

HyperLedger Fabric

"Hello World"

(Speaker) Federico Zappone

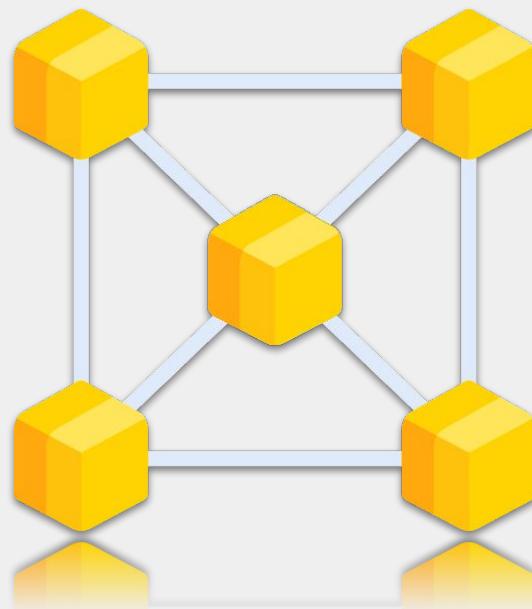
University of Molise (**UniMOL**)



github.com/ZappaBoy/hlf-hello-world

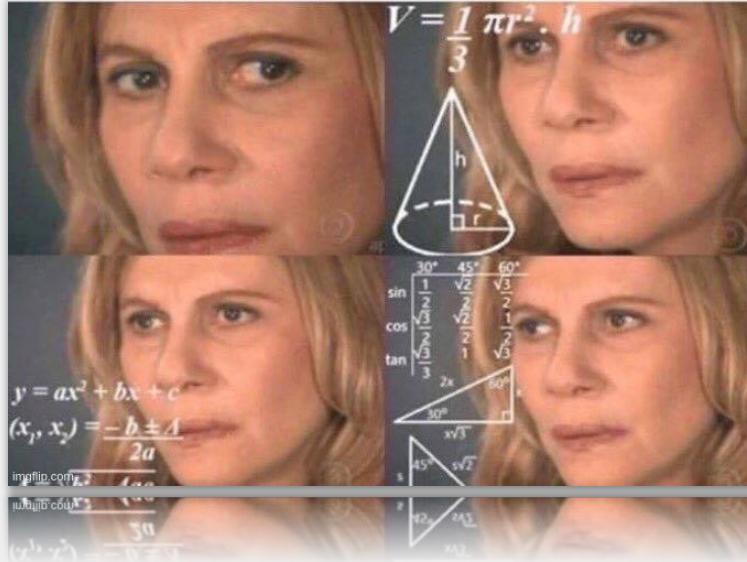
What is a blockchain?

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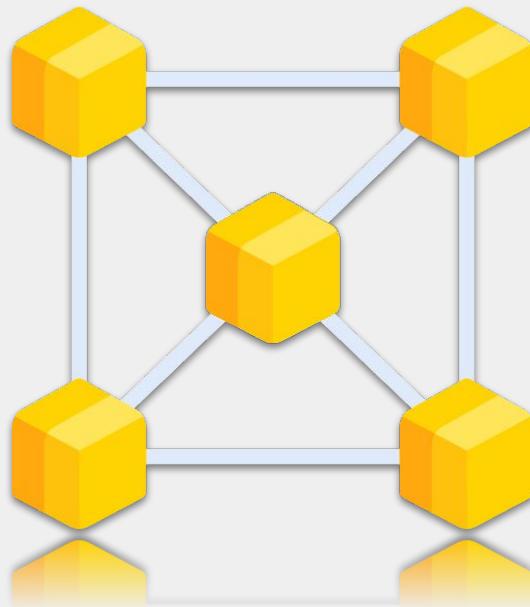


What is a Distributed Ledger?

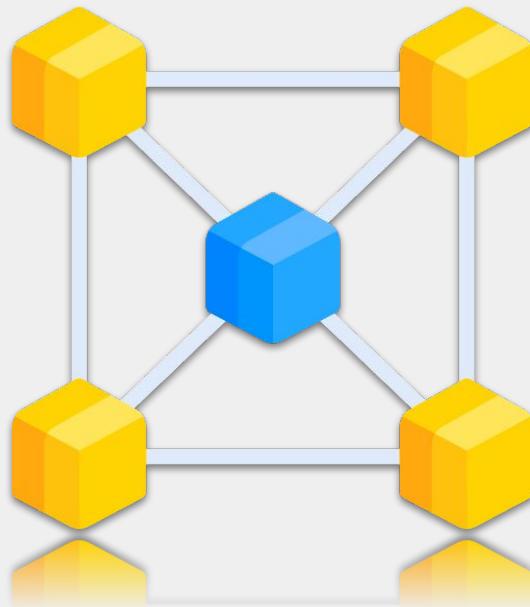
What is a Distributed Ledger?



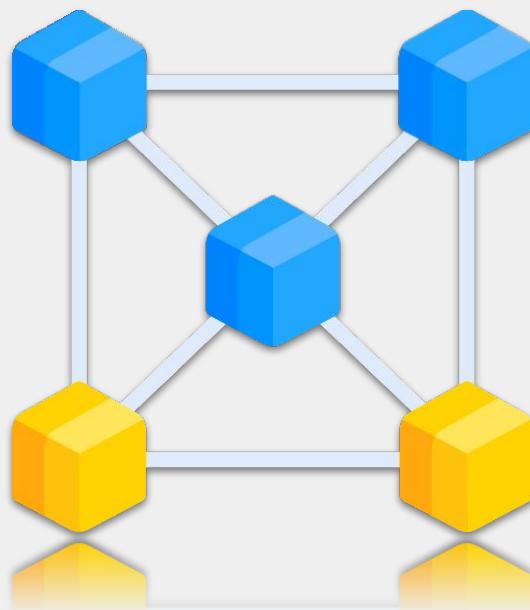
What is a **Distributed Ledger?**



What is a Distributed Ledger?



What is a **Distributed Ledger?**



Why use a
**Distributed Ledger
Technology?**

**DLT are
fast and scalable**

DLT are
customizable

**DLT offers
more control**

**DLT are designed for
companies**

Permissioned
DLT are designed for
companies

DLT

Permissioned

Permissionless





**Permissioned DLT
can be reduced
to permissionless DLT**

AND..

HYPERLEDGER FABRIC?

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What is HyperLedger Fabric?

