



Dagger Concepts

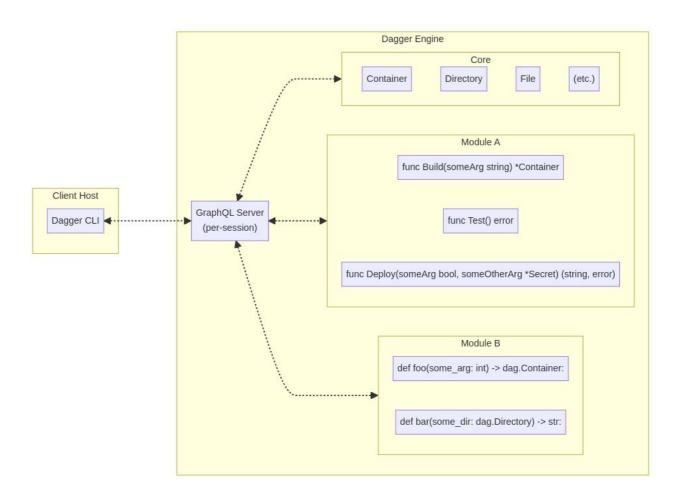
Solve current CI/CD problems







Architecture



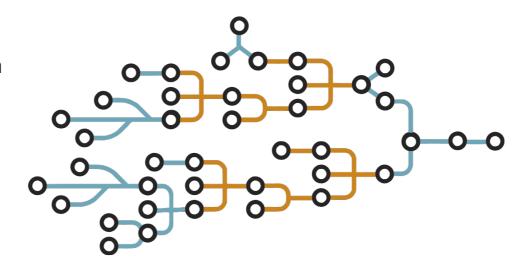
How does Dagger really work?

Directed Acyclic Graph (**DAG**)
--> DAGger €

BuildKit

Low-Level Build (<u>LLB</u>) definition

Docker layer caching



Execution Environment

Containerization:

- Reproducibility
- Caching
- Security

Code execution:

- Language functions
- Language Libraries
- Dagger API
- Dagger Module functions

Host resources:

- Files and directories
- Environment variables
- Local network services

Caching

Local / Single node: High degree of caching Distributed / ephemeral runners: Caching possible

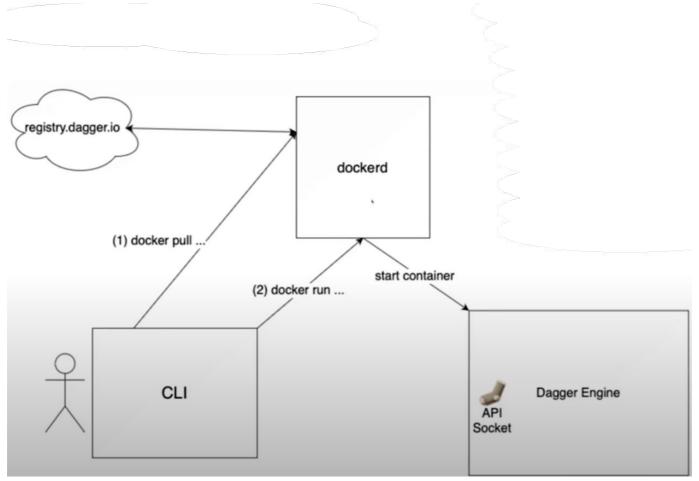
Dagger caches two types of data:

- Layers
- Volumes:

