

Ethereum Events & Logs

Smart Contract

```
emit Transfer(  
  from, to, amount  
);
```



Log Entry

topics[0]: Event sig hash
topics[1-3]: Indexed params
data: Non-indexed params

(Stored in tx receipt)



Listeners

DApps
Indexers
Analytics

(The Graph)

Why Use Events?

Cheap storage:

~375 gas/byte vs 20K/slot

Searchable:

Indexed topics for filtering

Off-chain access:

DApps can subscribe

Audit trail:

Permanent record of activity

Common Events: Transfer, Approval, Swap, Mint, Burn