But there is a **problem...**



DEVELOPER

HYPERLEDGER FABRIC  REUTERS®

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Fabric Network

Physical
entities

Abstract
entities



Physical entities

Physical entities

Peer

Physical entities

Peer

StateDB

Physical entities

Peer

StateDB

Certificate Authority

Physical entities

Peer

StateDB

Certificate Authority

Ordering Service

Physical entities

Peer

StateDB

Certificate Authority

Ordering Service

Chaincode

Abstract entities

Abstract entities

Ledger

Abstract entities

Ledger Organizations

Abstract entities

Ledger
Organizations
Membership Service Provider

Abstract entities

Ledger

Organizations

Membership Service Provider

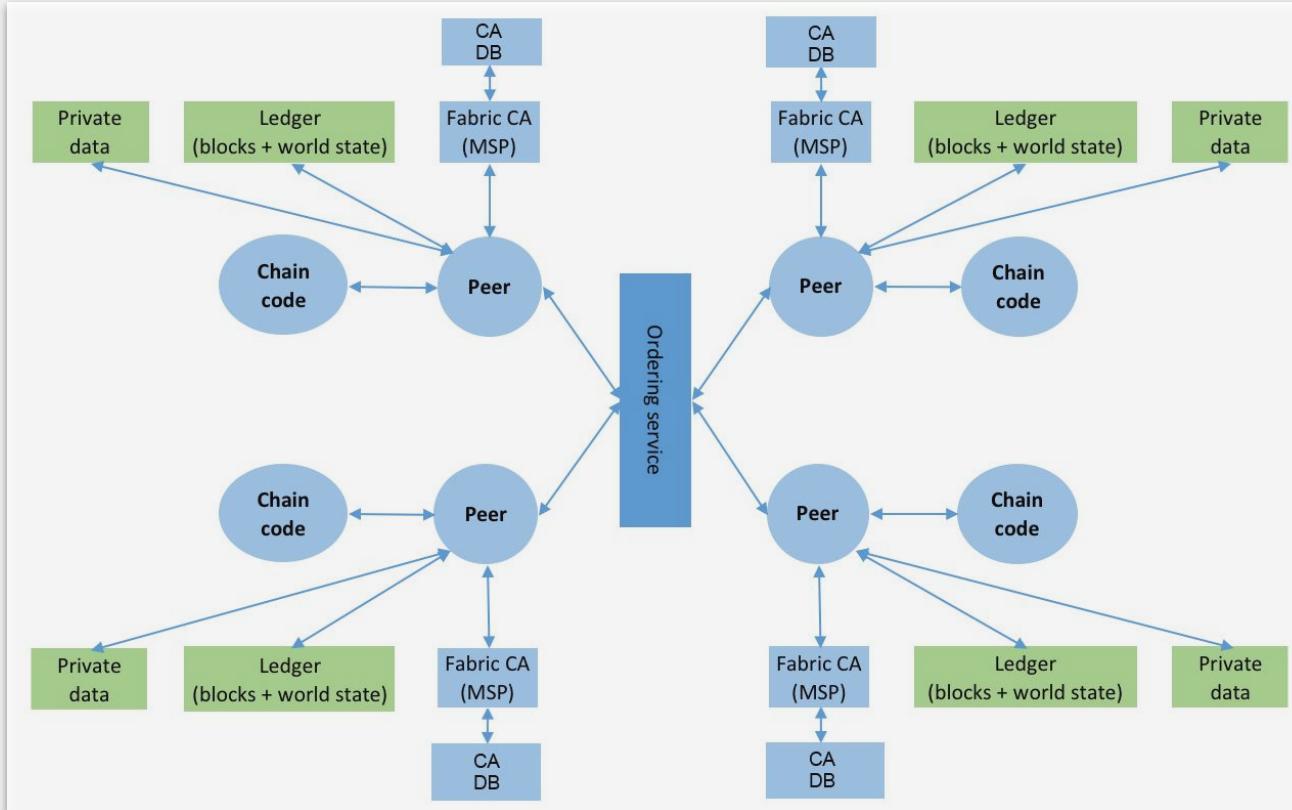
Channels



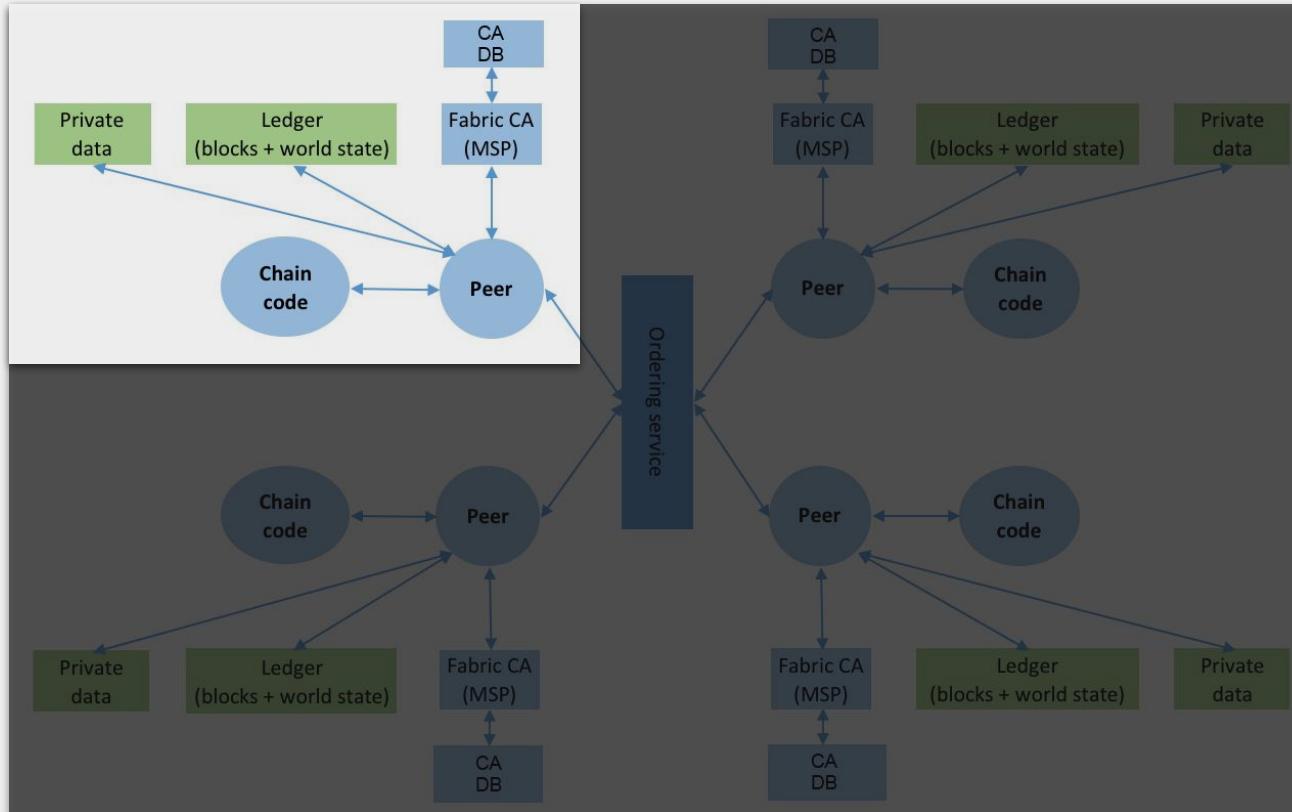
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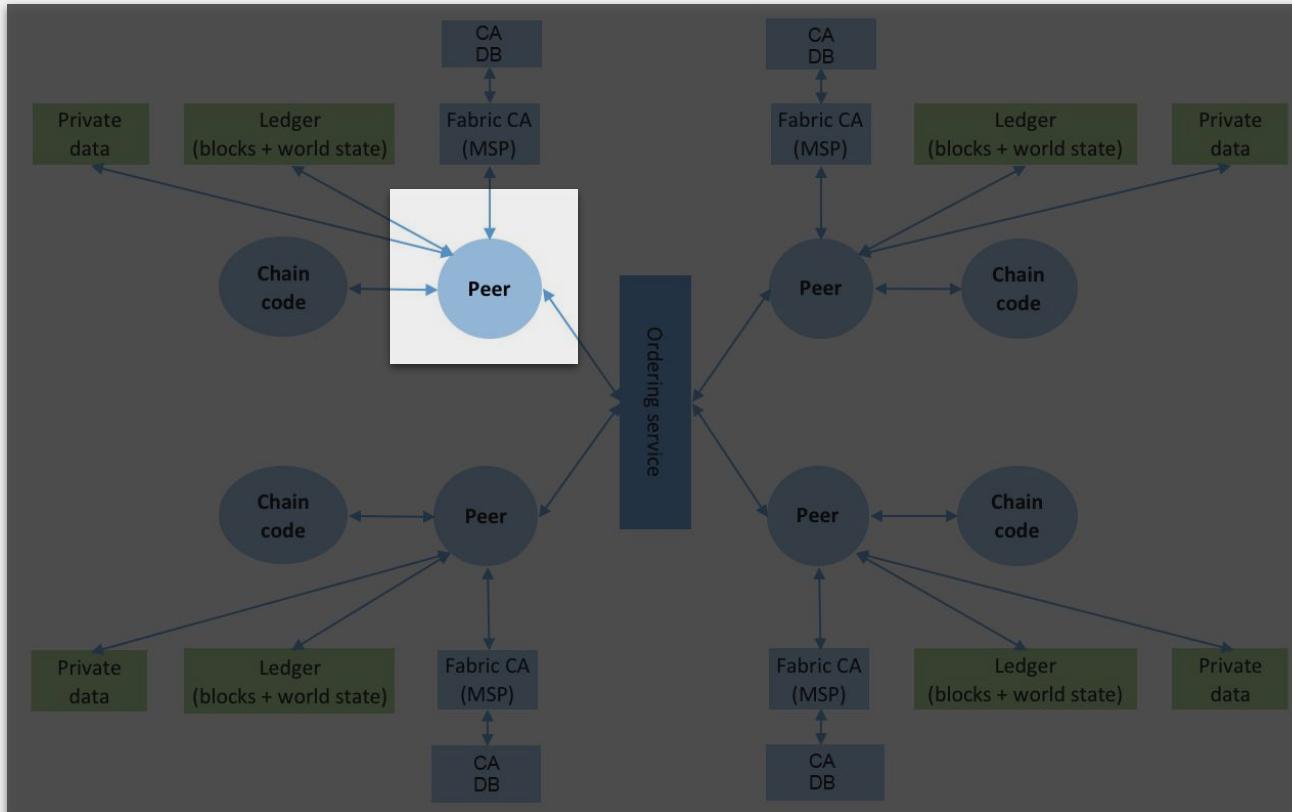
Example Architecture



