neo4j graphtalk

Technical Deep Dive: From Context Graphs to Agentic & Visual Intelligence

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Neo4j Tools Update - 2026

The latest in graph tooling

Neo4j's Graph Intelligence Platform

Most Comprehensive platform to build enterprise knowledge Layer

Graph AI

Agents & Ecosystem

Build multi hop agents in seconds.
Integrate with AWS, GCP, Azure, LangChain, ServiceNow, SalesForce, Databricks & Snowflake

Agentic Brain

Provides foundational services like memory, context-graph to power all AI platforms.

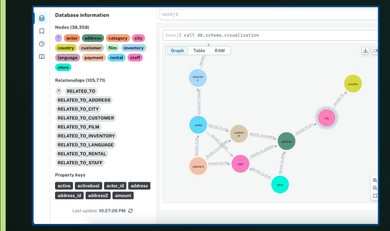
zep · mem0 · cognee

Agentic Solutions

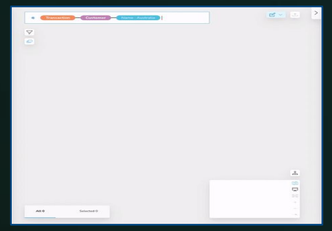
GraphAware Hume (Intelligence Analytics), NeoCarta (Enterprise Semantic Layer)

AI Powered Graph Tools

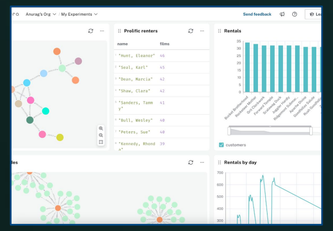
Browser (Query)



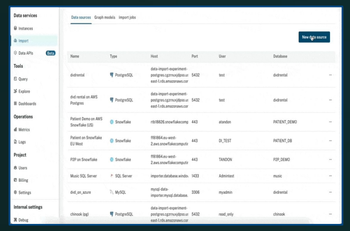
Bloom (Explore)



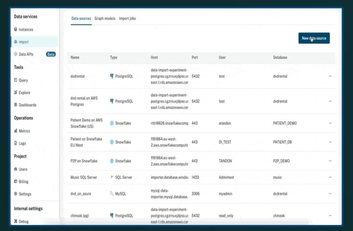
NeoDash (Dashboards)



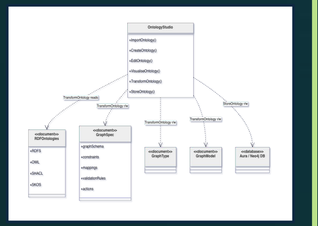
Data Import



Document Intelligence

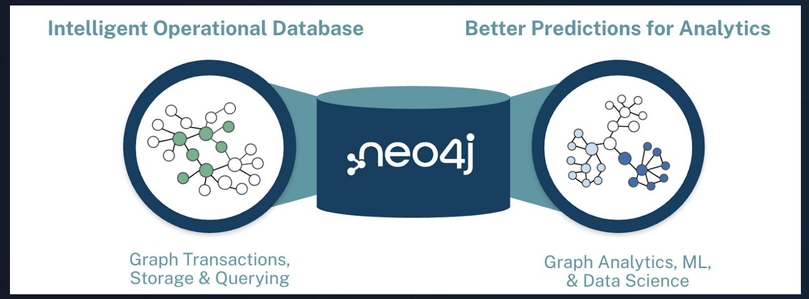


Ontology Management

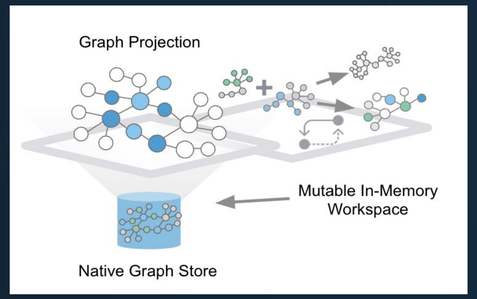


Database & Graph Algorithms

Database



Analytics (GDS)



Graph Engine (Virtual Graph)

Data 360

Neo4j Tooling in 2026

User Interfaces

The Visual Experience (Humans)

Provide all the tools an organization needs to build, view and collaborate:

- Data modeling
- Query editor
- Exploration (Bloom)
- Dashboards
- Sharing/Collaboration

→ Introducing **Studio** as a suite of tools for collaborative work.

