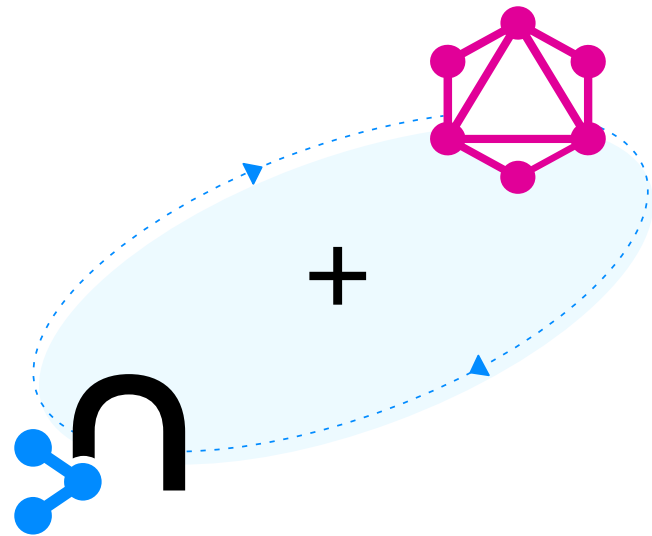




Neo4j GraphQL Library

Build GraphQL APIs That Bring the Power of Graphs to GraphQL



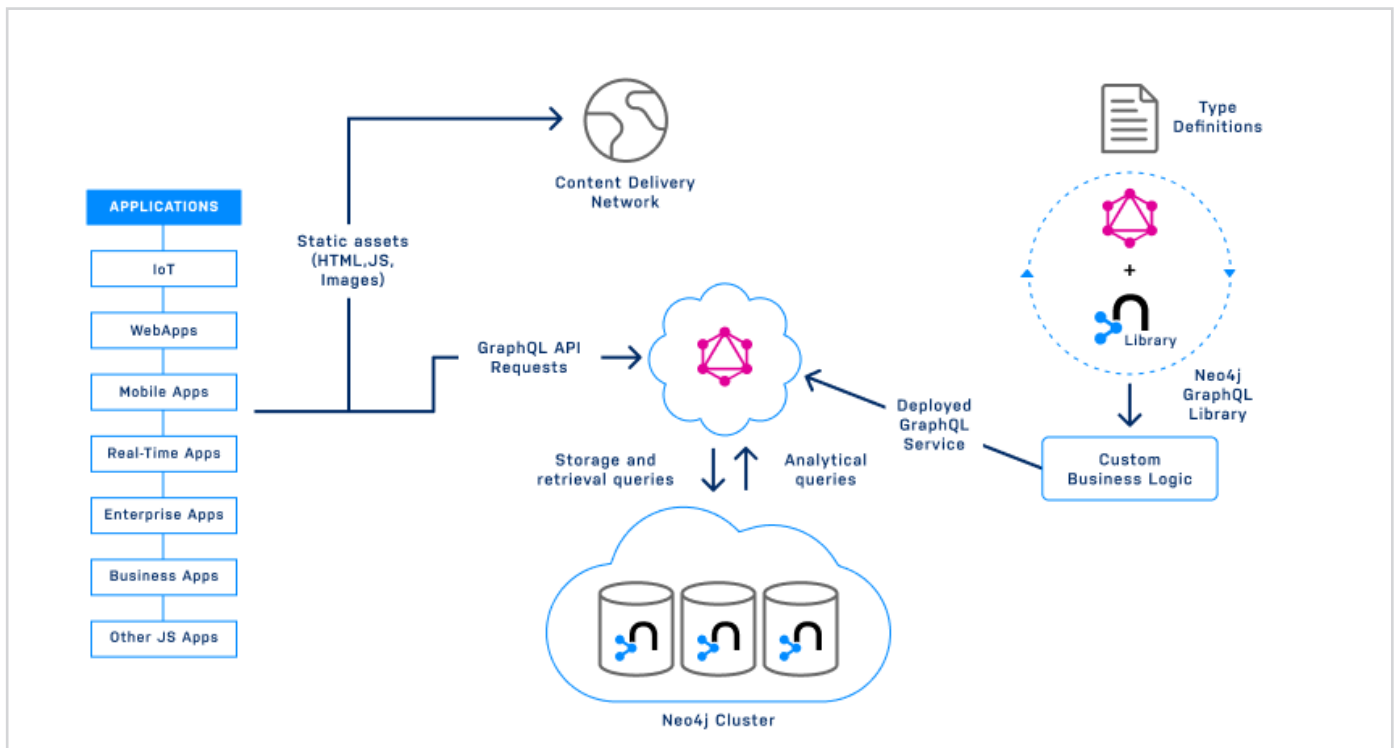
Intelligent applications need blazing-fast query response on connected data. The Neo4j GraphQL Library makes it easy to create developer-friendly APIs to support cross-platform and mobile development.