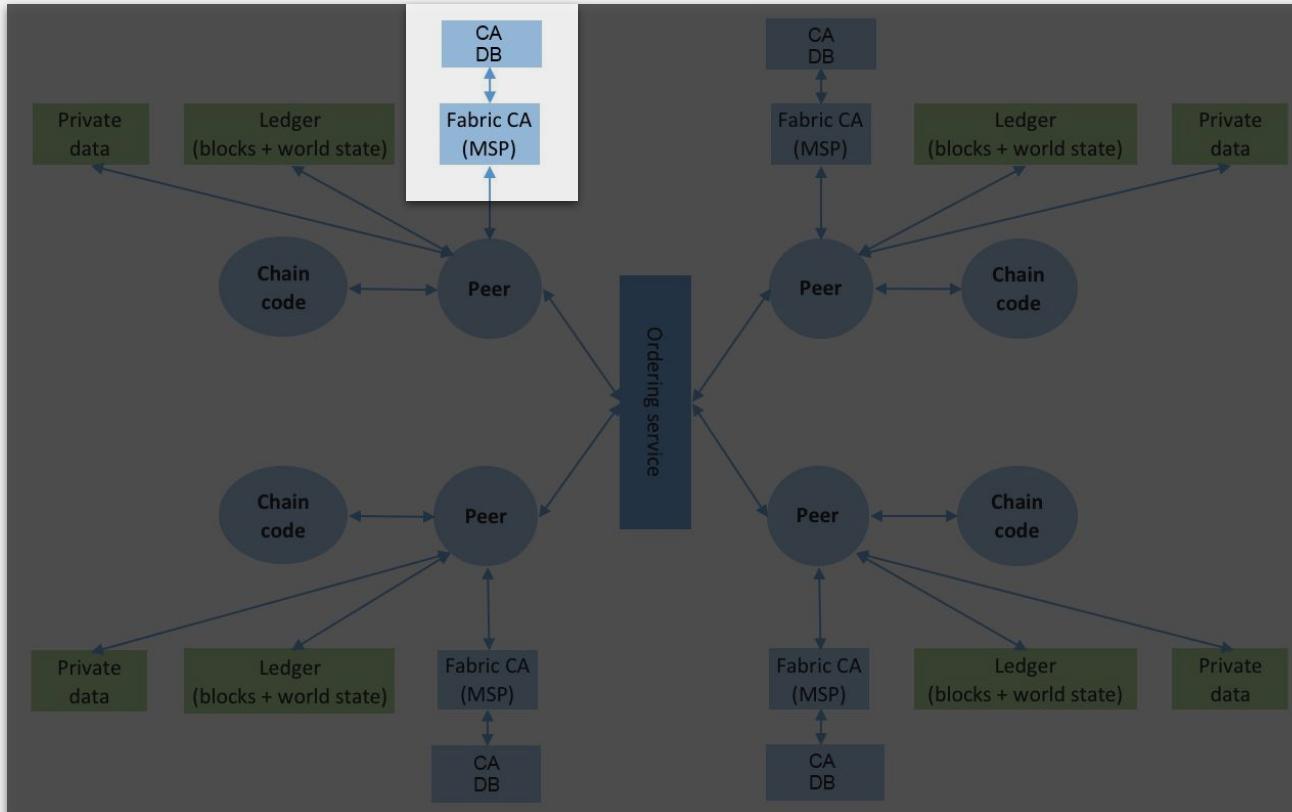
Example Architecture



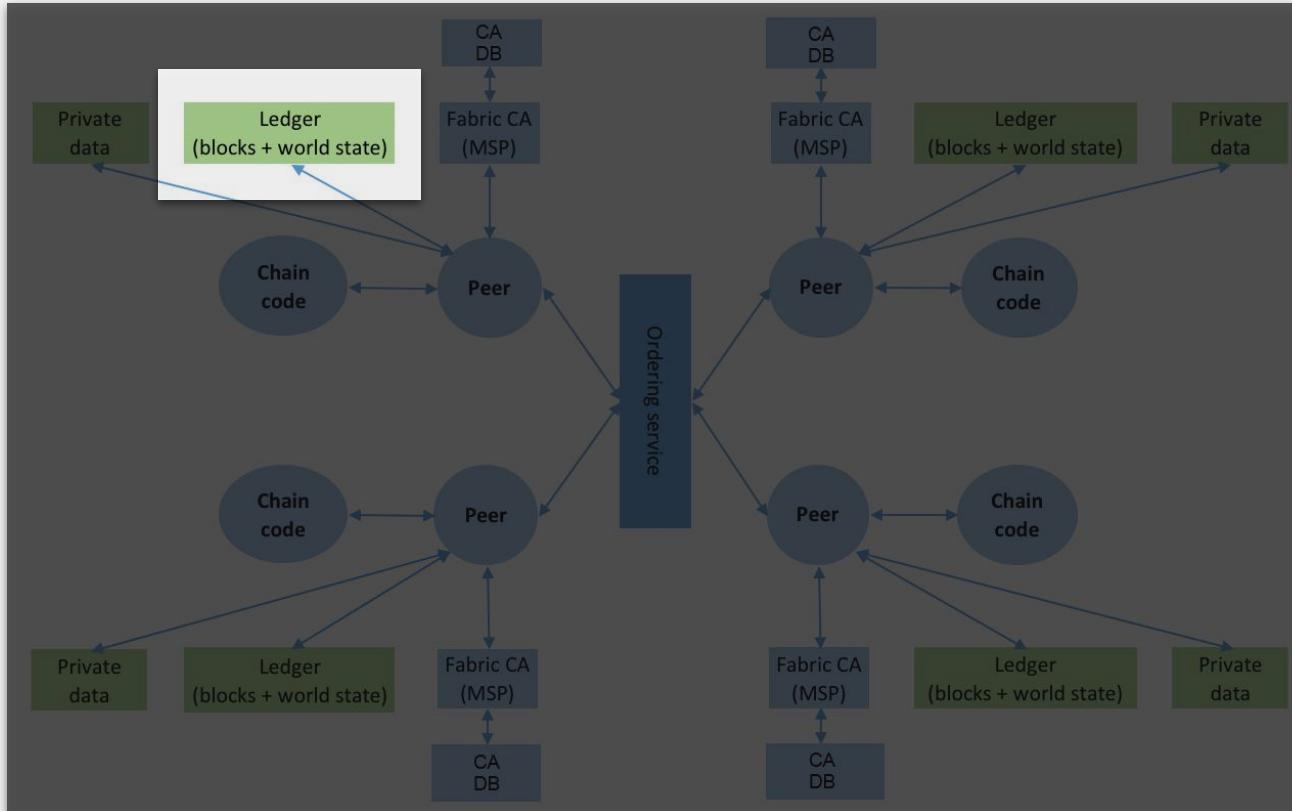
Example Architecture



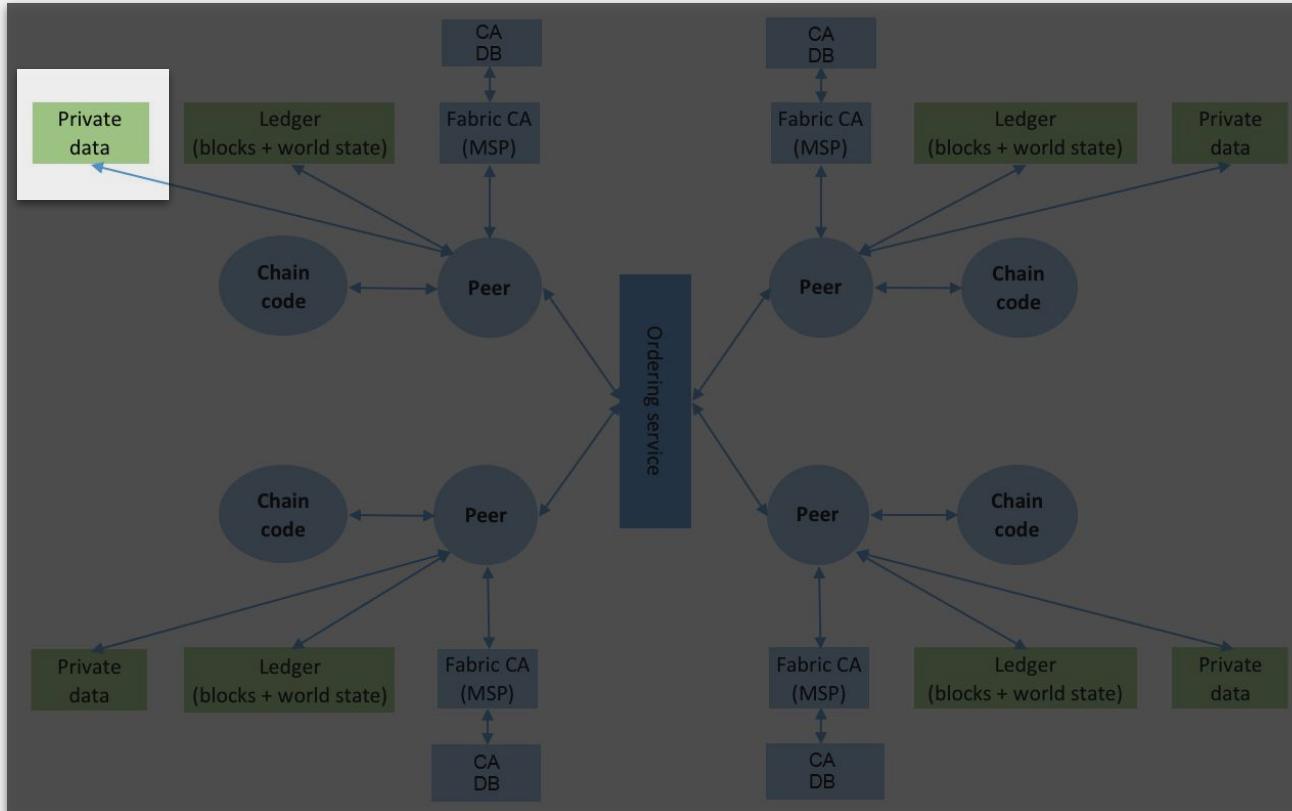
Example Architecture



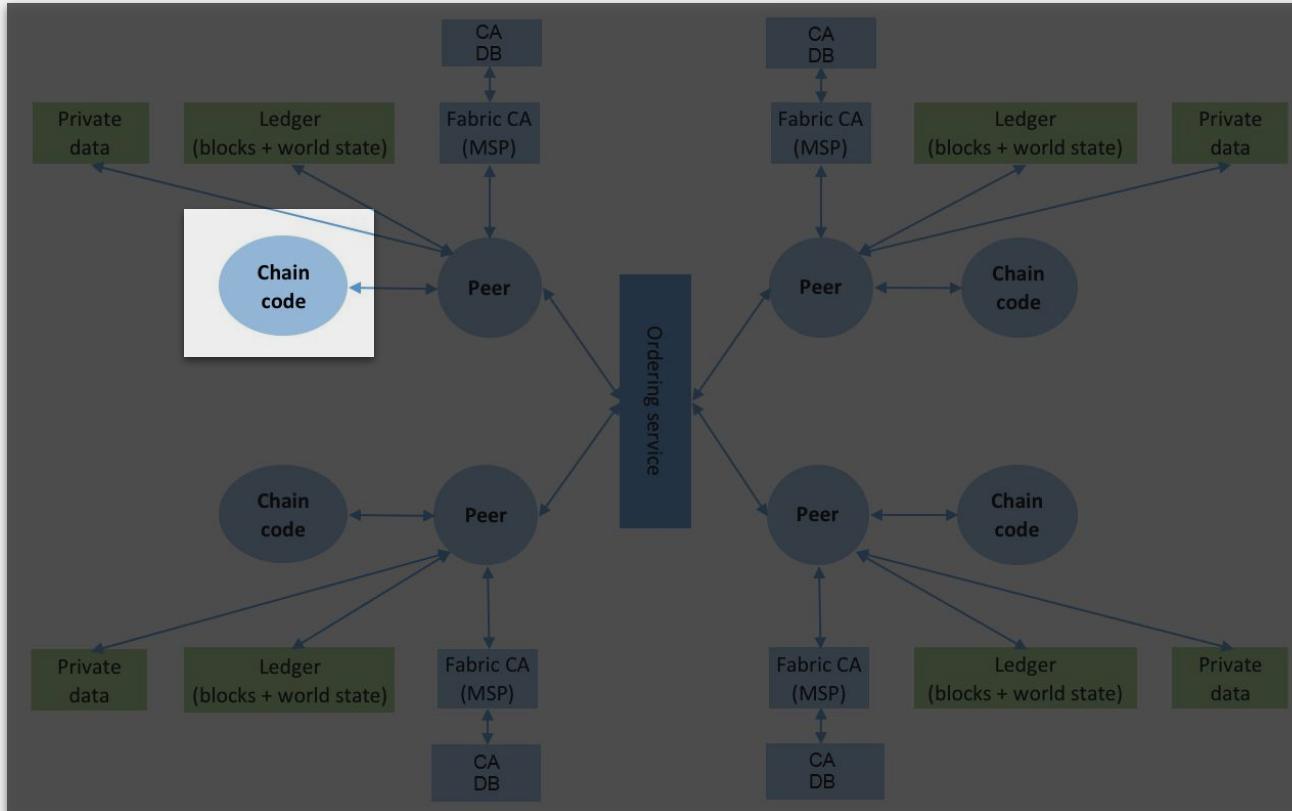
Example Architecture