Agentic

The Headless Experience (Agents)

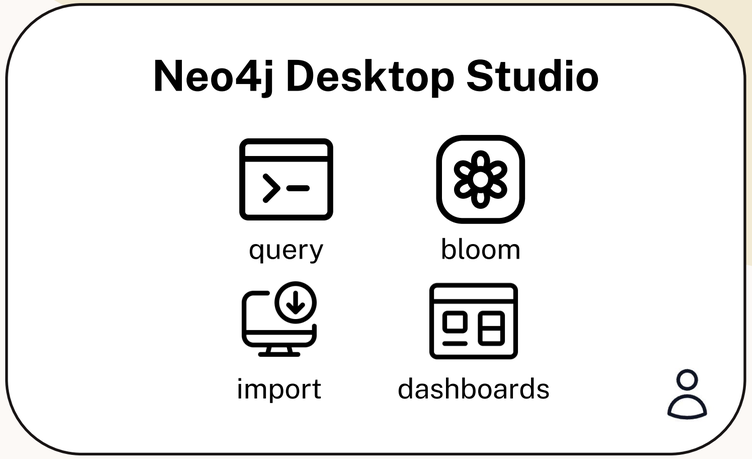
Provide the tools for agents to work with graphs and build solutions autonomously:

- APIs
- Semantics / Ontologies for context
- GraphRAG package
- MCP Server
- Neo4j CLI

→ Ongoing investment into enabling agents to use Neo4j's platform.

Introducing: Studio

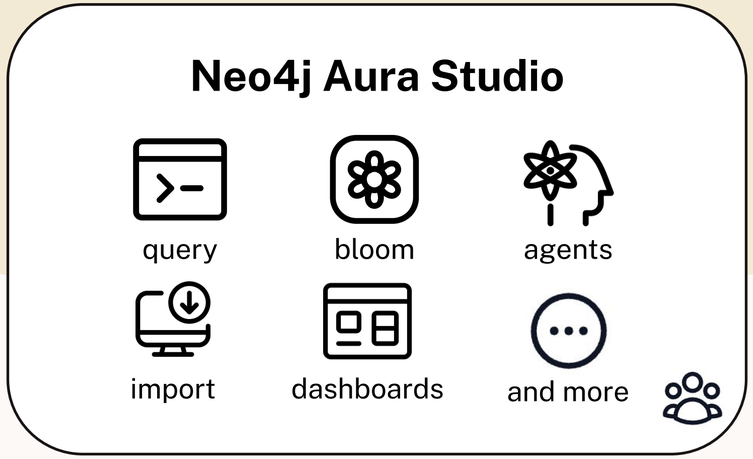
Single Developer
(Free)



- **Local** or **remote** databases
- For **individual** testing and evaluation, **no sharing**
- **AI assistant**
- Import from **files only**

Basic functionality, free for everyone

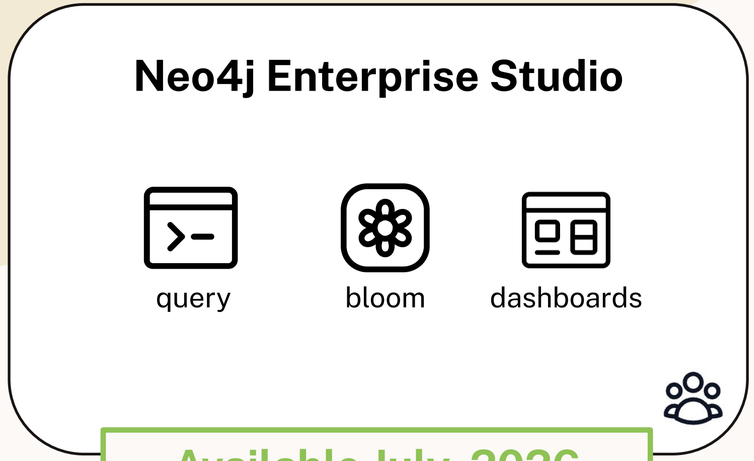
Enterprise Collaboration - Cloud
(Free, included with Aura)



