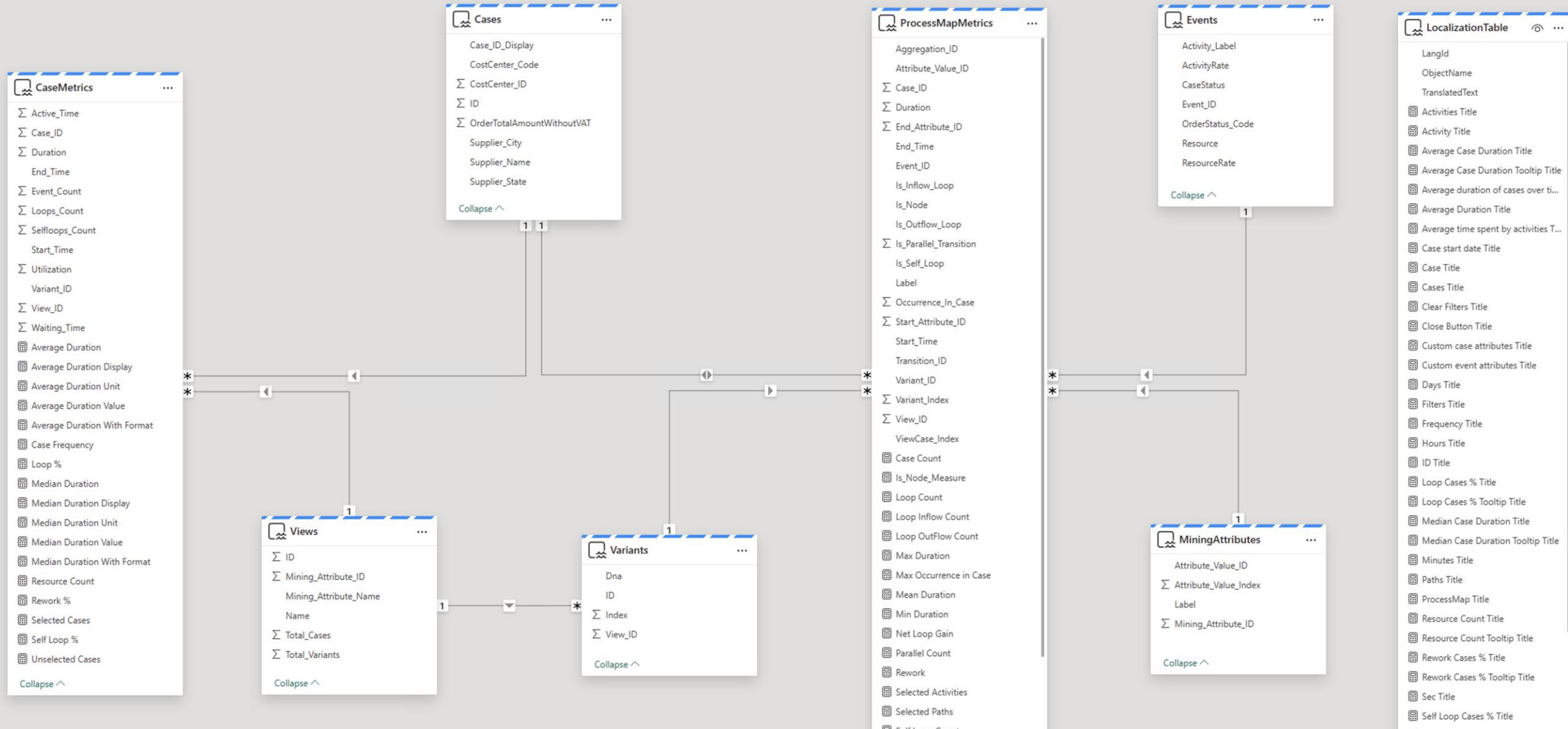
mesures validées

définitions stables

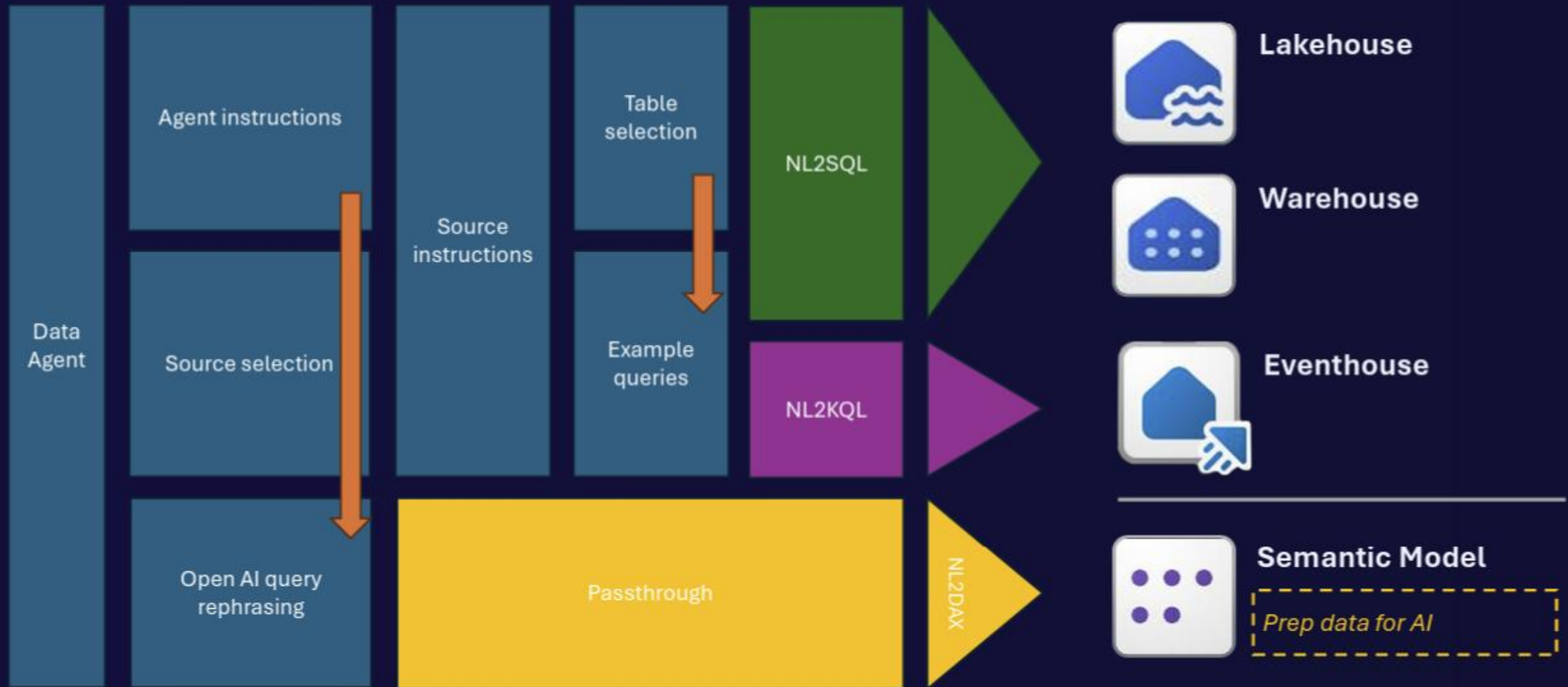
vocabulaire métier

cohérence analytique

Tout commence par le modèle sémantique



Data Agent orchestrator





[Products](#) [Departments](#) [Deals](#) [Zava Plan](#)

[Home](#) / [Hand Tools](#) / [Fabrikam 20V Max Cordless Drill](#)



Fabrikam 20V Max Cordless Drill

★★★★★ (248 reviews)

Powerful and compact cordless drill with a 20V lithium-ion battery. Includes charger and carrying case.

€129.99

✓ Only 1 left in stock at Zava Toulouse
[Check availability in other stores](#)

Add to Cart

Description

The Fabrikam 20V Max Cordless Drill is a super-fast compact tool designed for durability, and a durable motor to deliver job for the the tough. me and refresh your tools, with a 1/2" keyless chuck.

