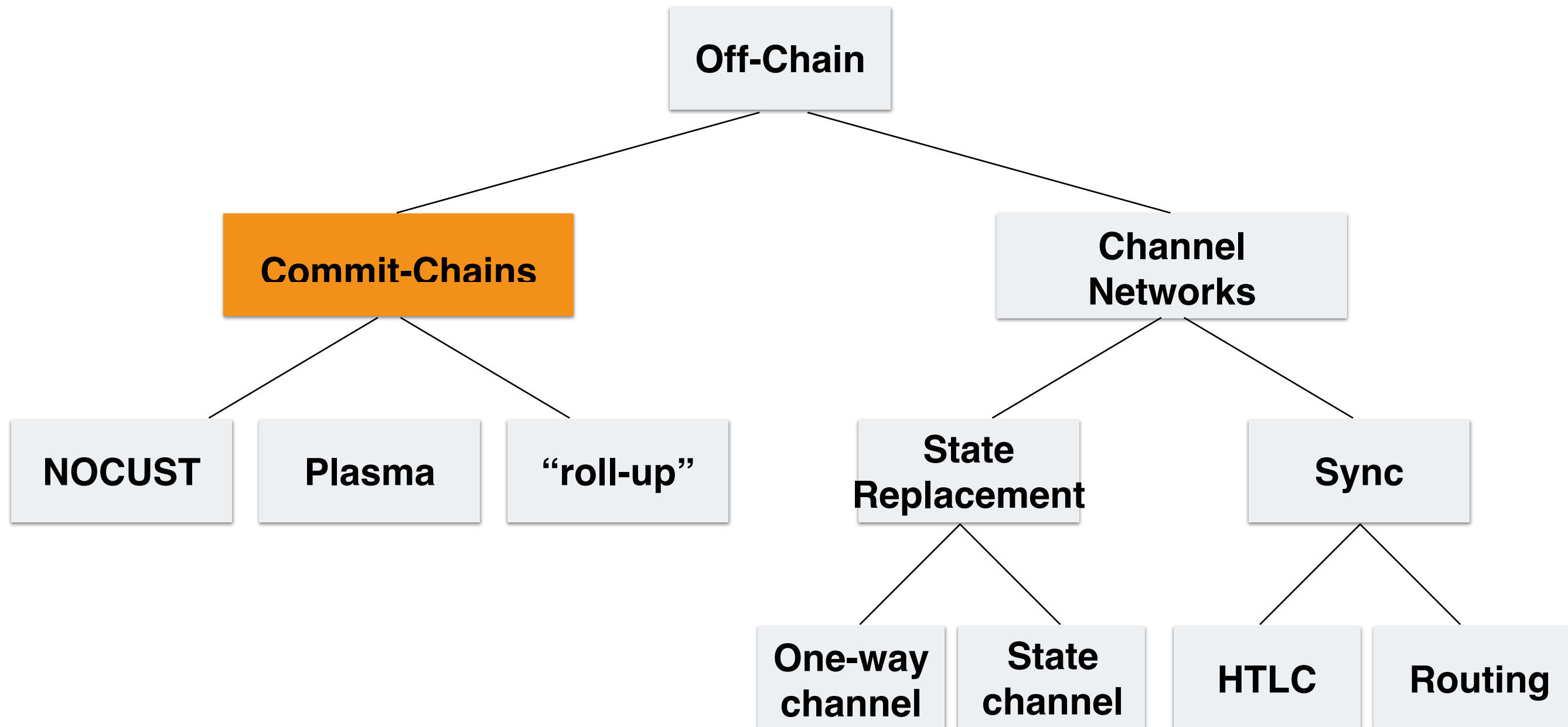**Commit-Chains**

Which off-chain solution?

