

Ethereum Proof of Stake Architecture

Consensus Layer (Beacon Chain)

Validators

~1M active

Slots

12 sec each

Epochs

32 slots

Finality

2 epochs



Engine API

Execution Layer (EVM)

Transactions

User actions

Smart Contracts

DApps logic

State

Account balances

Gas

Fee market

Block Production Timeline

Slot start

0s

Attestations

4s

Block propagate

8s

Next slot

12s