

TOP Network

A decentralized open communication network



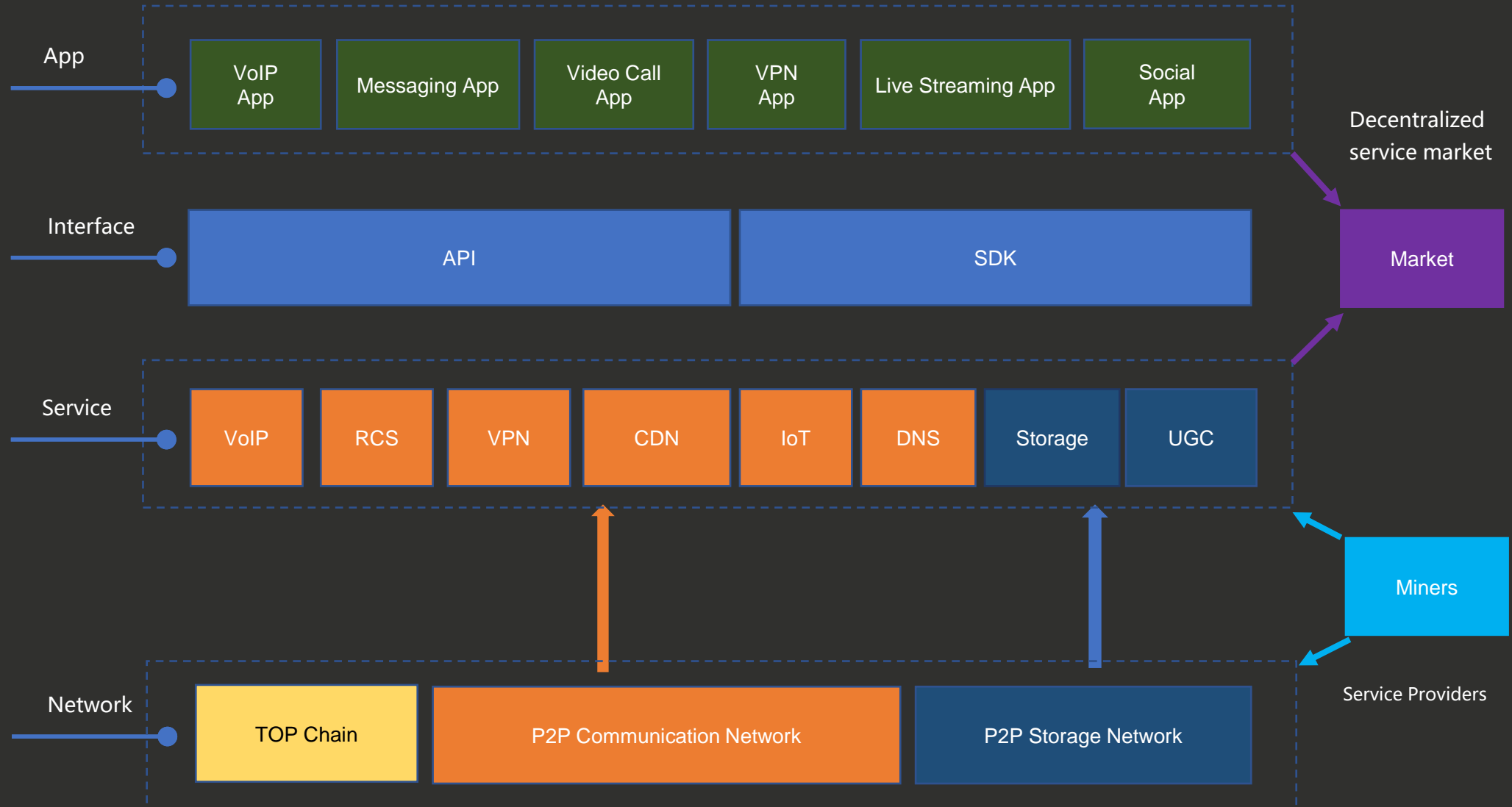
OP Network

A decentralized open communication network that provides messaging, calling, VPN, streaming, CDN, IoT data sharing, storage and other cloud communication services.