Commit-Chains

Off the chain transactions

Constant-size checkpoint

Blockchain

Block(i)   Block(i+2)

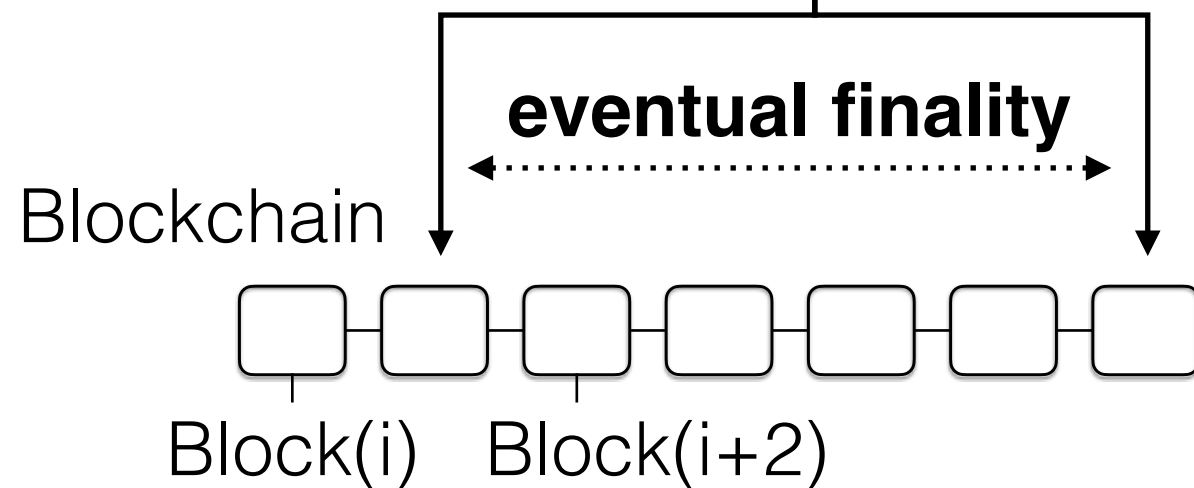round
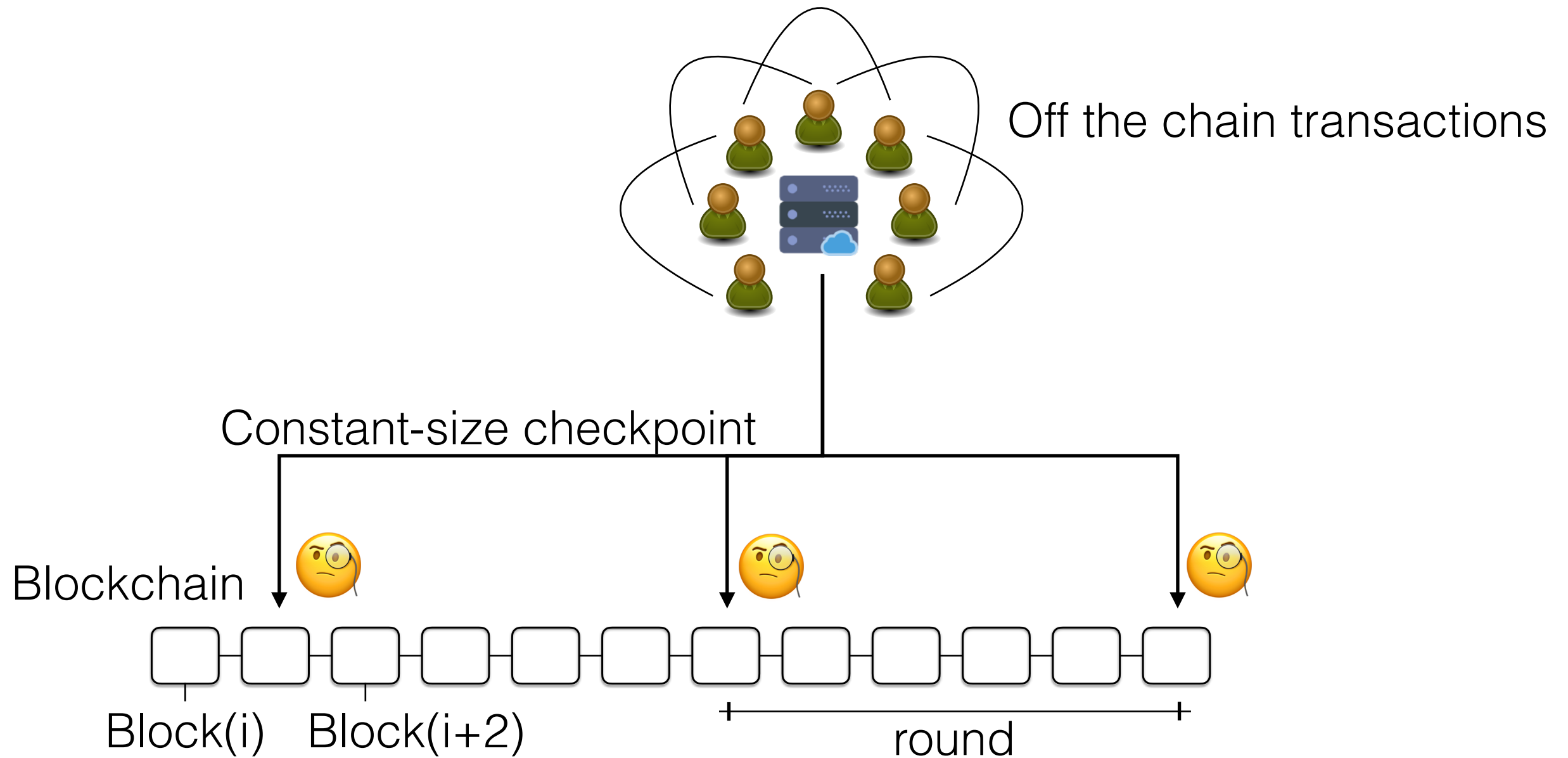
Without Collateral —> Eventual Finality
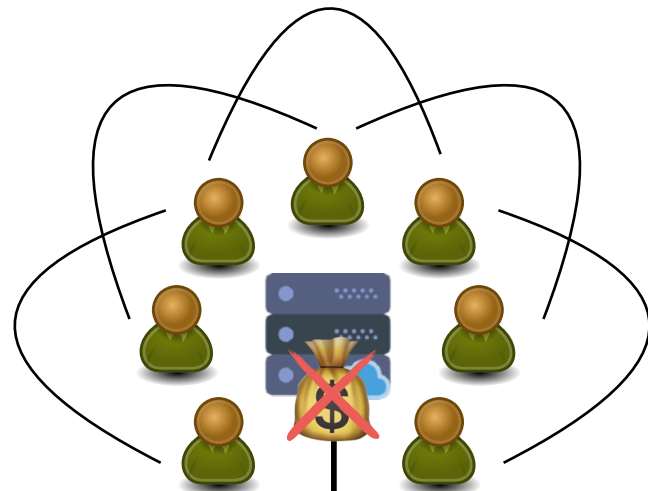
No collateral by operator