- **Aura** databases
- **Self-managed** databases (via Fleet Manager)
- **Multi-project** collaboration
- **Cloud storage** for tools data
- **AI assistant** and **agents**
- **Cloud** and **files** imports

Complete & fully-managed experience

Enterprise Collaboration - Self-managed
(Paid product)



Available July, 2026

- **Self-managed** databases only
- **Single project** collaboration
- **Self-managed** storage for tool data

Graph tools for self-managed customers

Customers that only need Browser can continue to do so without licensing Enterprise Studio.

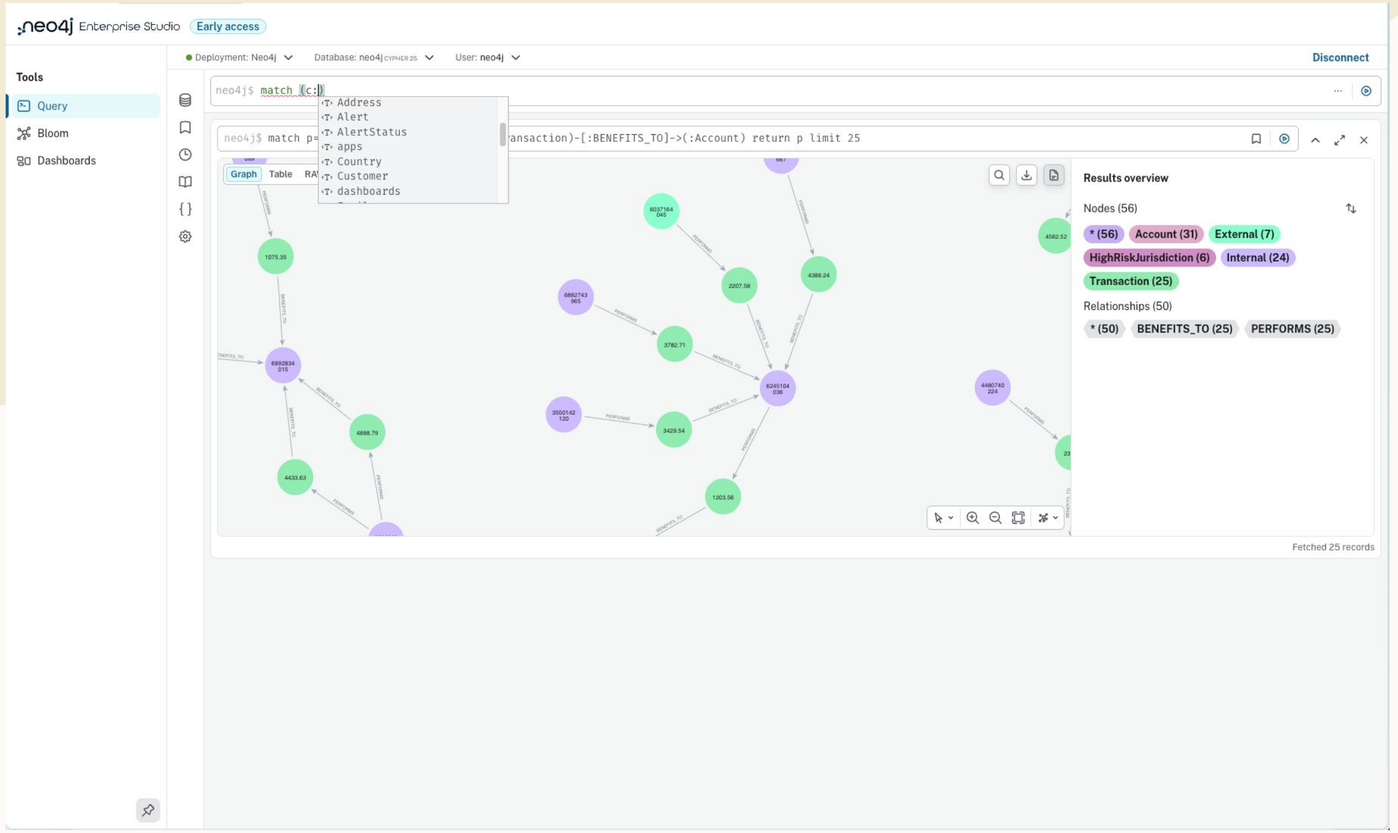
What’s new

Tools before	New Studio
Run Browser, Bloom and NeoDash separately	**One application** to deploy and run