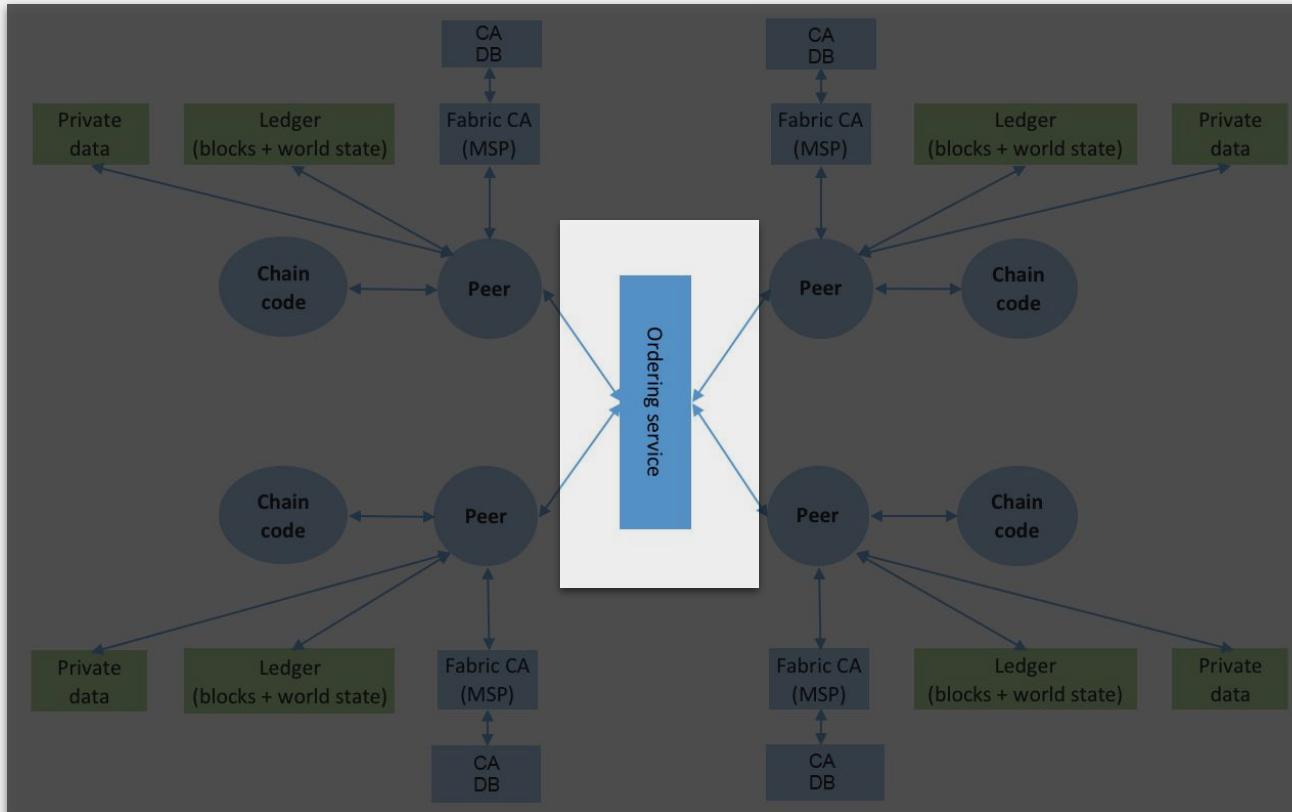
Example Architecture



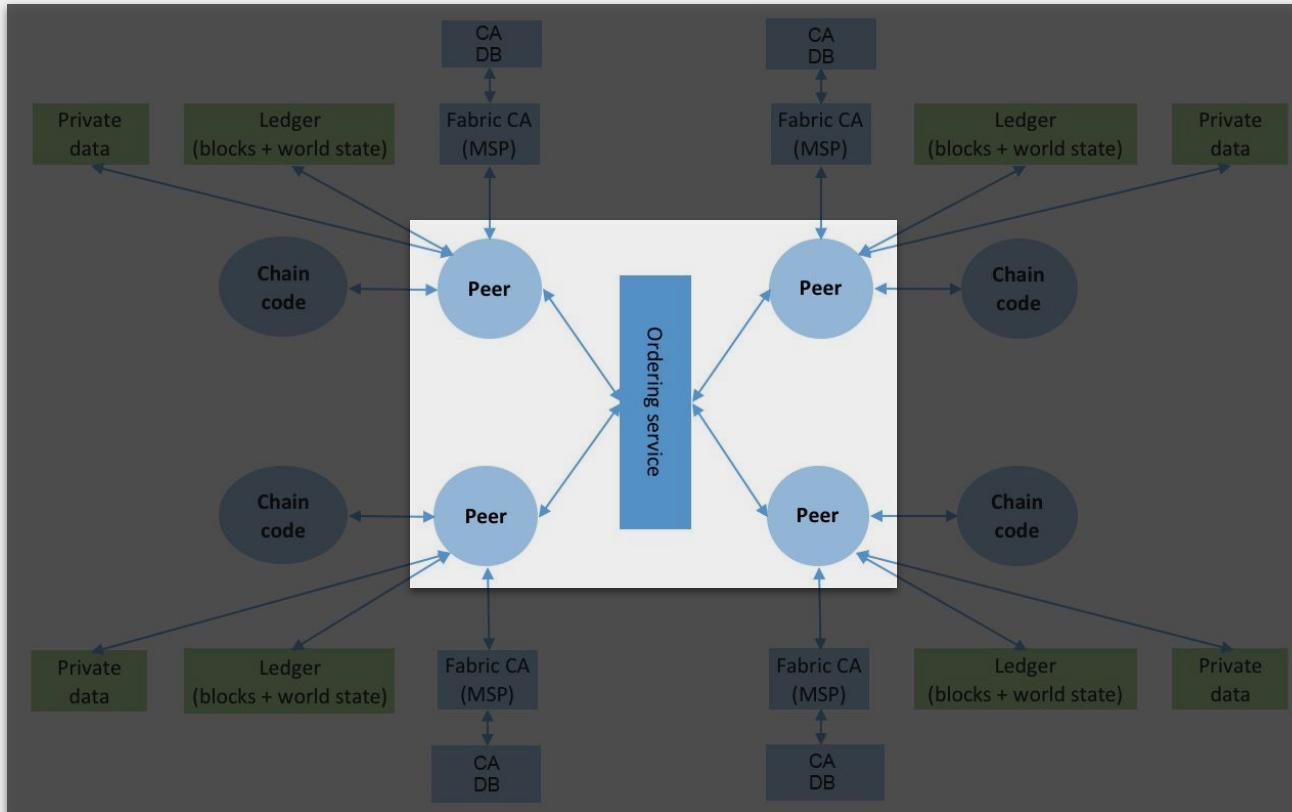
Example Architecture



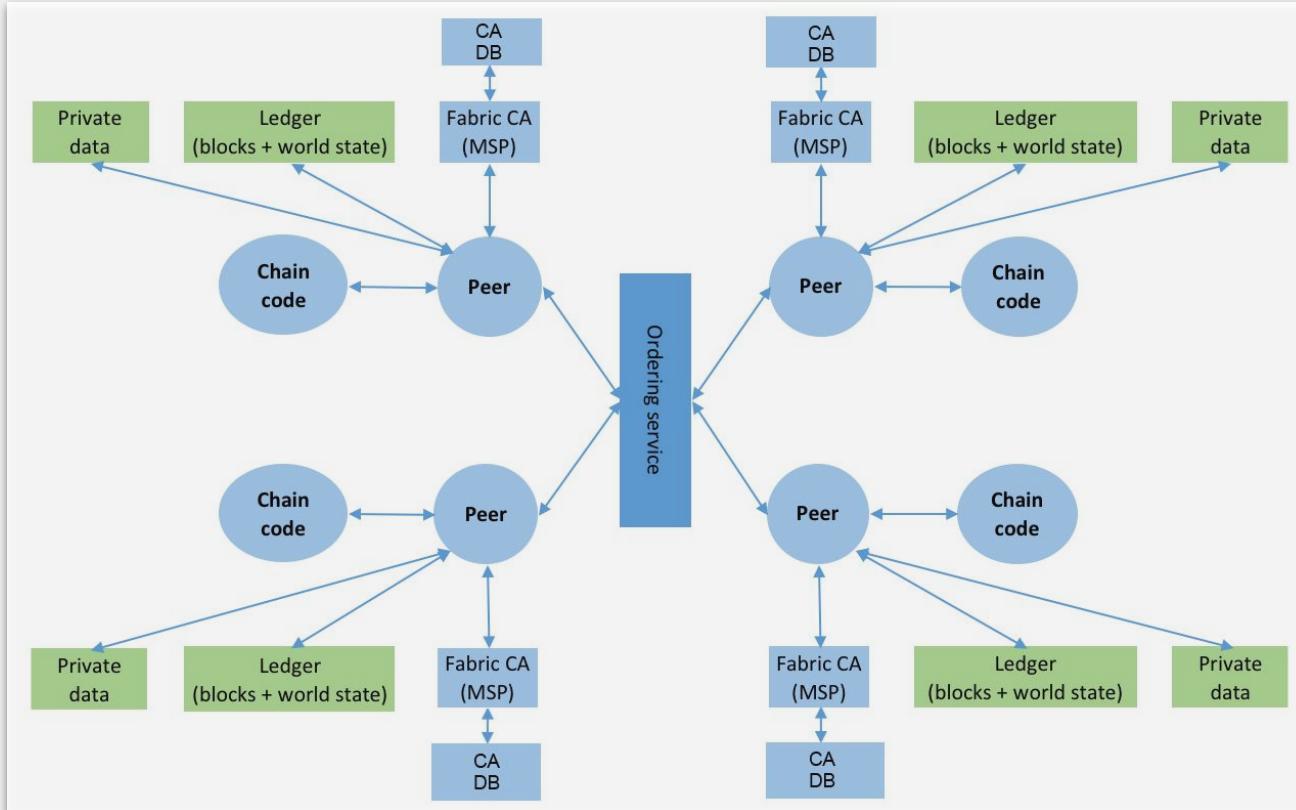
Example Architecture



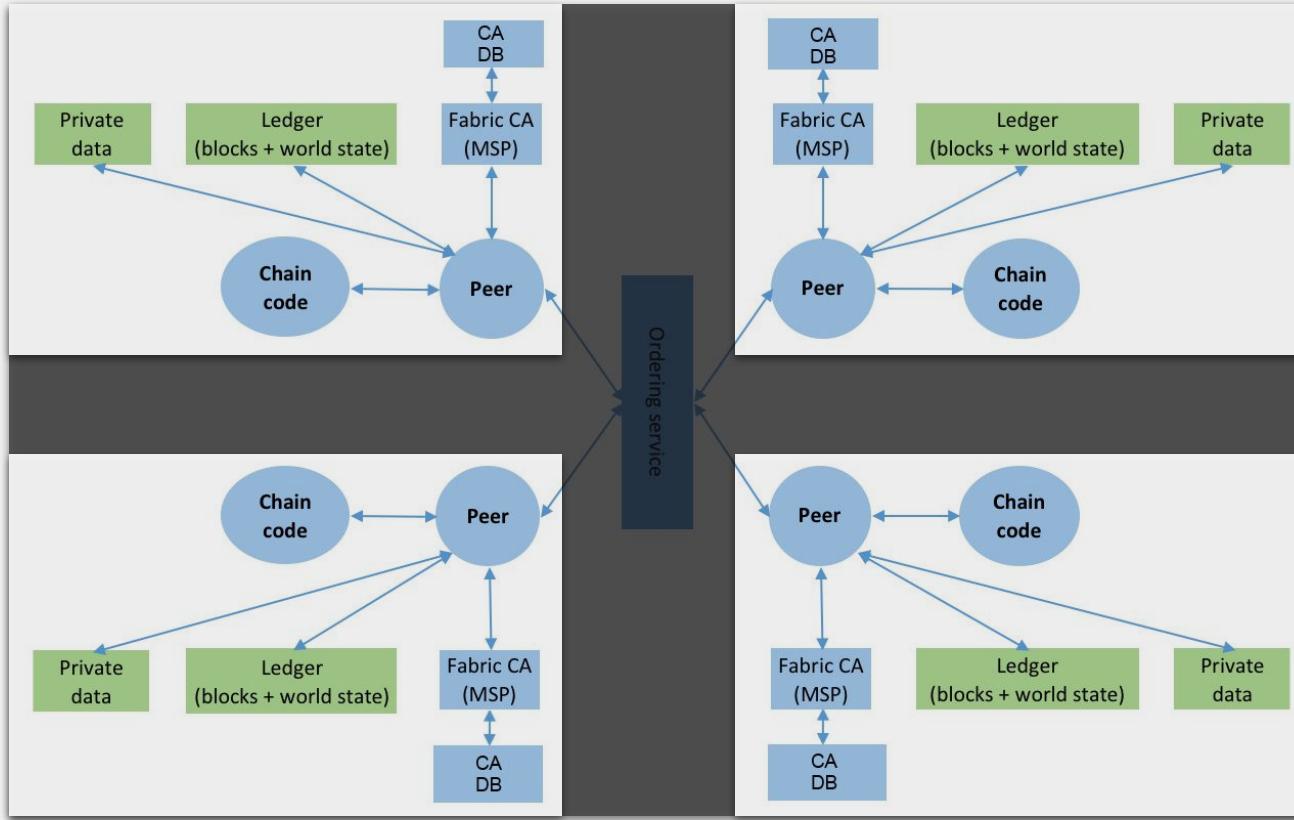