Recipient should wait..

eventual finality

Blockchain

Block(i)   Block(i+2)

Off the chain transactions
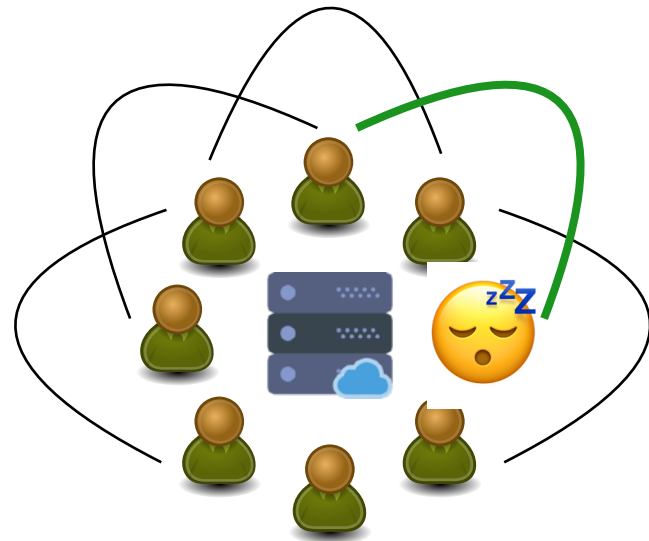
Like on-chain transactions..