Powered by Blockchain Technology



**Secure, Private, Unstoppable,
Censorship-Resistant**



By providing full-stack cloud communication services, TOP can save developers over 60% of cost compared to centralized networks. TOP is built on standard communication protocols so all Dapps are interoperable. Communication through TOP is encrypted and data belongs to users.

1 Low-cost Services

- Messaging
- Voice & Video
- VoIP
- VPN
- Streaming & CDN
- Storage & UGC
- IoT Data Sharing



2 Privacy and Security

User data is stored on blockchain.
No data breach and leak.
End-to-end encryption enables secure communications.
No censorship.



3 Interoperable

RCS international communication standard

All communications apps on TOP can interoperate with each other



Use Cases & Apps



VPN



PSTN
VoIP Call



Video
Call



Storage & UGC

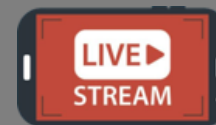
Any Communication Apps
&
Any Apps with
Communication Features



CDN



Messaging Apps



Live Streaming

BitVPN

A decentralized VPN Service



The first Dapp on TOP Network

Benefits of Building Apps on TOP Network

Build Communication Apps	On TOP Network	In-house Development
Development	Utilize TOP SDK or API Example: a few lines of code to build a messaging app	Develop communication stacks Develop backend communication server software Develop audio/video processors
Deployment	Do not need to deploy a network	Deploy servers and lease bandwidth
Network Operation	No network operation	Dedicated employees to manage network
Cost	Save over 60% of costs	Human cost Equipment cost Bandwidth cost
Development Cycle	A few weeks	Over one year
Tokenization of Apps	Yes	No

Key Technologies

1

QoS

High Quality
Communication
Services

2

Security

Secure and Private
Communication

3

Billing

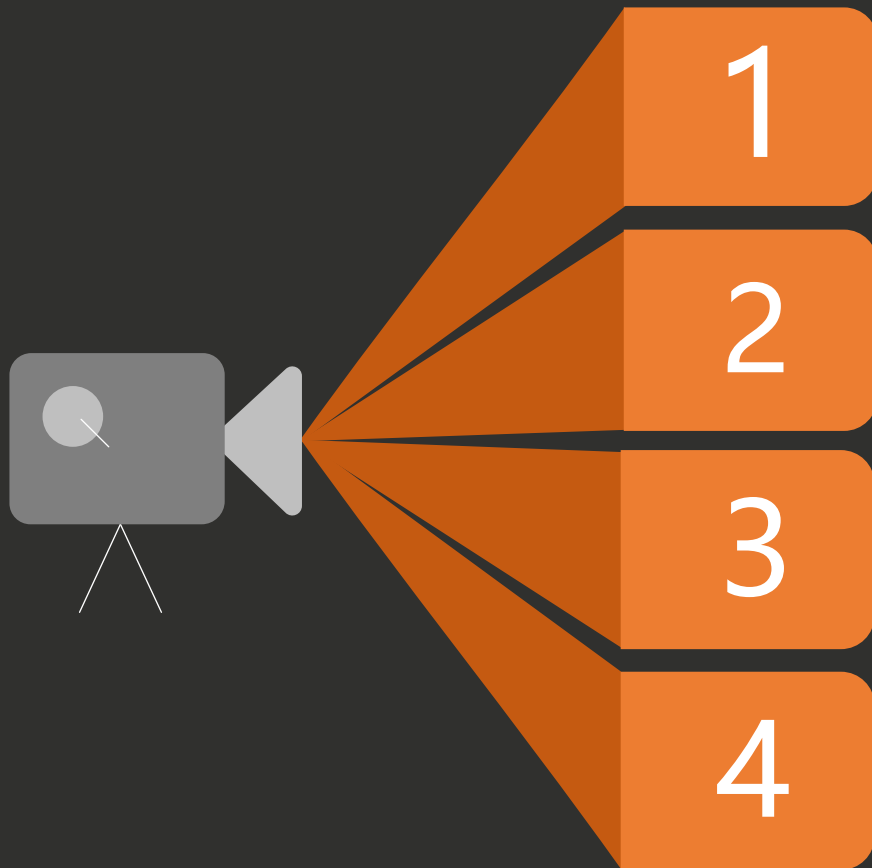
Accurate and Realtime
Billing Information