Description

The Fabrikam 20V Max Cordless Drill is a super-fast compact tool designed for durability, and a durable motor to deliver job for the the tough. me

Specifications

- 20V Max lithium-ion battery
- 1/2" keyless chuck
- Variable speed trigger (0-450 / 1,500 RPM)
- Built-in LED light
- Weight: 3.6 lbs (with battery)
- Includes
 - 1x 20V Max cordless drill
 - 1x lithium-ion battery
 - 1x charger
 - 1x carrying case



Image générée par l'IA



Microsoft Fabric

La plateforme de données unifiée adaptée à la transformation par l'IA



IQ



Modèles
sémantiques



Ontologie



Jumeaux
numériques



Graphique



Agents
de données



Agents
opérationnels

Plateforme Fabric



Copilot



OneLake



Gouvernance

Des agents pour tous ?

Termes métiers

Bon niveau de granularité (journalier, semaine, mois, ...)

Périodes

Traitement des exceptions

Véracité analytique (biais statistique, gestion des outliers, ...)

AI Agents in Fabric

Intelligence that understands, reasons, and acts



Fabric Data Agents

Perform deep analysis

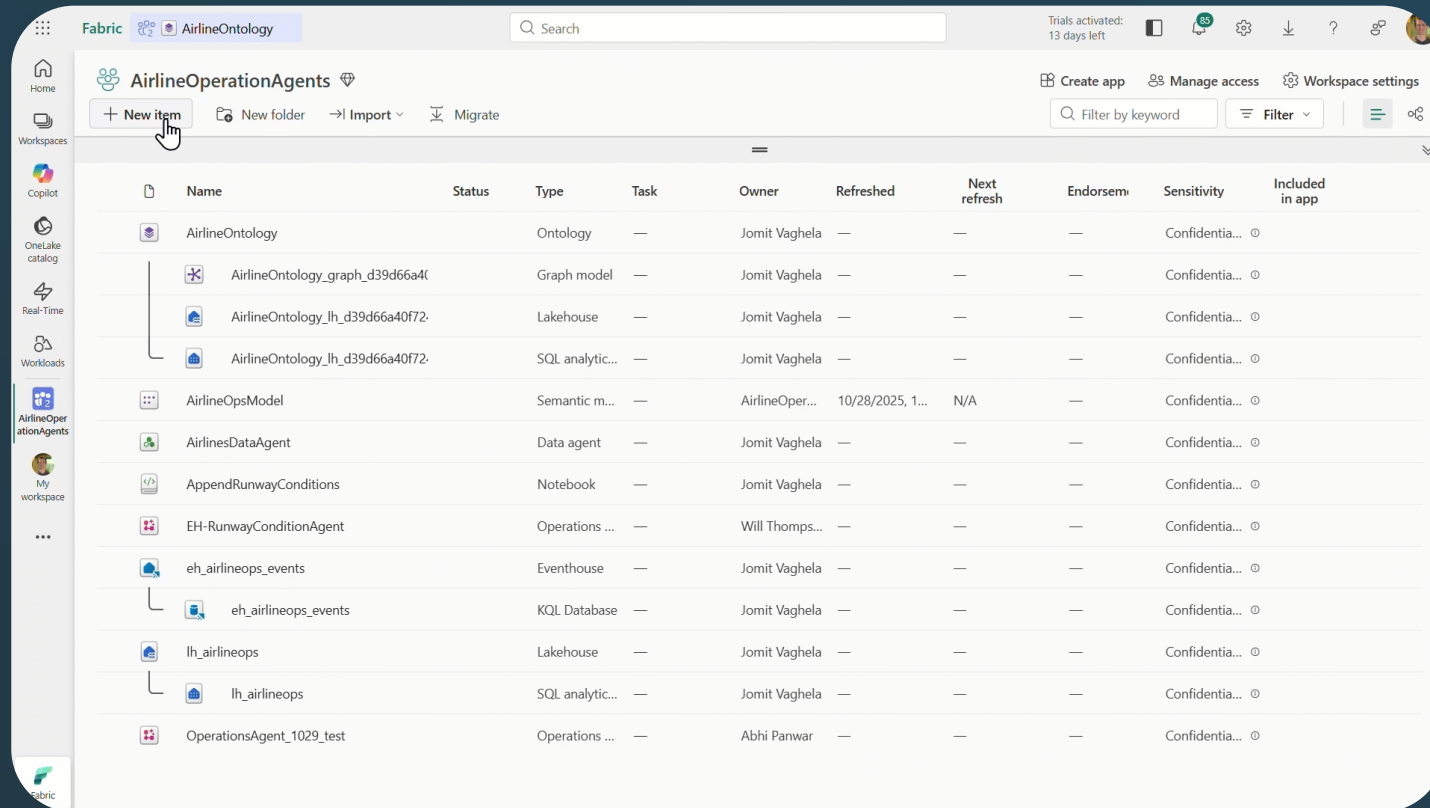


Fabric Operations Agents

Monitor & act in real time

Fabric Operations Agents

Public preview