The [Neo4j GraphQL Library](#) is a low-code, open source JavaScript library that does the heavy lifting of GraphQL API creation, automatically generating code and handling database calls. The result? A broad range of developers can leverage data in Neo4j with their existing skill sets, creating data-rich applications with fast time to value.



"I am absolutely blown away how easy it is to spin up a GraphQL API on top of my Neo4j database. Incorporating user authentication was a breeze, freeing me up to explore user roles and permissions. The authentication/authorization is straightforward and easy to grok. So easy a drummer can do it!"

*Rob Brennan
Drummer and Consulting Architect, GenUI*





Key Features of Neo4j GraphQL Library

GraphQL First Development

Written in TypeScript for a robust type-safe codebase, the Neo4j GraphQL Library defines the database schema and the GraphQL schema using the same type definitions, enabling front-end and backend developers to work together seamlessly.

Generate CRUD Functionality

The Neo4j GraphQL Library automatically generates a CRUD API from GraphQL type definitions to provide instant create, read, update, and delete functionality, including complex filtering, ordering, and pagination.

Generate Cypher from GraphQL

The Neo4j GraphQL Library generates a single Cypher query for any GraphQL request, boosting performance and eliminating the N+1 query problem.

Write Less Boilerplate

No need to write boilerplate data fetching code – just inject a Neo4j driver instance into the request context. The Neo4j GraphQL Library generates the database query and handles the database call, which means no need to write GraphQL resolver functions.

Increase Efficiency with Nested Mutations

Nested mutations make transactions more efficient. Nested mutations create cleaner code and enable you to group operations such as creating and connecting many nodes at once, reducing and simplifying client code.

Simplify Application Security

Use the Auth directive to secure your GraphQL API using JSON Web Tokens (JWTs). The [Auth directive](#) provides authorization capabilities, allowing the developer to define complex security requirements and authorization rules in GraphQL type definitions.

Extend GraphQL with Cypher

Cypher is designed for queries for complex graph traversals, graph projections, aggregations, and more. Extend the capabilities of GraphQL by using [@cypher GraphQL schema directives](#) that express complex logic in Cypher, adding custom logic to your GraphQL API without writing custom resolvers.

Access Neo4j Through the Object Graph Mapper

The Object Graph Mapper or OGM simplifies creating custom queries or mutations directly in GraphQL without the need to know Cypher and leveraging the type-safety of GraphQL.

FEATURE SUMMARY

Simplifies creation of GraphQL APIs

- ✔ Generates schema
- ✔ Generates CRUD API
- ✔ Generates Cypher from GraphQL
- ✔ No resolver code
- ✔ Handles database calls

Extensible for powerful graph applications

- ✔ @cypher directive for custom logic using Cypher
- ✔ Object Graph Mapper (OGM) for custom queries without using Cypher

Features GraphQL developers want

- ✔ Nested mutations
- ✔ @auth directive for application security

Neo4j is the leader in graph database technology. As the world's most widely deployed graph database, we help global brands – including Comcast, NASA, UBS, and Volvo Cars – to reveal and predict how people, processes and systems are interrelated. Using this relationships-first approach, applications built with Neo4j tackle connected data challenges such as analytics and artificial intelligence, fraud detection, real-time recommendations, and knowledge graphs. Find out more at neo4j.com.

Questions about Neo4j?

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