Bespoke visualizations, cypher editors, AI features	**One foundation** with Shared visualizations, cypher editors, AI features
Tools are standalone, providing limited integrations and shared features	**One integrated experience** built on the same building blocks with deep integrations
Tools store their assets (dashboards, scenes) individually with limited sharing	**One backend** to store and share assets, with full collaboration functionality, and stored separately from customer data

Query

For **developers** to:

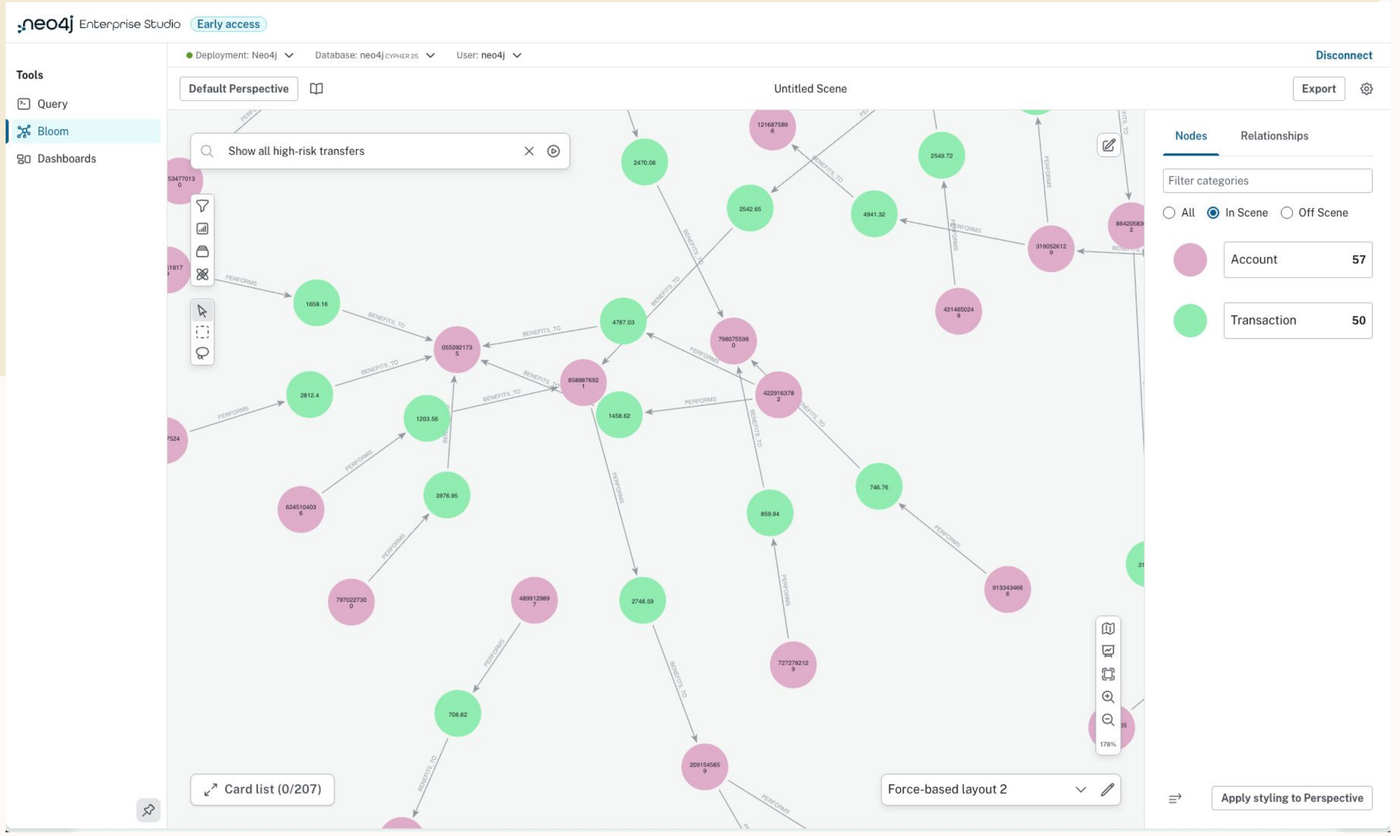
- Write, test, run, and optimize graph queries
- Results as graphs, tables, or raw JSON
- Format nodes and relationships with color, size, and captions
- Save and parameterize common queries for easy recall



