Empowering Kubernetes Workloads with GraphQL

Unleashing Efficiency and Flexibility

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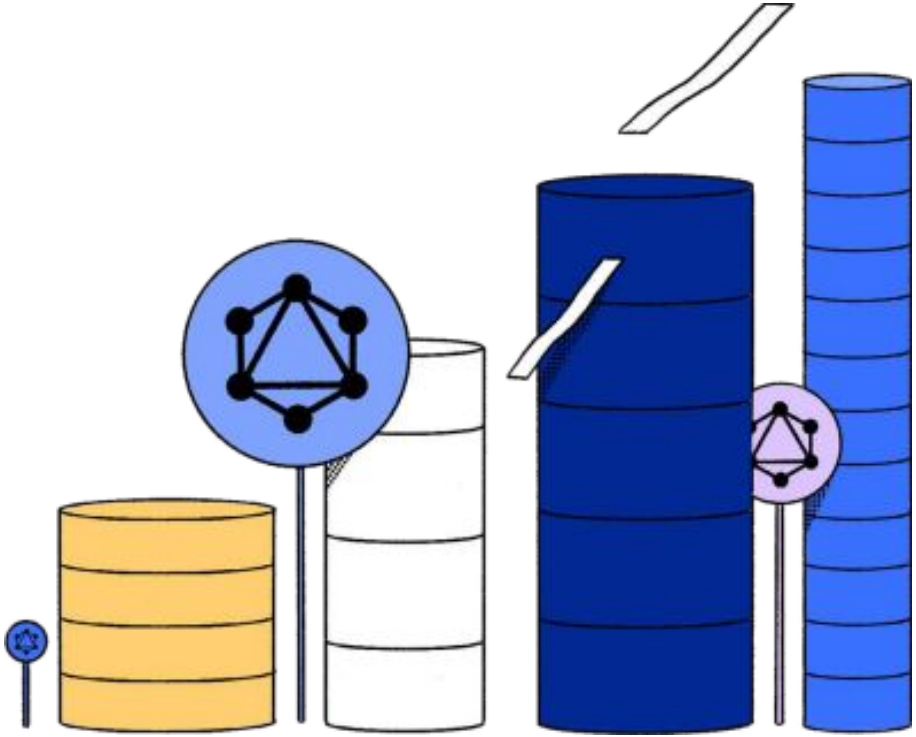
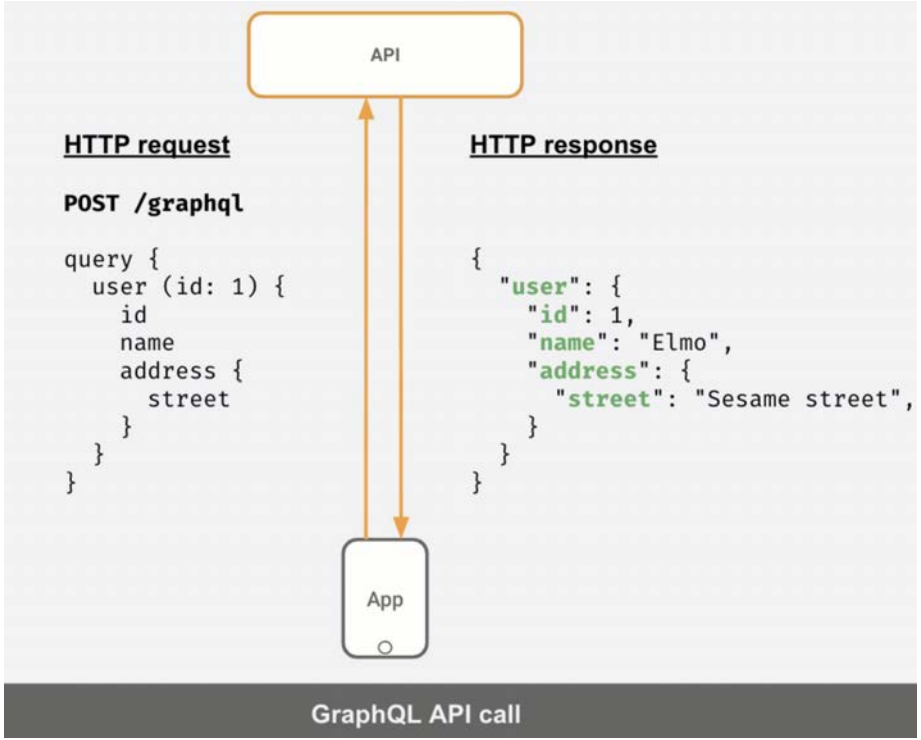
Agenda