With collateral —> Instant finality

insurance period

Blockchain

Block(i)   Block(i+2)
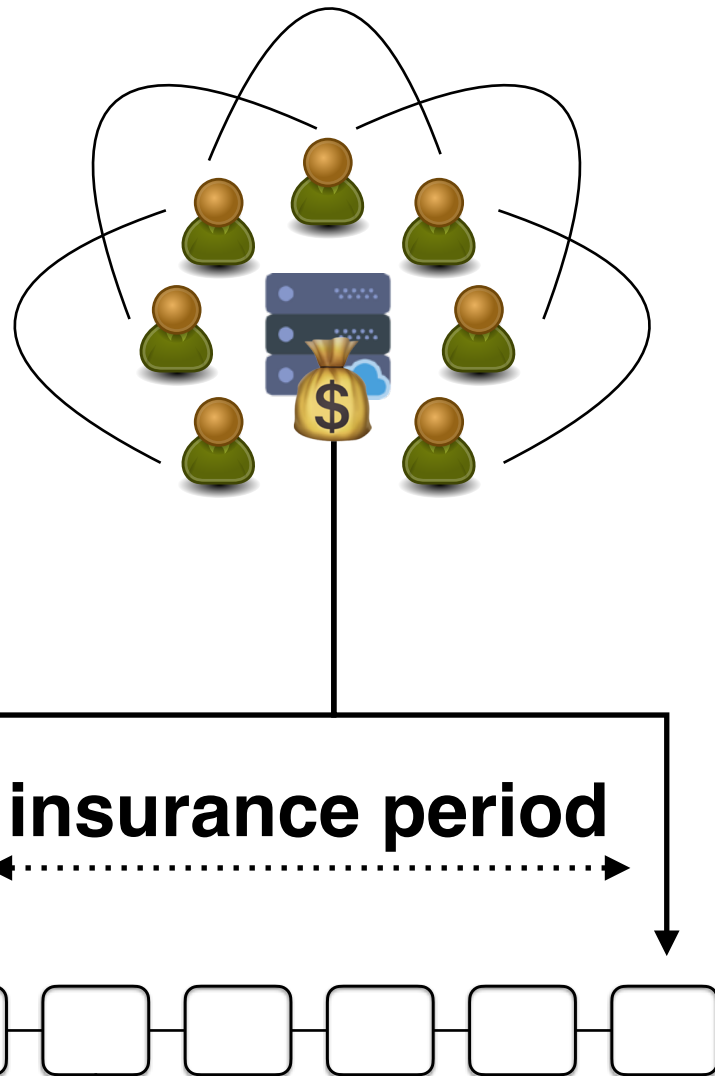
💰 Insurance pool

🔁 Collateral re-usable each round

💫 TX can be accepted instantly

🥳 Collateral allocation O(1) for all users
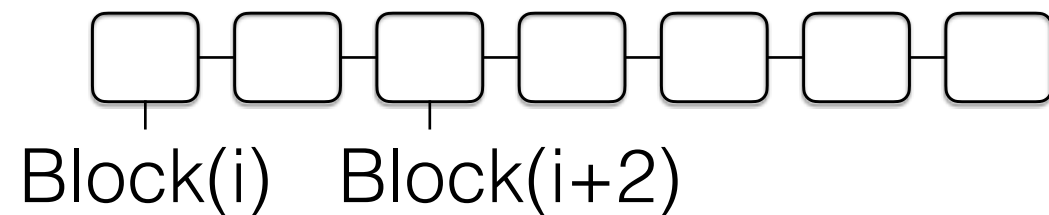
Join without on-chain Transaction

I wanna join!

Welcome!

✦ Instant 🚀

✦ CO$_2$ friendly (Zero gas costs)

Wait.. a centralized Operator

..but untrusted and non-custodial!

Cannot
- ✦ steal coins
- ✦ double spend coins
- ✦ mint new coins
  (if users follow the protocol..)