4

Ledger

Settle Millions of
Transactions on Blockchain

On a Decentralized and Trustless Network



Distributed Controller

Abstracted view of the network

2

Smart Routing

Intelligently search the best routing path between any clients

3

Proof of Capacity

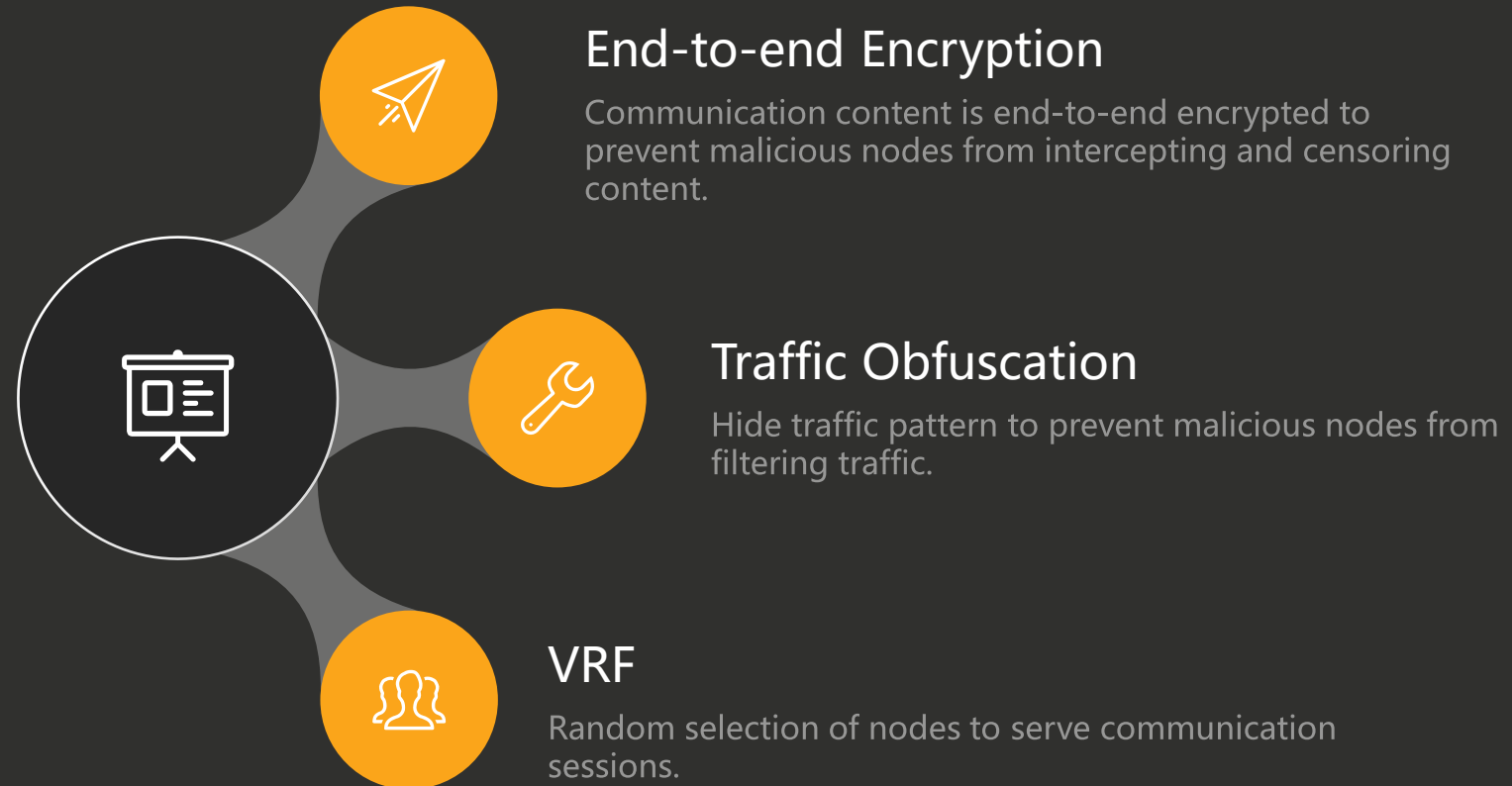
Decentralized verification of service capacity of each node