The screenshot shows the Microsoft Fabric interface for the 'AirlineOperationAgents' workspace. The top navigation bar includes 'Fabric', 'AirlineOntology', a search bar, and a 'Trials activated: 13 days left' notification. The workspace header shows 'AirlineOperationAgents' with a '+ New item' button and options for 'New folder', 'Import', and 'Migrate'. The main table lists various agents and their associated data assets.

Name	Status	Type	Task	Owner	Refreshed	Next refresh	Endorsement	Sensitivity	Included in app
AirlineOntology		Ontology	—	Jomit Vaghela	—	—	—	Confidentia...	ⓘ
AirlineOntology_graph_d39d66a4c		Graph model	—	Jomit Vaghela	—	—	—	Confidentia...	ⓘ
AirlineOntology_lh_d39d66a40f72		Lakehouse	—	Jomit Vaghela	—	—	—	Confidentia...	ⓘ
AirlineOntology_lh_d39d66a40f72		SQL analytic...	—	Jomit Vaghela	—	—	—	Confidentia...	ⓘ
AirlineOpsModel		Semantic m...	—	AirlineOper...	10/28/2025, 1...	N/A	—	Confidentia...	ⓘ
AirlinesDataAgent		Data agent	—	Jomit Vaghela	—	—	—	Confidentia...	ⓘ
AppendRunwayConditions		Notebook	—	Jomit Vaghela	—	—	—	Confidentia...	ⓘ
EH-RunwayConditionAgent		Operations ...	—	Will Thomps...	—	—	—	Confidentia...	ⓘ
eh_airlineops_events		Eventhouse	—	Jomit Vaghela	—	—	—	Confidentia...	ⓘ
eh_airlineops_events		KQL Database	—	Jomit Vaghela	—	—	—	Confidentia...	ⓘ
lh_airlineops		Lakehouse	—	Jomit Vaghela	—	—	—	Confidentia...	ⓘ
lh_airlineops		SQL analytic...	—	Jomit Vaghela	—	—	—	Confidentia...	ⓘ
OperationsAgent_1029_test		Operations ...	—	Abhi Panwar	—	—	—	Confidentia...	ⓘ