Bloom

For **business users, subject matter experts** and **developers** to:

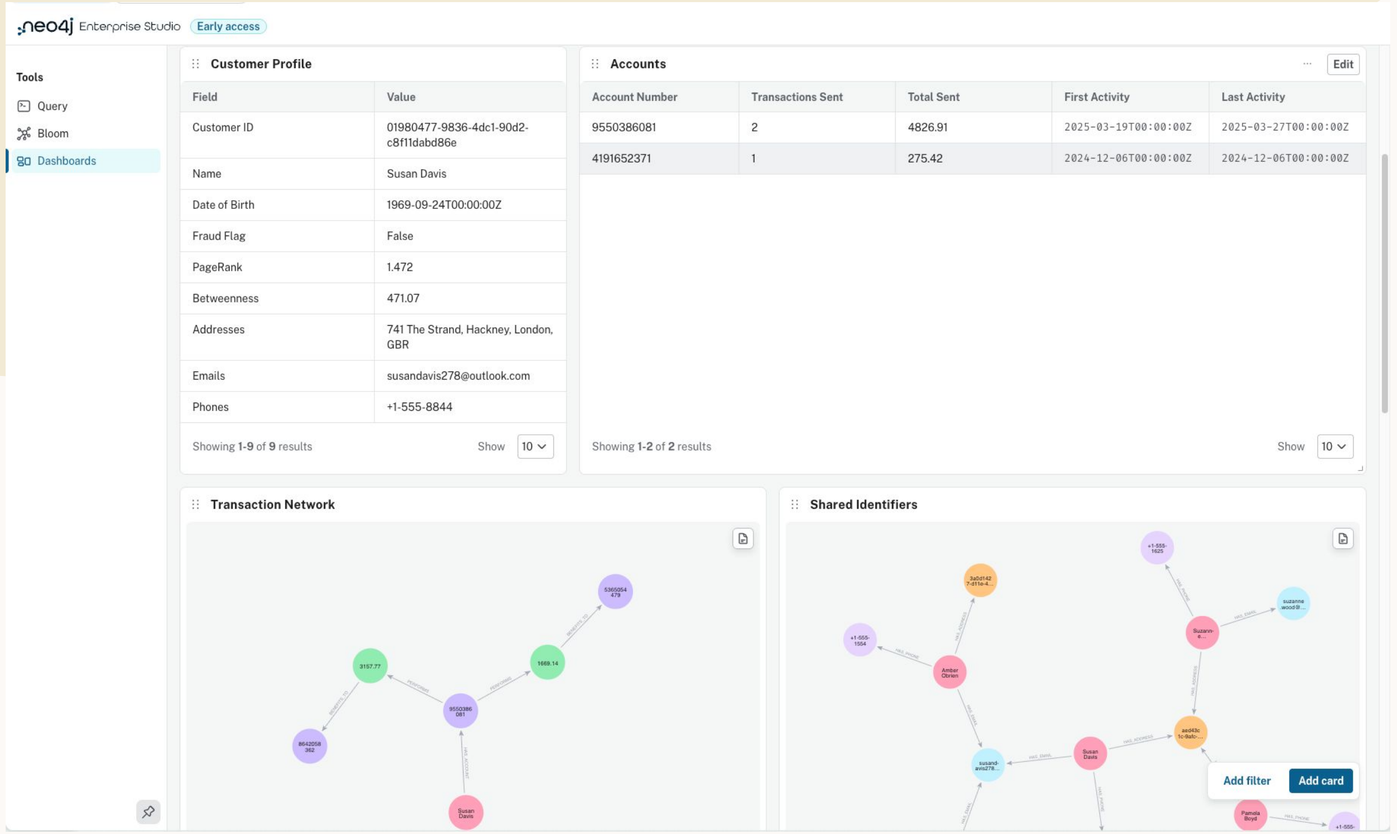
- Explore and understand graph data without writing code
- Find and understand data, relationships, and patterns
- Interactively explore data by expanding relationships
- Run pre-built algorithms to identify communities and important nodes
- Save and share visualizations with other users



