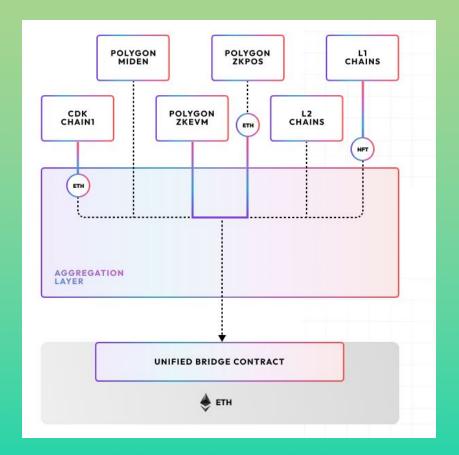
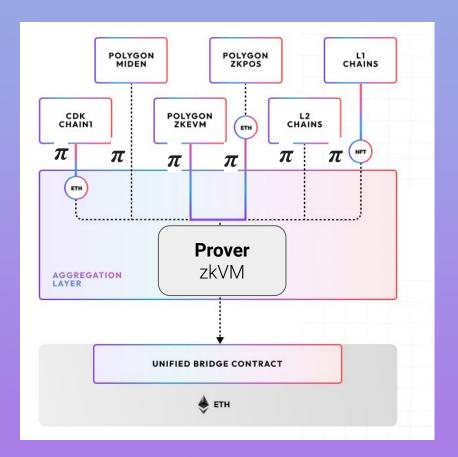




The AggLayer connects sovereign chains together, unifying liquidity, users, and state, but with the feel of a single chain. A multichain web that is better for UX, better for network effects, and better for security.







The solution is to architect the Aggregation Layer in a way that assumes that every prover can be unsound. The Pessimistic Proof guarantees that even if a prover for a particular chain is unsound, that prover cannot drain more funds than are currently deposited on that chain. In this way, a soundness issue cannot infect the rest of the ecosystem.

## Pessimistic proof computation

## Leafs, exit roots, and Merkle trees

Local balance tree



- originNetwork
- tokenAddressbalance

Local exit tree



- bridge exits

Nullifier tree



- Nullified bridges

## **Proof computation**

- 1. Apply bridge exits to Old LET -> new LET
- 2. Apply bridge exits and imported bridge exits to old LBT -> new LBT
- 3. Check nullifiers
- 4. Check no negative balance in new LBT

