Extract powerful insights from your data

Memgraph lets you ingest data from various sources, build in-memory dynamic graphs, run graph algorithms and deploy real-time applications with ease.

Memgraph Lab

Visual interface for exploring graphs, developing procedures and executing queries.

MAGE

Open-source graph algorithm library implemented in Python, C/C++ and Rust.

GQLAlchemy

Open-source Object Graph Mapper (OGM) for developing graph applications in Python.

Take full advantage of your streaming data

Memgraph is the only fully-featured graph application platform for stream processing

Why use graphs?

For complex and fast-evolving data structures, graph databases are uniquely positioned to offer:

- Fast data analytics and traversals
- Simple and natural way of data modeling
- Simultaneous support for real-time updates & querying
- Flexible schema evolution

What is Memgraph?

Memgraph is a streaming graph application platform that helps you wrangle your streaming data, build sophisticated models that you can query in real-time, and develop graph-based applications.

Implementation language	C/C++
Storage engine architecture	In-Memory
On-disk persistence	Yes
ACID compliant	Yes
Data ingestion	Kafka, Pulsar, Redpanda, JSON, MySQL, CSV, postgreSQL, Cypher
Query language	Cypher
License	Business Source License (evolves to Apache 2 in 4 years)
High-availability replication	Yes
Custom Cypher procedures	Python, C/C++, Rust
Hosted Cloud service on AWS	Memgraph Cloud

Real-time analytics with Memgraph

Memgraph can natively ingest streaming data from sources like Apache Kafka, Apache Pulsar, RedPanda. You can use graph traversals and graph algorithms to analyze this data in real-time. Simply connect Memgraph instance to a topic:

01
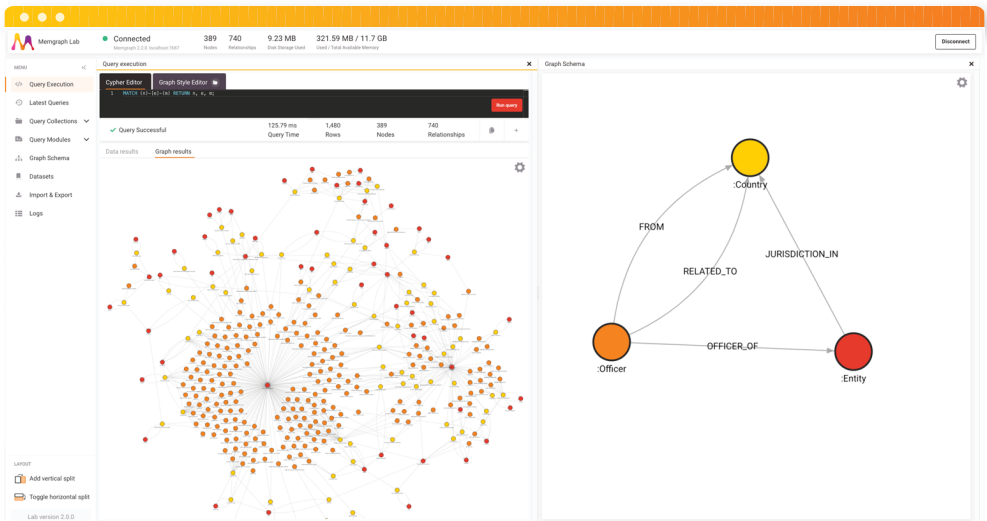Download or pull, and start Memgraph (on Windows, Linux or Mac).

02
Define a transformation module (Python, C, C++ or Rust) that maps messages to Cypher queries.

03
Create a stream in Memgraph that connects to a topic.

04
Start the stream and process the incoming data.

The open-source MAGE library contains traditional and dynamic graph algorithms that are developed for real-time data analysis, which means you don't have to implement your own solution. You just need to create the stream and start analyzing the data.

Where can you use Memgraph?

Fraud Detection

Graph traversals are well-suited for finding shared resources in previous frauds, while graph algorithms like community detection can help uncover fraudsters that work together.

Route Planning and Geospatial Analysis

Accurate and fast path computation is essential for applications such as onboard navigation systems, traffic network routing, delivery systems, modeling traffic flow, identifying mobility patterns and pinpointing traffic bottlenecks during rush hours.

Recommendation Engines

A real-time recommendation engine requires the ability to instantly capture any new interests expressed in the customer's behavior - something that batch processing can't accomplish but is trivial for graph databases.

Identity & Access Management

Easily model user roles and access rights using graphs without resorting to endless SQL JOIN operations. Graph traversals are perfect for checking identity and access authorization as fast as possible.

Connect with us and join our community

memgraph.com/community
contact@memgraph.com

Try Memgraph Playground in your browser

playground.memgraph.com