- GraphQL
- Kubernetes
- Efficiency of k8s
- Flexibility of GraphQL
- Case studies
- Hasura



The Power of GraphQL

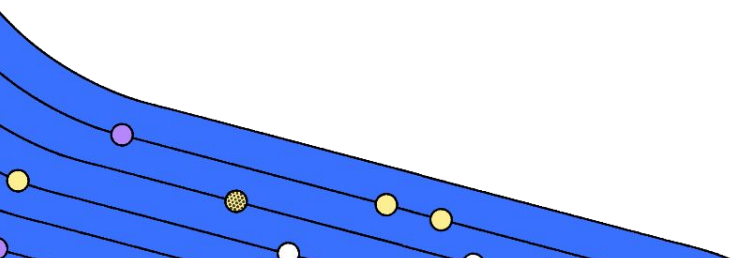
- GraphQL is a query language
- GraphQL vs REST



GraphQL benefits

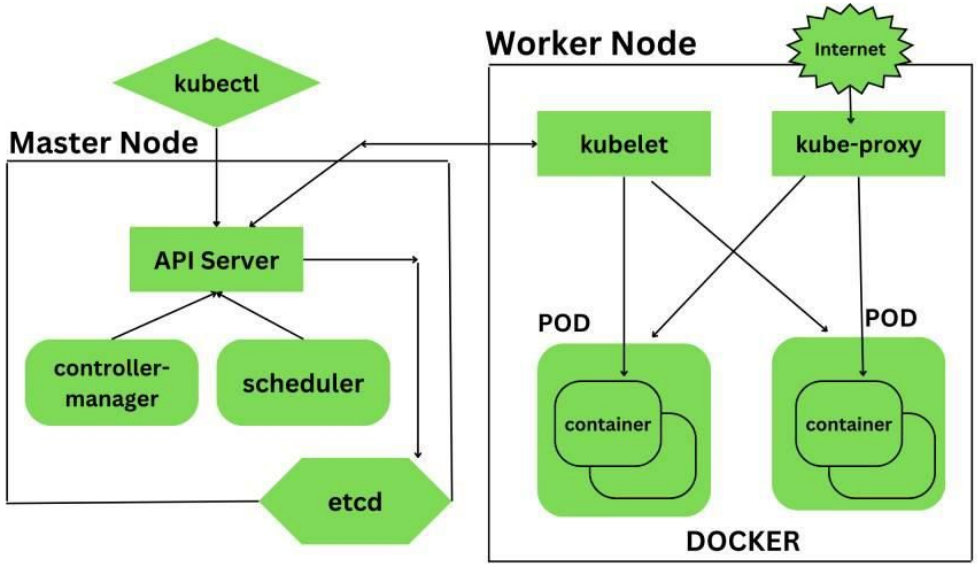
- Avoid over-fetching
- Prevent multiple API calls
- Lesser Communication with API developers
- Self documenting

Requirement	REST	GraphQL
Fetching data objects	GET	query
Writing data	POST	mutation
Updating/deleting data	PUT/PATCH/DELETE	mutation
Watching/subscribing to data	-	subscription