Example Architecture



Example Architecture



Example Architecture

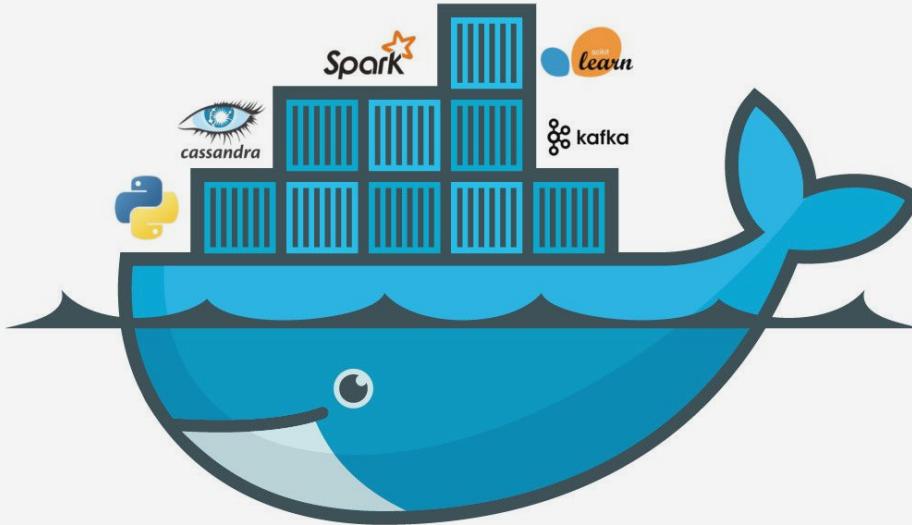




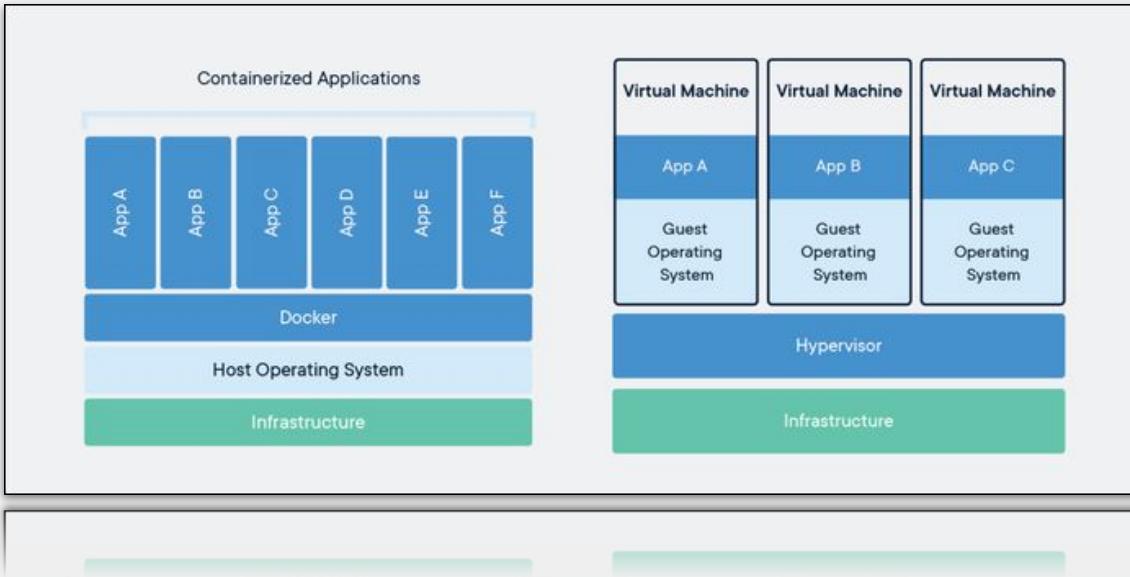
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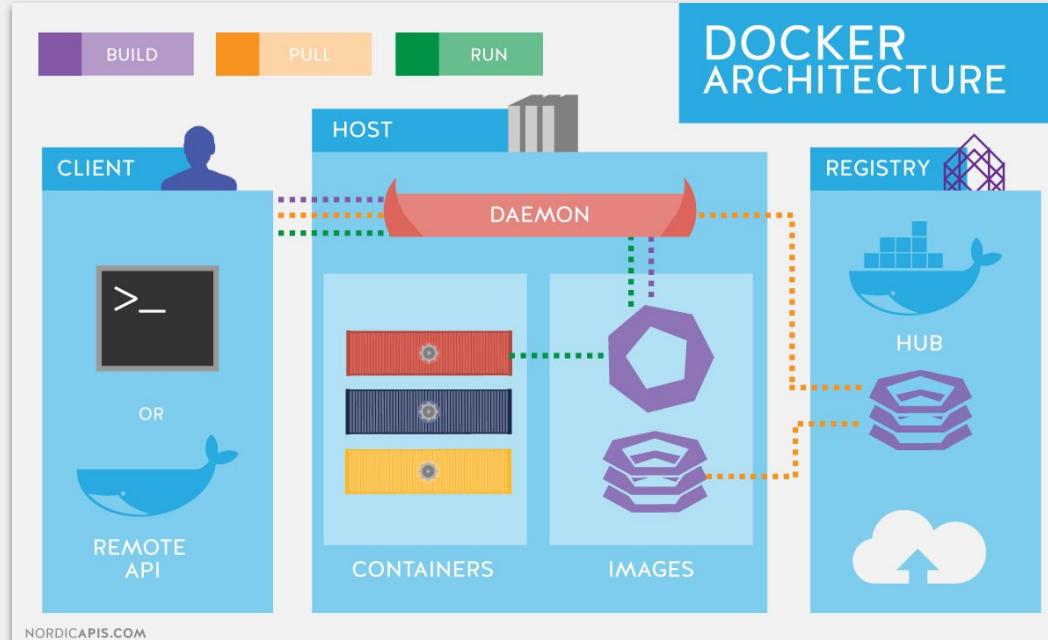
Docker engine