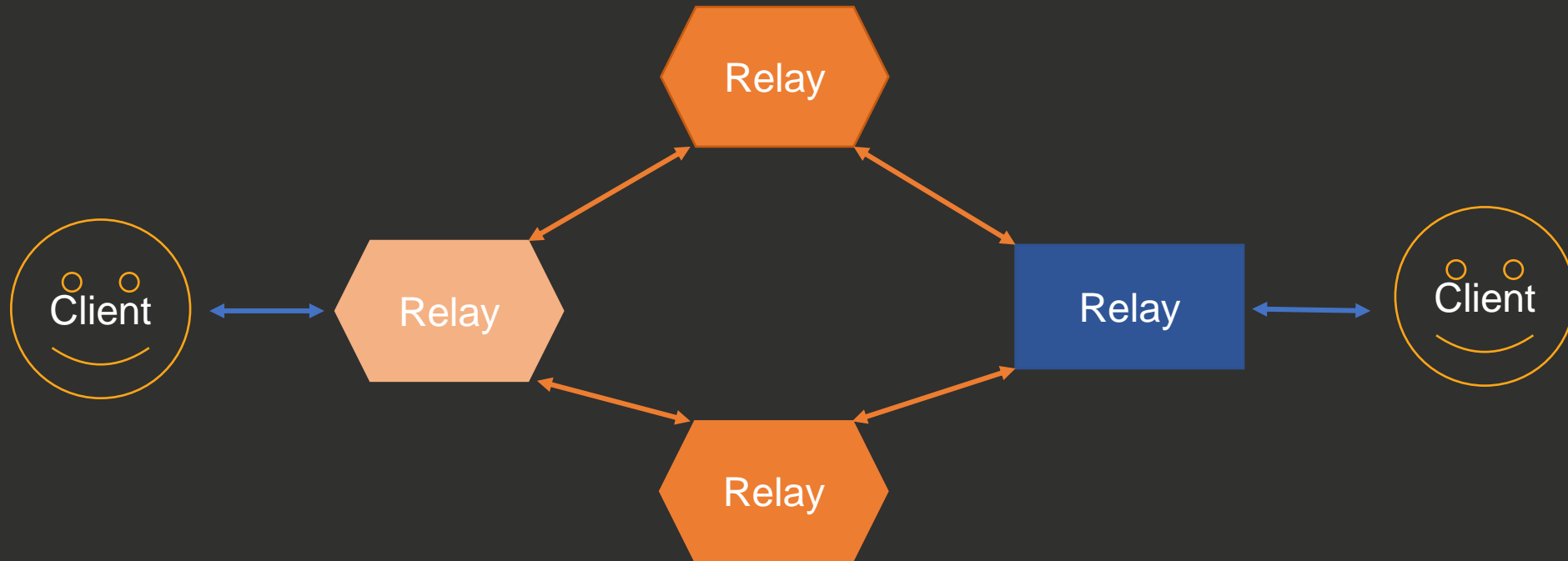
4

Proof of Quality

Consensus of service quality of each node

**Prevent Attacking
From Malicious Nodes**





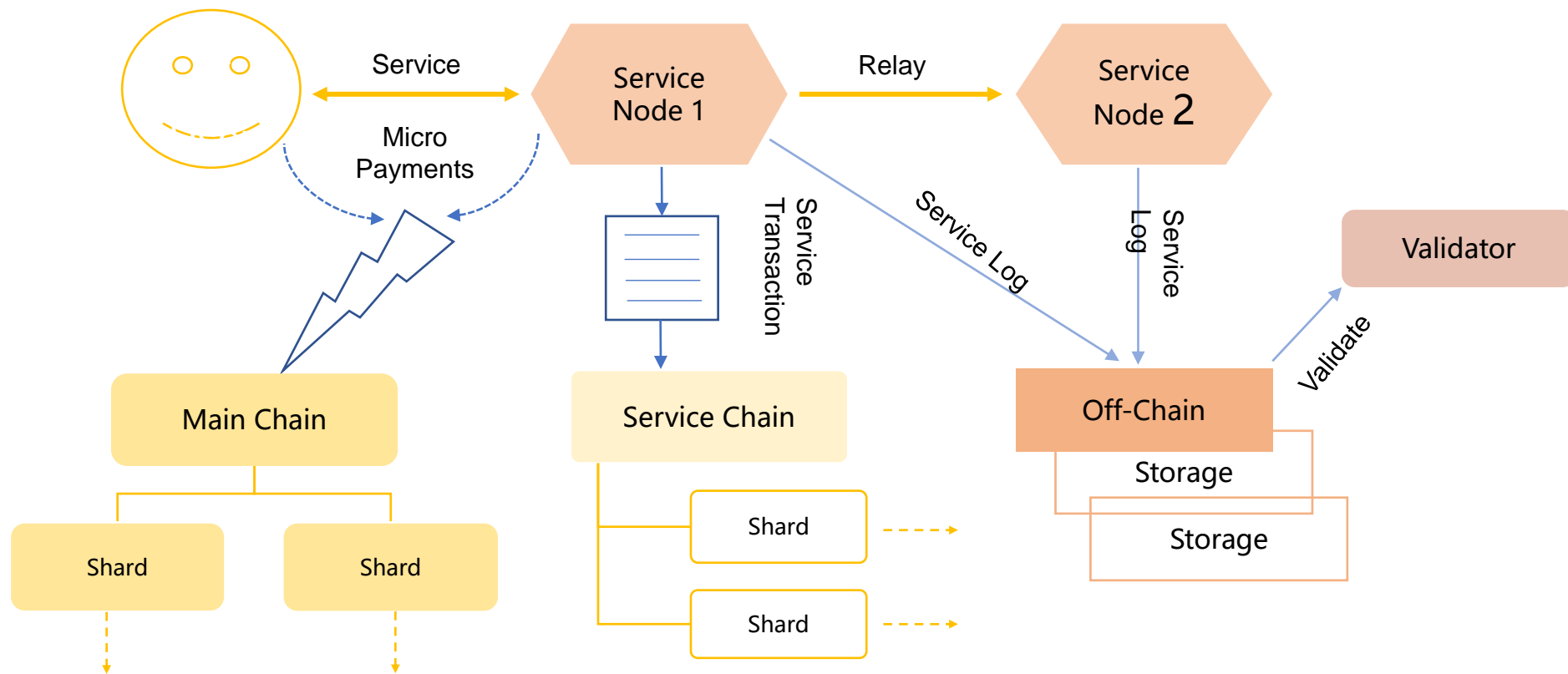
Proof of Service consensus mechanism accurately logs usage information.

Payment Settlement On a Decentralized and Trustless Network

Payment settlement on today's blockchains are super slow and expensive.

Bitcoin	Ethereum	TOP Network
TPS (Transaction Per Second) 4	TPS (Transaction Per Second) 15	?
Confirmation Latency Up to 10 minutes	Confirmation Latency Up to 1 minute	?
Fee \$0.1 USD	Fee \$0.005 USD	?

Communication services generate huge volume of transactions. TOP Network is also a high performance blockchain platform that can settle **millions of transactions every second (million TPS) and near zero fee.**



► **Multi-Chain Architecture**

- Separate settlement from service chains
- One service chain for one TOP service
- Service chain PoB, PoSt; Main Chain: PBFT-DPoS

► **Horizontal Scale**

- Accounts are organized into zones
- Each zone has multiple shards. 100 x Scale Out.
- Intelligent routing between shards

► **Layered Ledgers**

- Save detailed service logs into decentralized storage
- Service transactions are booked on service chains
- Payment is settled on the main chain

TOP Network

Public Infrastructure for Communication Applications



Cloud
Computing



IPFS

Decentralized
Storage
Network



TOP

Decentralized
Communication
Network

TOP Network



Telegram
t.me/topnetwork_top



WeChat

www.topnetwork.org