Deploy virtual team members for real-time action at scale

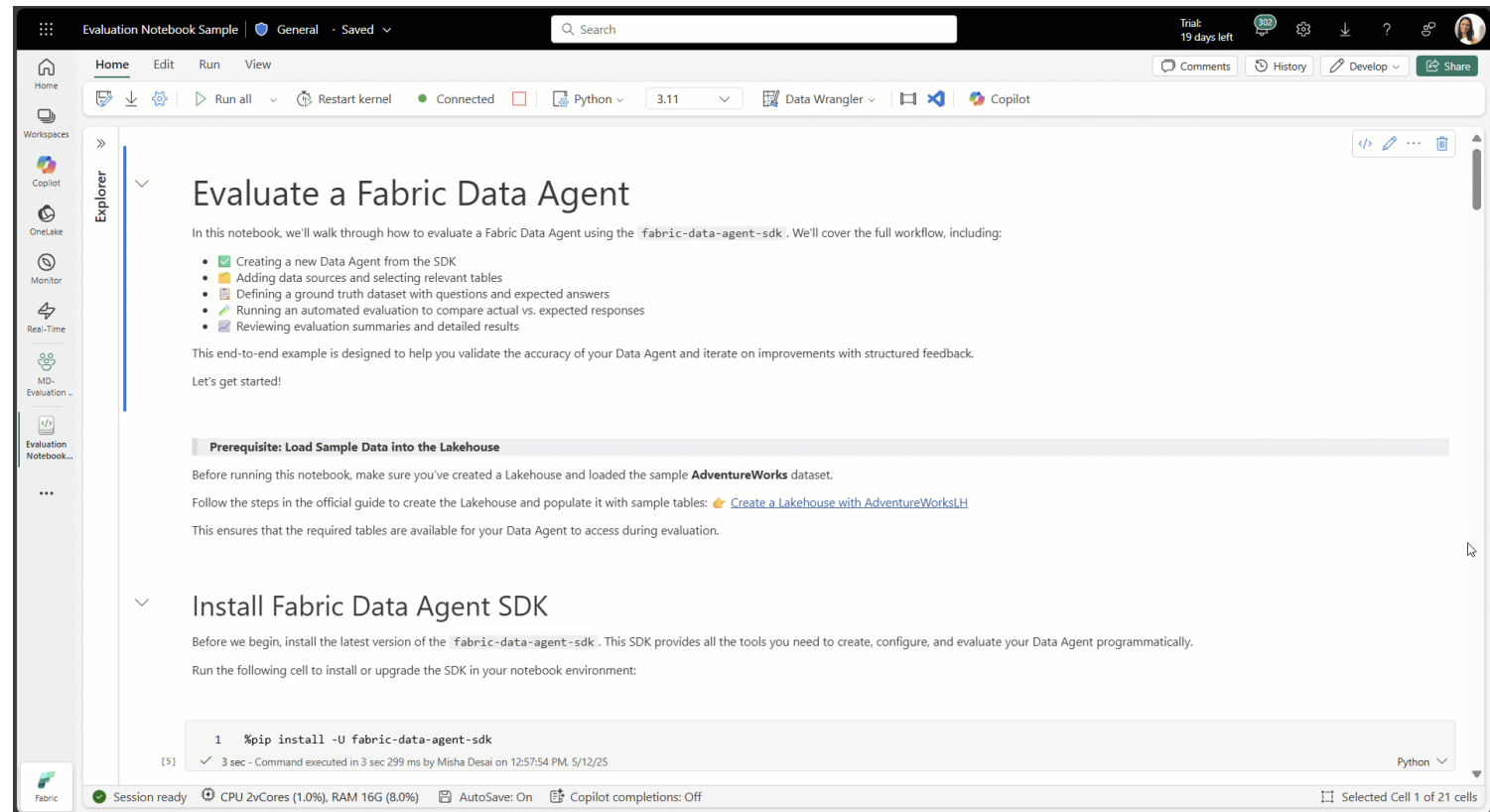
Ground agents in Fabric IQ for trusted, enterprise-aware actions

Customize agent behavior with playbooks and feedback loops

Analyze alerts and outcomes with built-in root-cause analysis

Evaluate data agents

- Native support for **data agent evaluation** through the Fabric data agent SDK.
- Run structured evaluations using Python from notebooks
- **Validate accuracy** before production deployment
- Tune prompts for better performance
- Benchmark improvements over time
- View Summary and detailed results



Checklist – êtes vous prêts pour un déploiement

- No golden question test set
- No column descriptions in your semantic model or schema
- No clear domain boundary for the agent ("it should answer everything")
- No executive sponsor who understands "this is preview"
- No plan for monitoring agent responses in production
- No defined escalation path for wrong answers



Merci



Christopher Maneu
<https://aka.ms/chris>