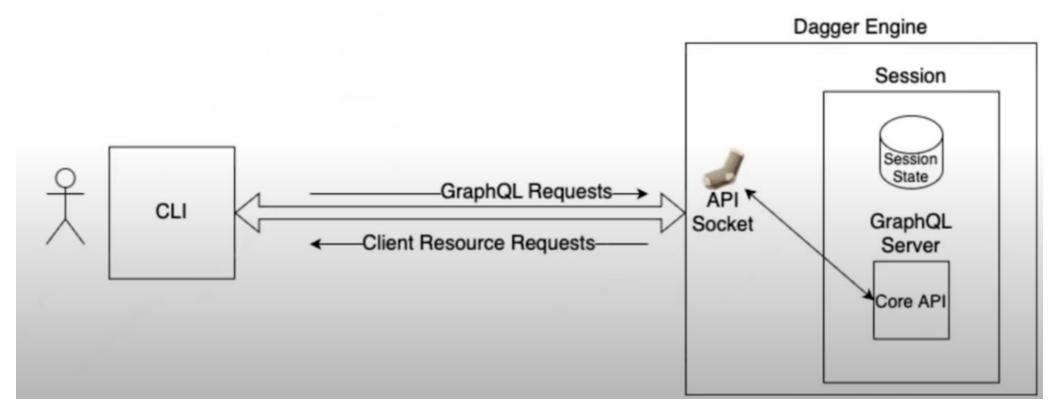
see Cache Volumes

Under the hood

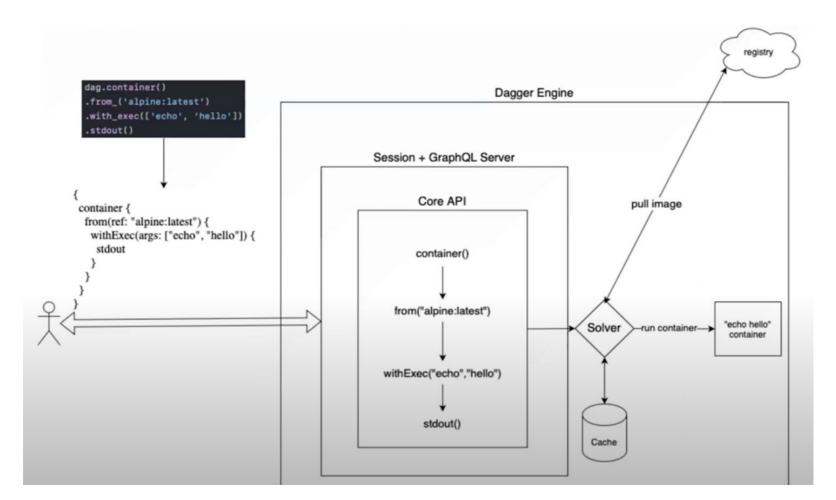
Engine Provisioning



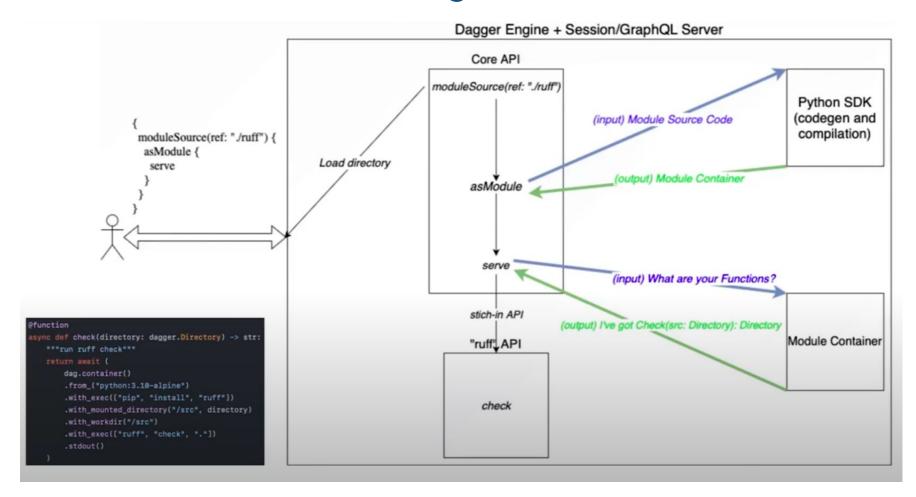
Session + GraphQL Server



Core API Calls

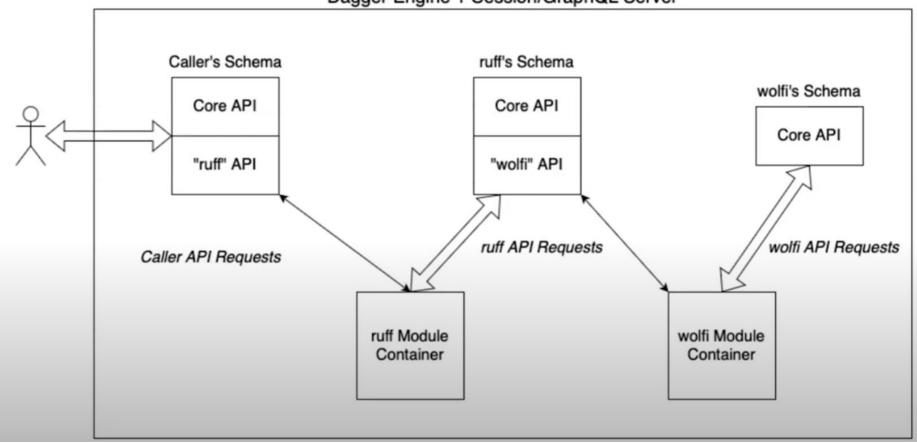


Module API Calls - Loading



Module API Calls - Loading (recursively)

Dagger Engine + Session/GraphQL Server



An actual (example) call