Dashboards

For **analysts** and **developers** to:

- Create and share interactive dashboards
- Surface KPIs, trends, and other insights
- Use rich visualizations including graphs, tables, charts, and maps



Demo

Import

Data sources | Graph models | Import jobs

Connect your first graph model

Sketch graph models that can be used for any import or presentation purposes.

Create graph model

Thank you

(Want to) use agents with Neo4j?
Reach out! We’d love to hear what you are looking for.

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Building Graph Intelligence Agent

Jean-Marc Guerin - Neo4j AI Solutions Architect

Critical knowledge is trapped in your documents

- Investor decks, pipeline updates, SOPs, lab notebooks — packed with entities, relationships, and numbers, but locked inside prose, tables, and scanned pages
- Vector RAG retrieves **similar** chunks — not **connected** facts
- You can improve chunking, embedding, re-ranking but you cannot fix **reasoning** (aggregation, multi-hop traversal, notion of who relates to what…)

From Retrieval to Reasoning

A graph doesn't just retrieve — it **connects** entities, relationships, and provenance as first-class citizens.

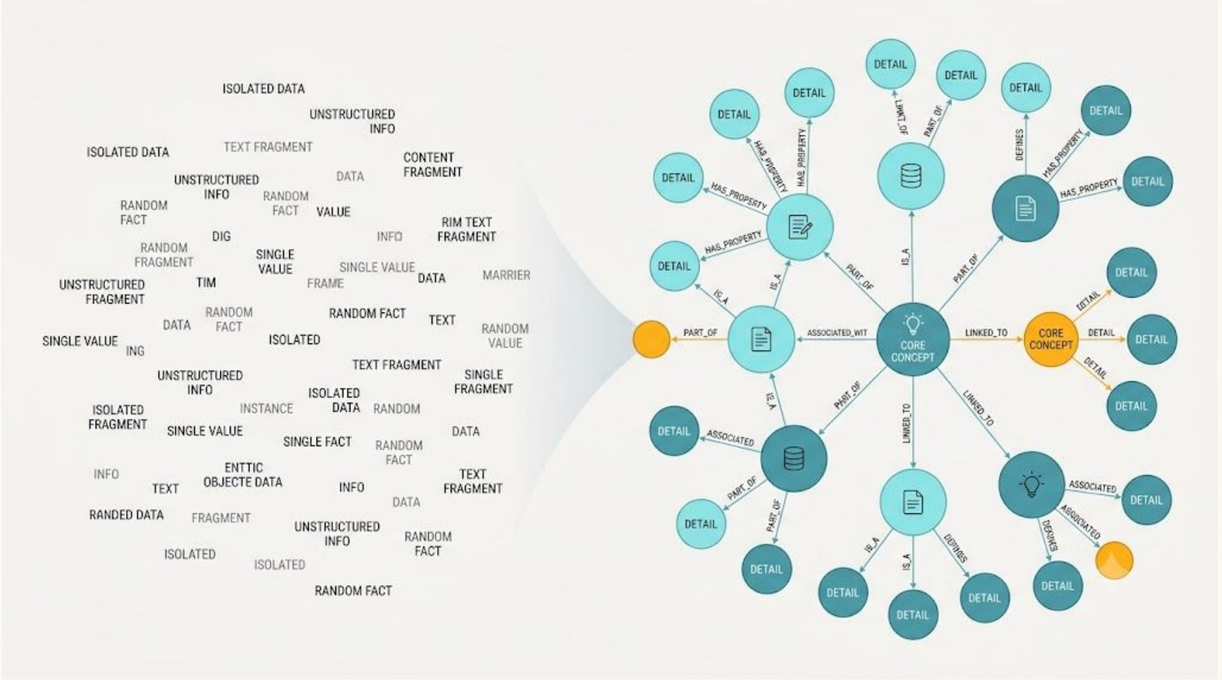
Accuracy — grounded in structured facts, not similarity scores