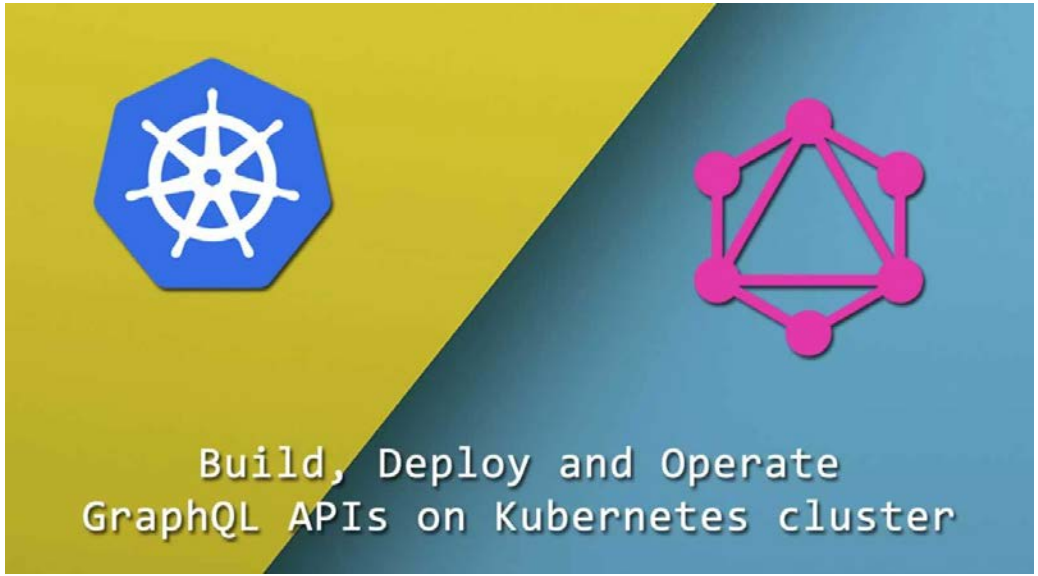
Unleashing Kubernetes Efficiency

- Container Management
- Scaling, deployment, load balancing etc.
- Challenges:
  - Data Retrieval
  - API Complexity



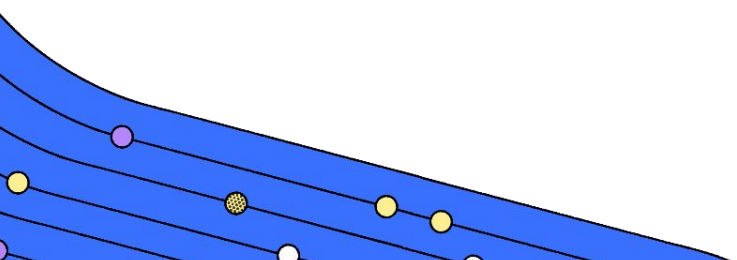
Solving challenges with Kubernetes using GraphQL

- Flexibility in Data Retrieval
- Efficient Resource Manipulation
- Real-Time Insights

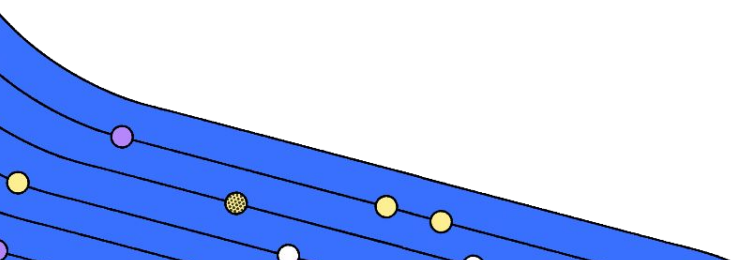


Hasura as a GraphQL Engine for Kubernetes

- GraphQL at its core
- Real-time Capabilities
- Simplified Data Access
- Authorization and Authentication
- Monitoring and observability
- Productivity

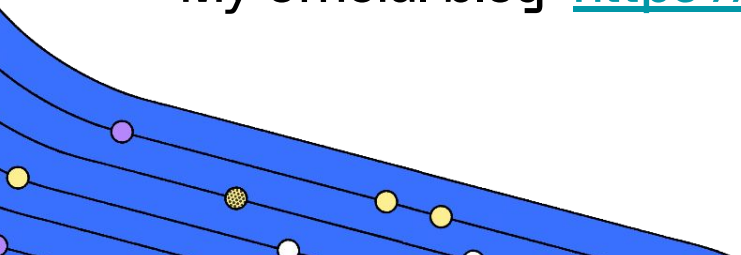


Demo



Documentation

- https://hasura.io/learn/graphql/intro-graphql/introduction/
- https://hasura.io/docs/latest/deployment/deployment-guides/kubernetes/
- https://docs.google.com/presentation/d/11dDmxAGFNFmesnOHQRJOX4qski-sqI8osqRfWefiCLg/edit?usp=sharing
- My medium blog: https://medium.com/@akshubhat
- My official blog: https://hasura.io/blog/@akshay/



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Thanks for joining!

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