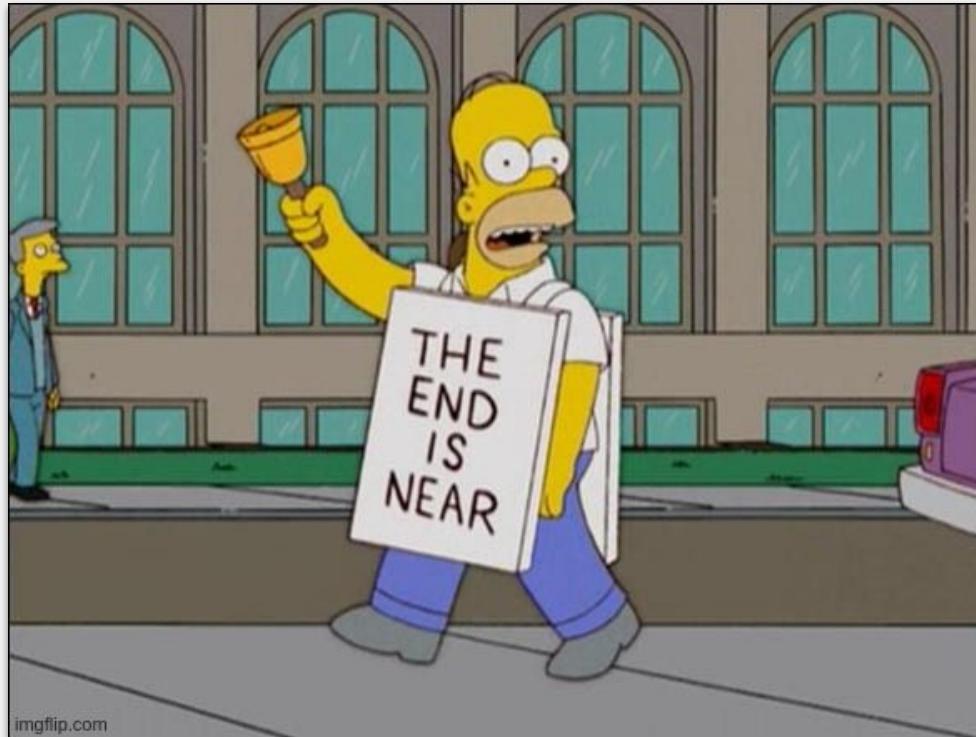


Why use Docker?



How Docker works?



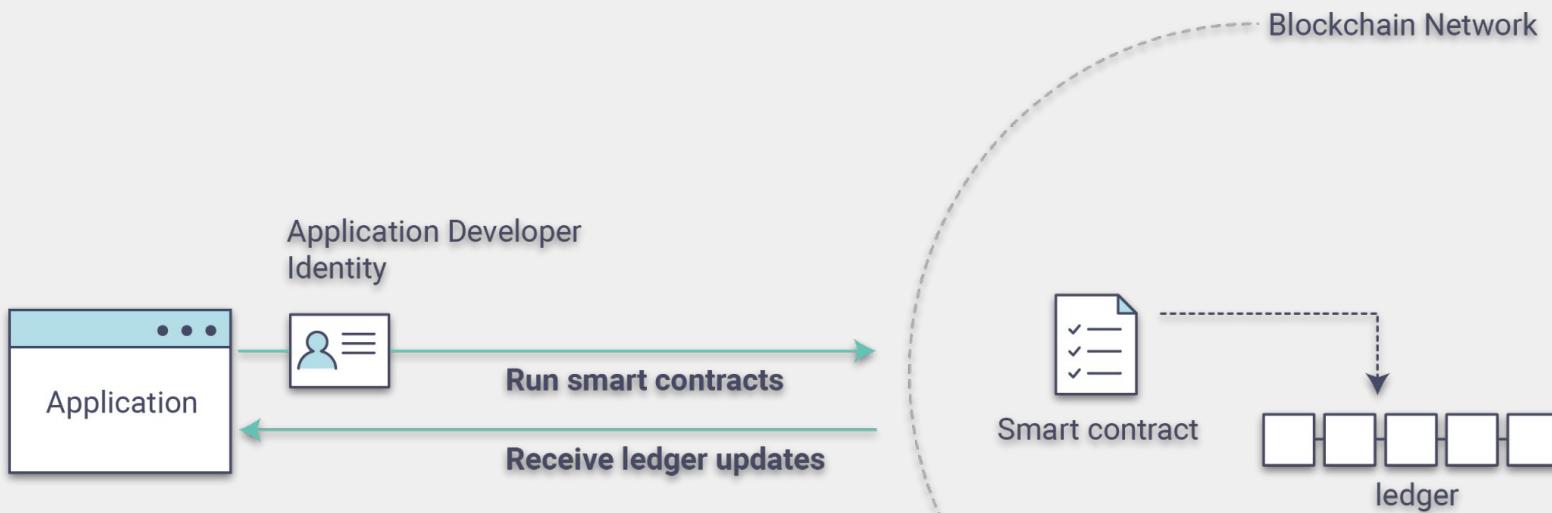


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How can we
interact
with the ledger?

