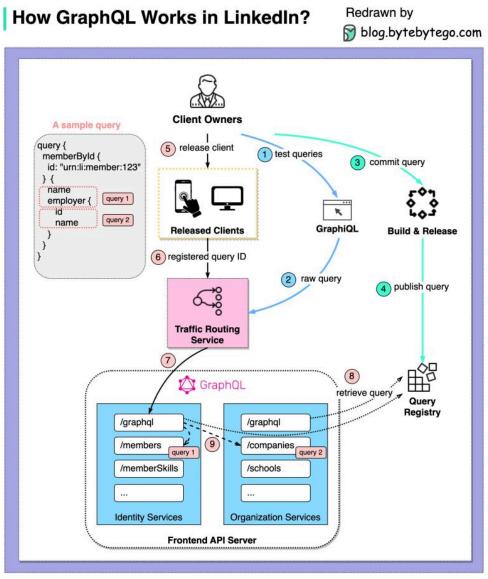
How does GraphQL work in the real world?

The diagram below shows how LinkedIn adopts GraphQL.



Based on LinkedIn Engineering Blog

"Moving to GraphQL was a huge initiative that changed the development workflow for thousands of engineers..." [1]

The overall workflow after adopting GraphQL has 3 parts:

Part 1 - Edit and Test a Query
 Steps 1-2: The client-side developer develops a query and tests with backend services.

- Part 2 Register a Query
 Steps 3-4: The client-side developer commits the query and publishes the query to the query registry.
- Part 3 Use in Production
 - Step 5: The query is released together with the client code.
 - Steps 6-7: The routing metadata is included with each registered query. The metadata is used at the traffic routing tier to route the incoming requests to the correct service cluster.
 - Step 8: The registered queries are cached at service runtime.
 - Step 9: The sample query goes to the identity service first to retrieve members and then goes to the organization service to retrieve company information.

LinkedIn doesn't deploy a GraphQL gateway for two reasons:

- 1. Prevent an additional network hop
- 2. Avoid single point of failure

Reference: How LinkedIn Adopted A GraphQL Architecture for Product Development