Traceability — every answer points back to its source

Cross-document reasoning — join facts no single chunk contains

Speed at scale — traversal, not re-scanning everything

Token reduction - better context, better reasoning



Document Intelligence Agents, Across Industries

Healthcare / Life Sciences

- Drug-target discovery · scientific literature mining
- Regulatory submission intelligence
- Clinical trial cross-document analysis

Technology & SaaS

- Product knowledge graph · customer support Q&A
- SRE runbook graph · incident & ops intelligence

Financial Services

- Analyst research KG · credit risk Q&A
- AML entity resolution · financial crime intelligence
- Regulatory compliance · SOP intelligence

Professional Services & Legal

- Legal doc cross-reference · M&A contract intelligence
- Tax law KG · legislation traceability

Manufacturing & Engineering

- Engineering doc Q&A · maintenance intelligence
- Supply chain documentation · parts traceability
- Quality reports · root cause analysis across archives

Consumer Products, Energy & Government

- Consumer AI assistant
- Claims intelligence · fraud detection
- Legislative archives · case intelligence

One Example, Many Lessons

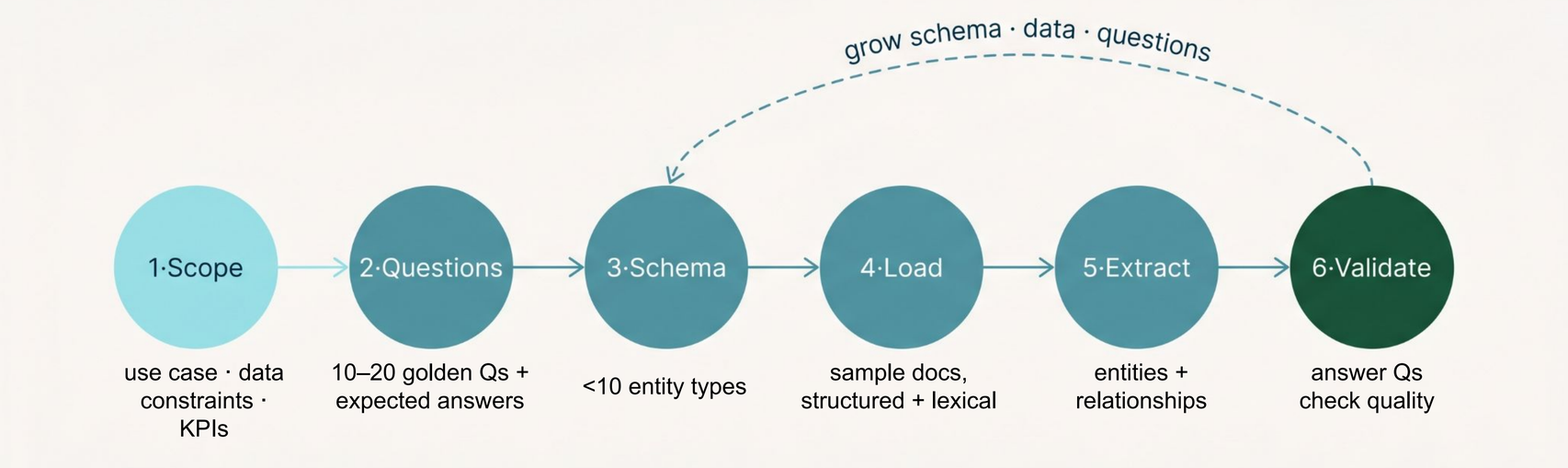
The example: a competitive-intelligence graph built from 14 pharma companies' Q1 2026 investor decks and pipeline updates

