

https://github.com/yahgwai/devcon-workshop

Check out the Prerequisites section, and try to get them installed

Wifi: DevconWorkshop
Password: buildit22



Demystifying L2 Transactions

Chris Buckland
Developer, Offchain Labs

@wahgwai

Workshop layout

Using Arbitrum as an example, we'll explore how L2 transactions work and how they're different from L1 transactions

- Introduction to optimistic rollups (5 mins)
 - What a rollup is, and overview of how it works
 - The L2 transaction lifecycle
 - How L2 transactions consume gas
- Workshop (45 mins)
 - Send a transaction and explore the gas it consumes
 - Decode and inspect the batch containing that transaction



Rollup = sidechain + validating bridge

SoK: Validating Bridges as a Scaling Solution for Blockchains

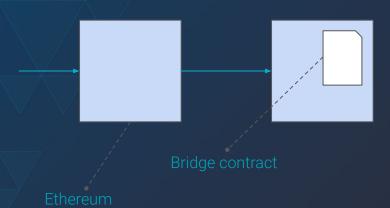
Patrick McCorry¹, Chris Buckland¹, Bennet Yee², Dawn Song²

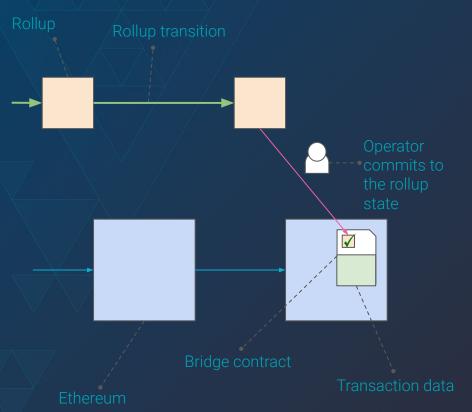
Rollup

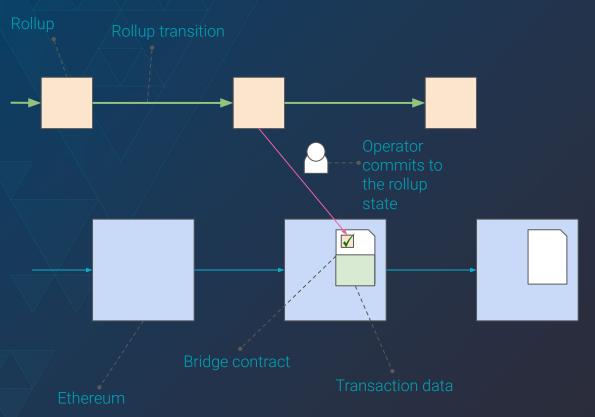


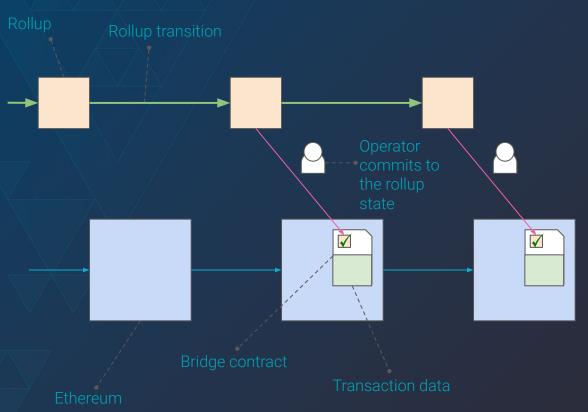


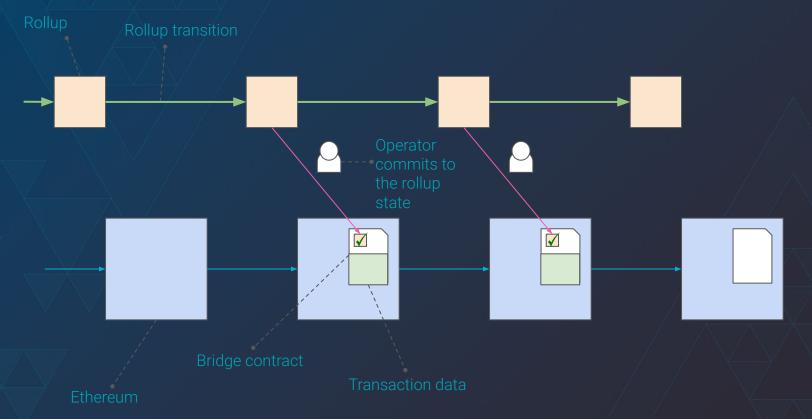


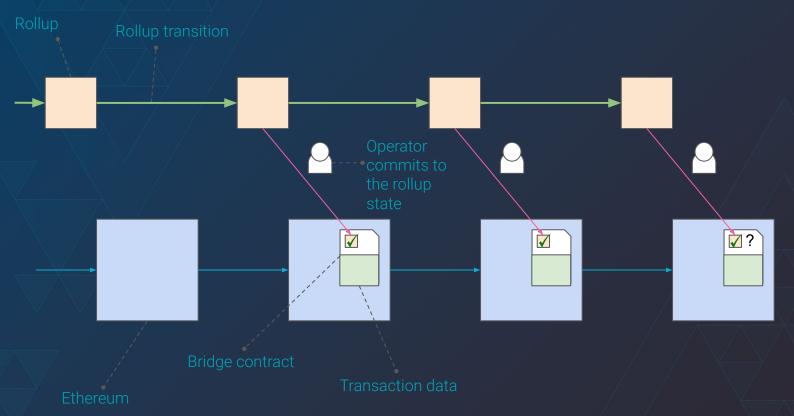


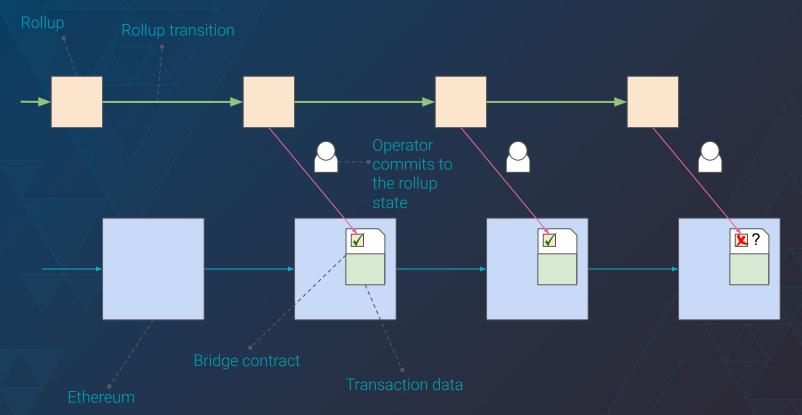




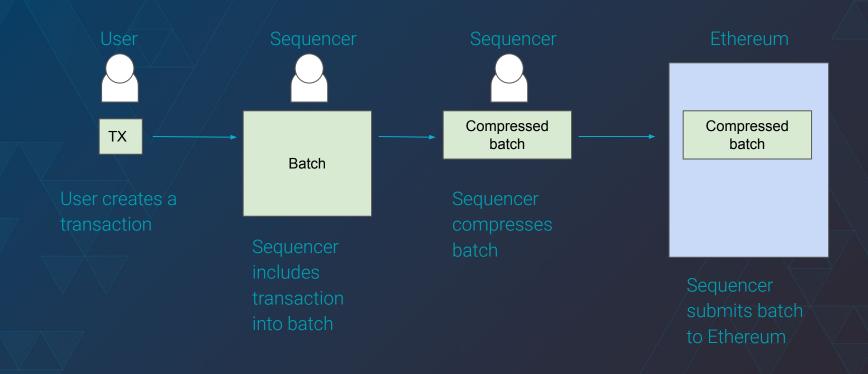








Transaction submission lifecycle



L1 and L2 gas

Transactions consume both L1 and L2 gas - users need to pay for both

L1 gas

- Used to pay for batch submission
- Tx data is submitted to L1, but transaction is not executed there
- Tx data is stored in L1 call data
- User needs to pay call data costsfor each byte of tx data

L2 gas

- The same units as Ethereum gas
- Gas price is the L2 gas price



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Chris Buckland

Developer, Offchain Labs cbuckland@offchainlabs.com