We need an
application

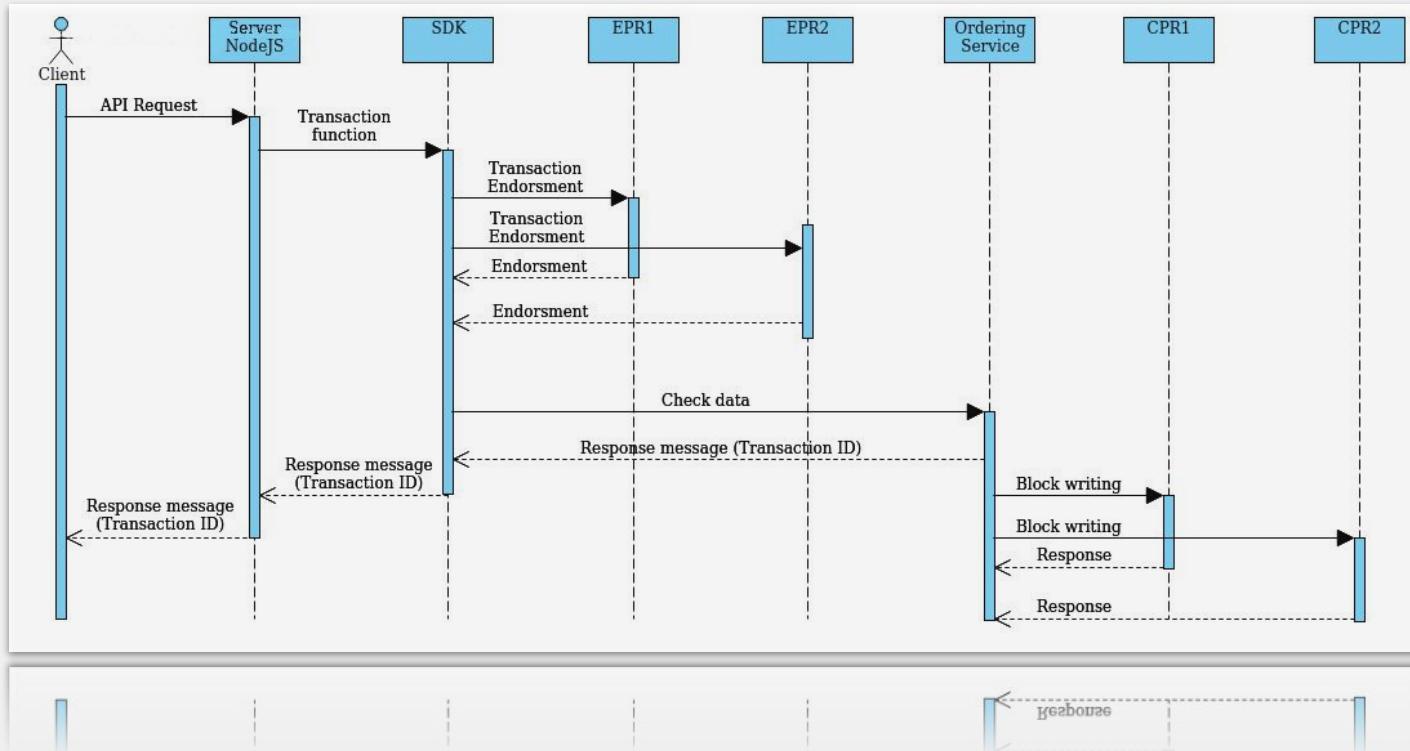


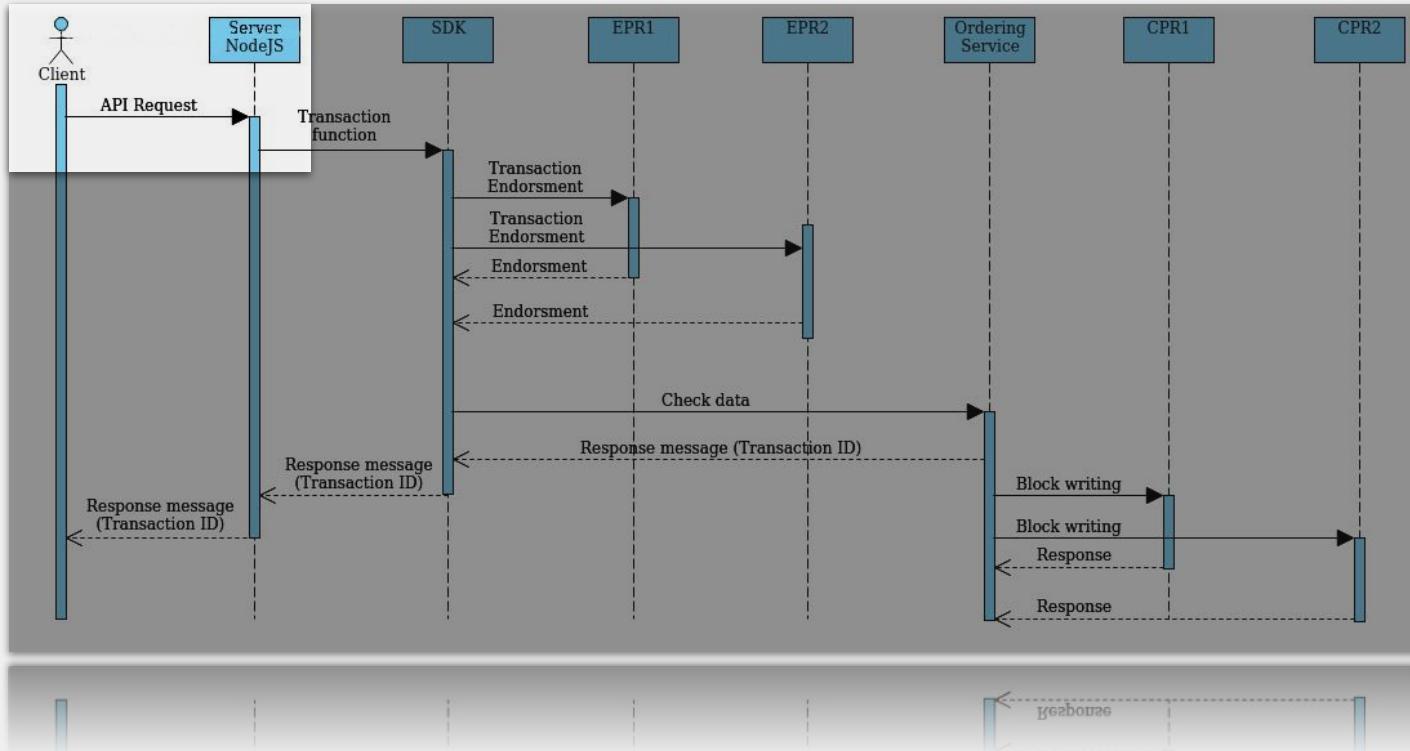


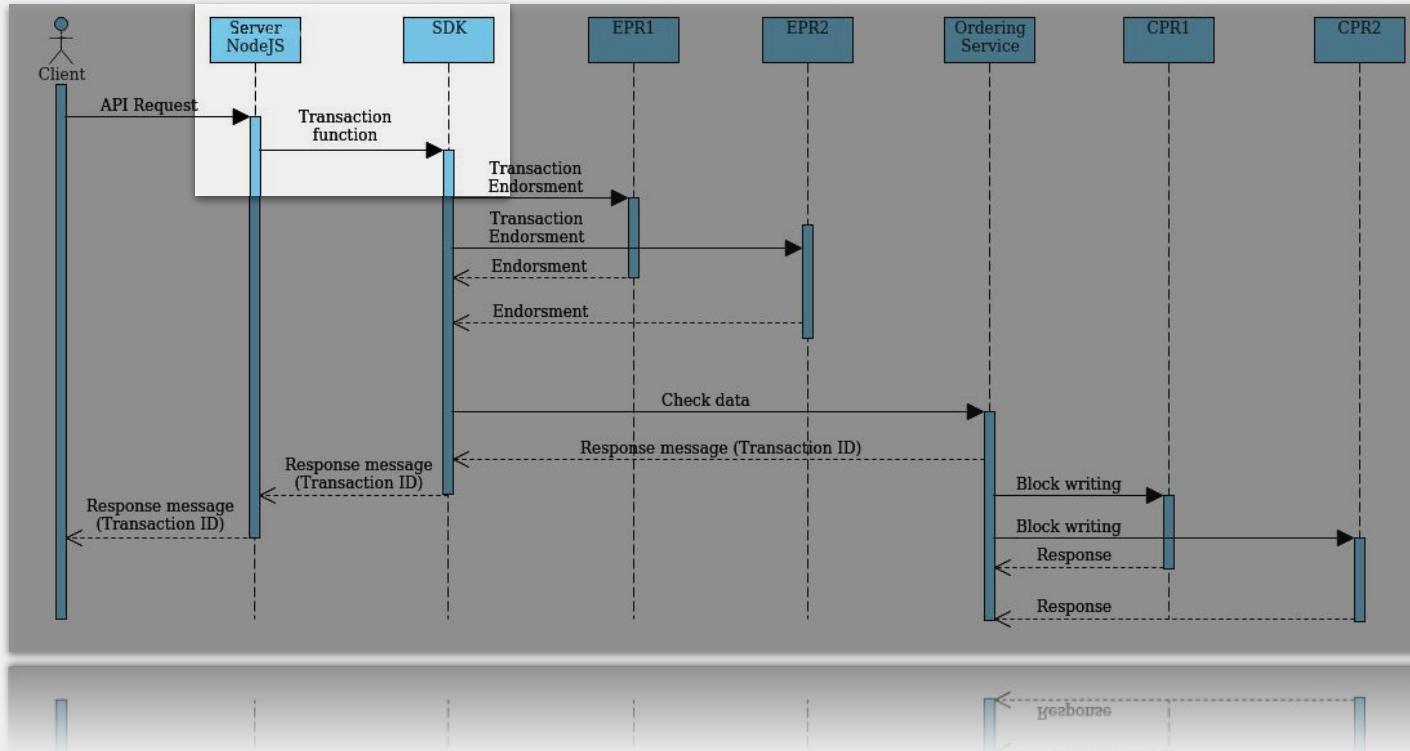
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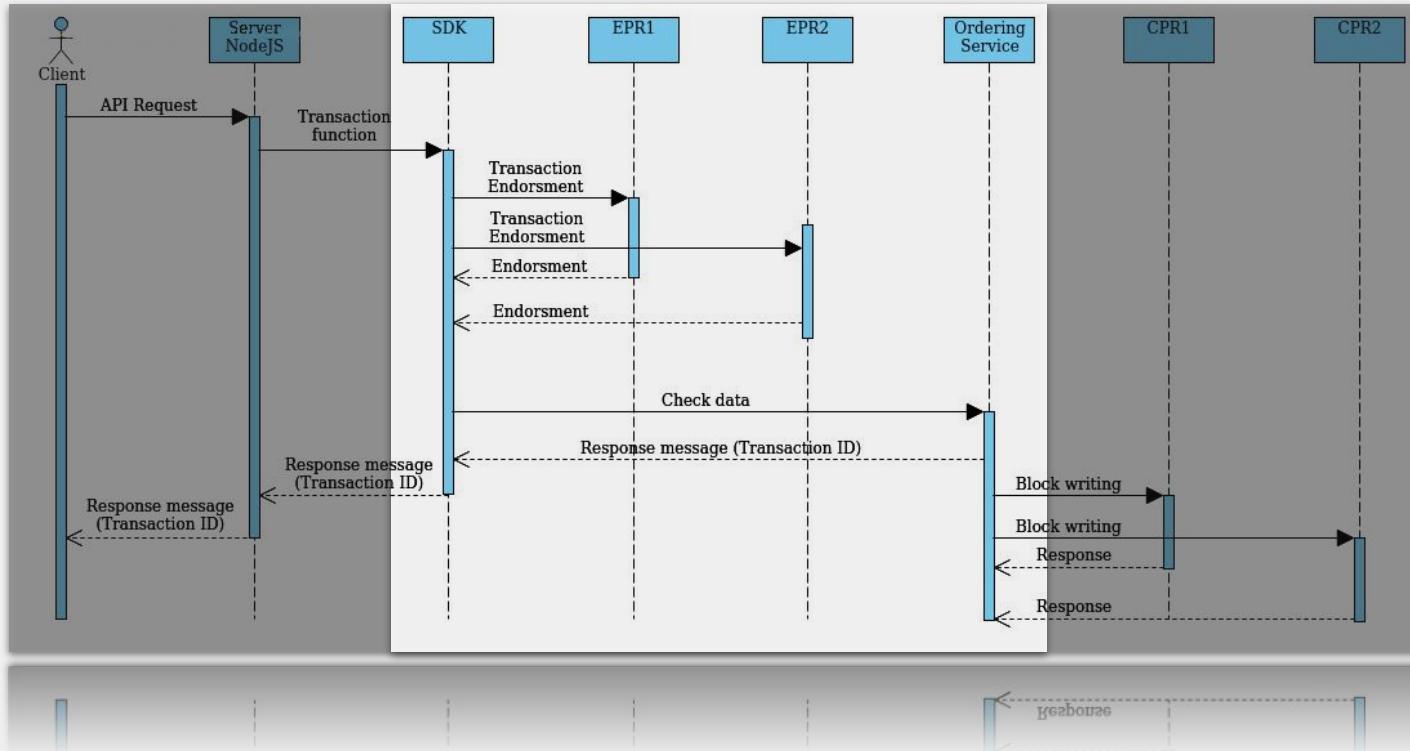
mcq.dilipmi