Why it matters: BD, R&D, and strategy teams need to answer "who's racing on what, and where are the gaps" — across companies, not within one document

The documents: dense investor slides — mixed tables, charts, and logos, inconsistent naming across companies

The limit: this is a scoped example — a production pipeline ingests far more data over time and uses a richer schema

The methodology — start small, validate, grow



Start small on every dimension — then grow once each layer is validated:

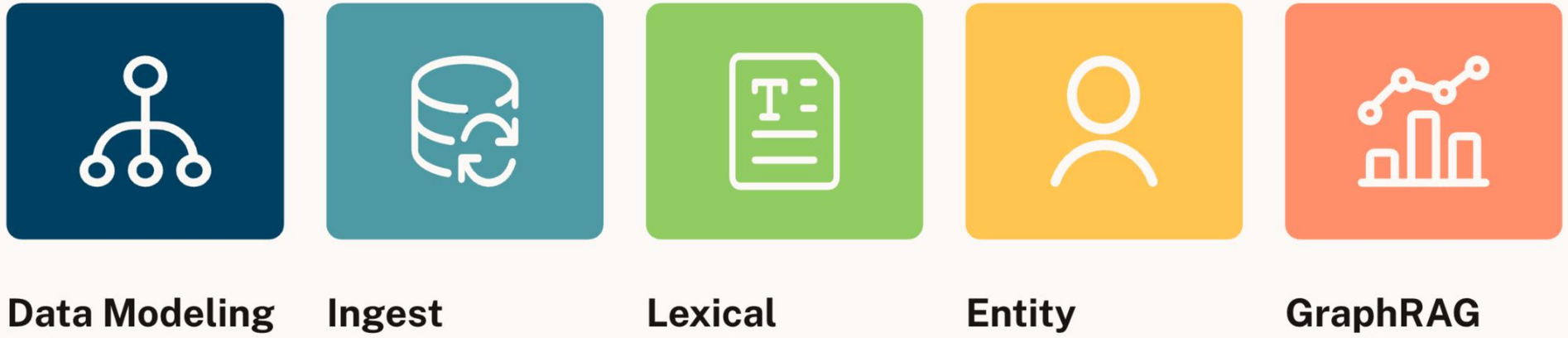
- **Documents:** a representative sample, not the full corpus — enough to cover your question types
- **Schema:** fewer than 10 entity types to start — add more after validation
- **Questions:** 10–20 to start — the list grows as the schema matures

Why this matters: POC discipline builds production intuition. Teams that validate on samples consistently build better — and faster — production systems than those who extract everything first.

Neo4j MCP Workspace — rapid graph prototyping

Open-source workspace connecting an AI coding agent to purpose-built tools for building Neo4j knowledge graphs end to end.

- **MCP servers** — specialized tools for schema design, document parsing, entity extraction, graph querying and evaluation.
- **Skills** — pre-built guided workflows that automate the full pipeline with flexibility at each step.
- Works for any skill level: full automation for a first result, full control for advanced customization
- Supports 100+ LLM providers — any model your organization approves.



Open source · github.com/neo4j-field/neo4j-mcp-workspace-template

Demo