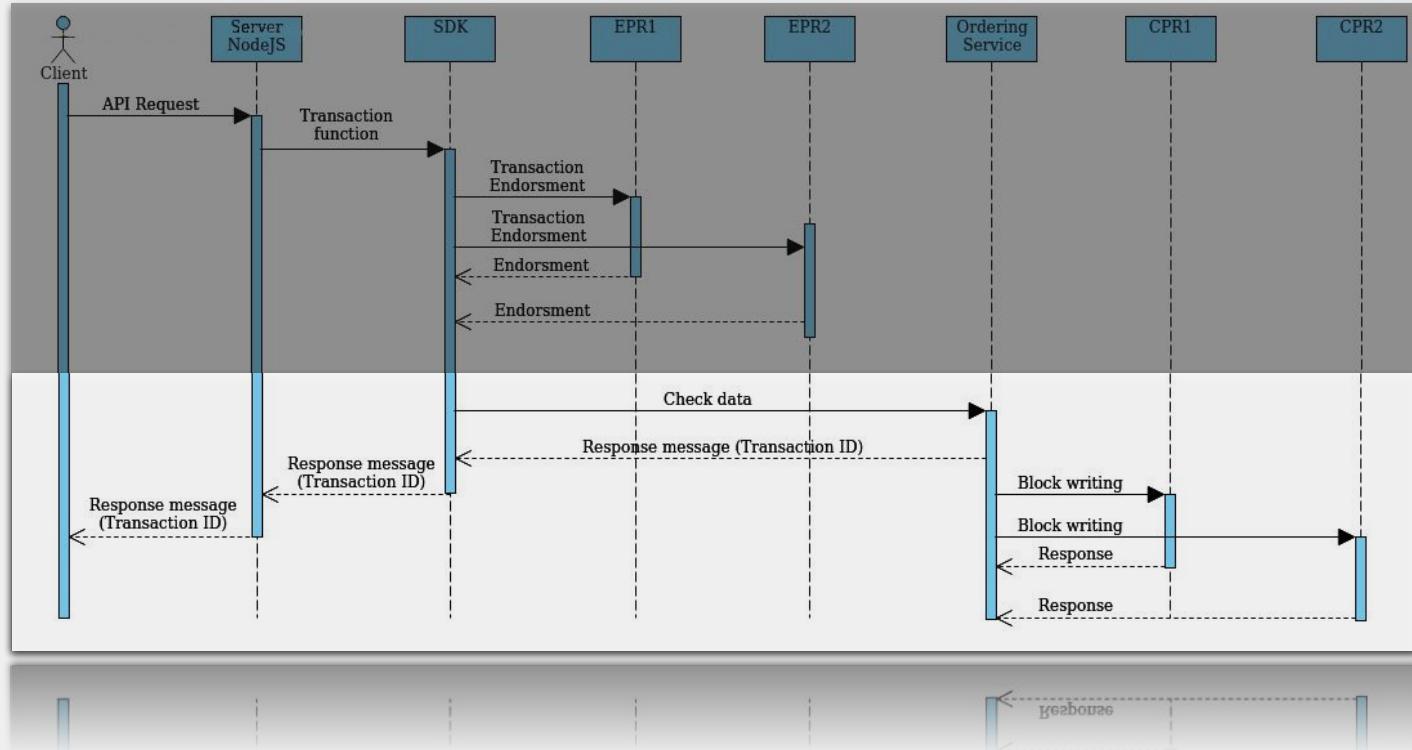
TOO HIGH (LEVEL)

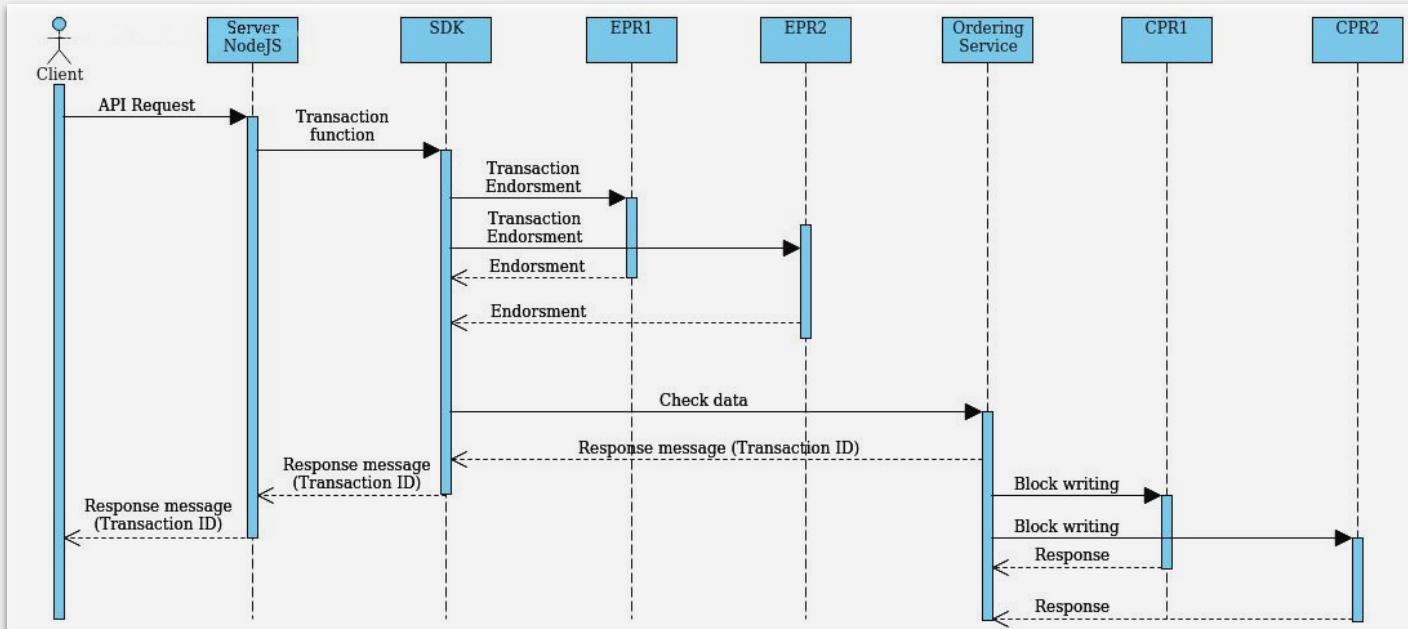










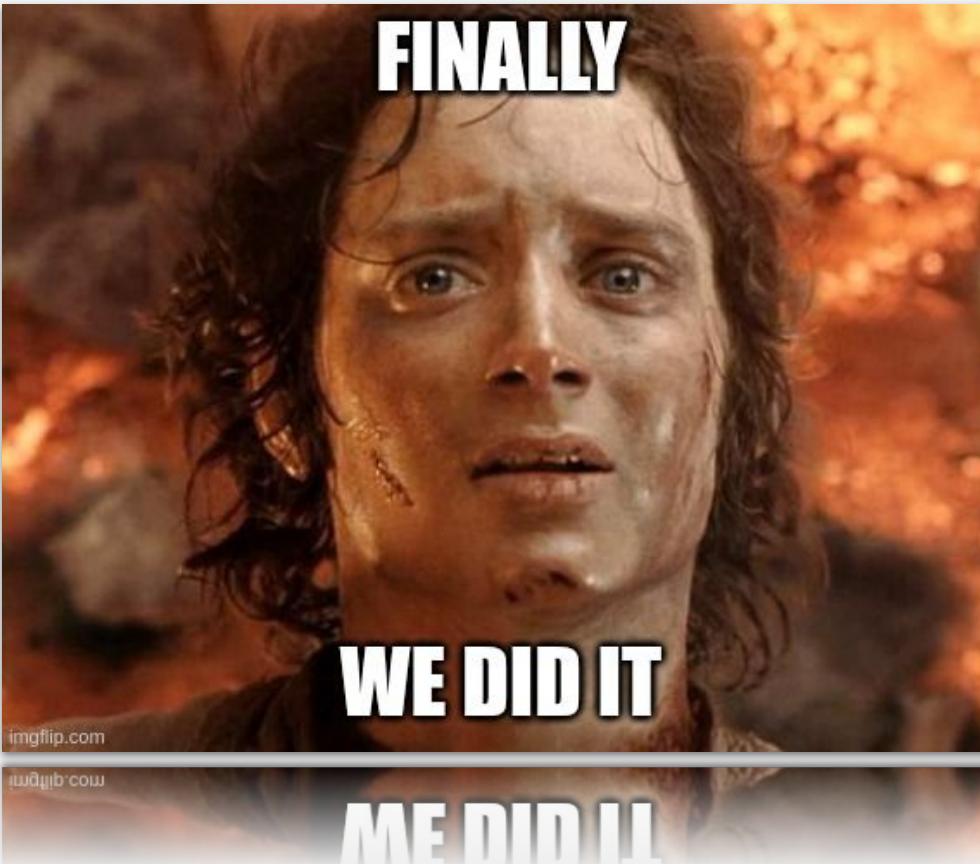


PROVE IT





github.com/ZappaBoy/hlf-hello-world



FINALLY

WE DID IT

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ME DID IT

Thank you for the attention



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f.zappone1.job@gmail.com

Any questions?

