





EOS BLOCKCHAIN SWITZERLAND

www.eosblockchainswitzerland.ch

HOME

EVENTS / MEETUPS





Switzerland EOS Education & Development

EOS is an Exponential Operating System delivering a reliable Smart Contract Platform for high-grade Business decentralized applications

Education

Development















Meetup.com/EOS-BLOCKCHAIN-SWITZERLAND



t.me/eosswissvalley







Meetup.com/EOS-Nation-Lausanne



t.me/eosnationLausanne





Meetup.com/EOS-Nation-Geneva



t.me/eosnationgeneva



twitter.com/EOS_Nation



medium.com/@eosnationbp



facebook.com/groups/EOSNation



github.com/EOS-Nation



t.me/eosnation





Block Producer



Maintains and secures **EOSIO**chains in the EOS Ecosystem



Worldwide Team



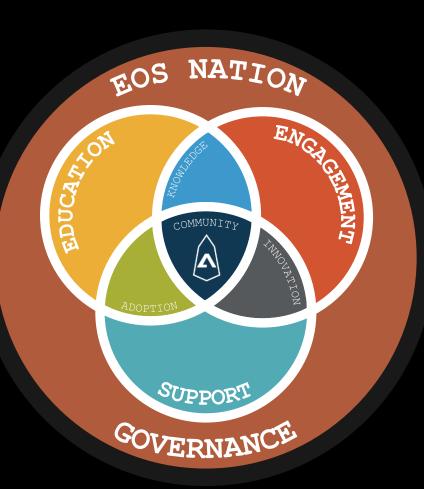
Working towards EOS adoption



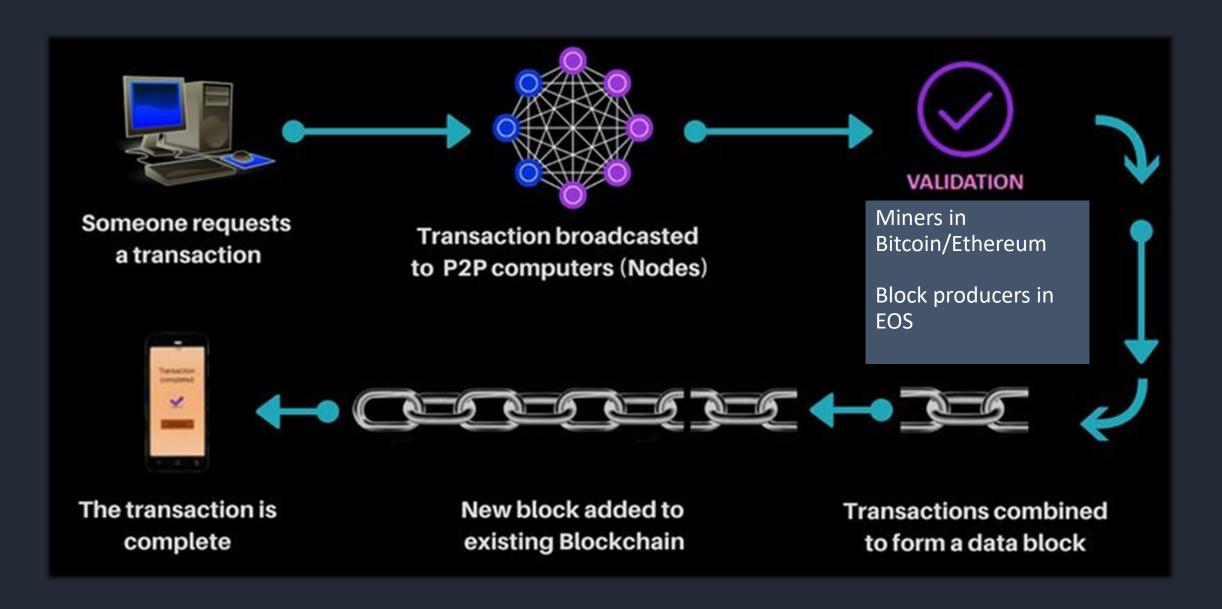
- Creating and sharing content
- Sponsoring meetups, hackathons and conferences
- + Community engagement
- + Strong and reliable block production infrastructure



7 Founders, 4 Staff, 3 Interns and 16 Ambassadors



How a transaction is flowing in <u>a</u> Blockchain



Blockchain Characteristics

- Verification of transactions without having to be dependent on third-parties (Desintermediation, Trustless)
- Data cannot be altered or deleted (Immutability)
- Uses protected cryptography to secure the data ledgers (Security)
- The transactions that take place are transparent (Transparency)
- Transactions stored in the blocks are distributed to all computers participating in the chain (Decentralization)
- It removes the risk of duplicate entry or fraud (Double spending)
- Attacks are difficult, because the nodes are distributed among different infrastructures/location and jurisdiction. There is no single point of failure (Resiliency)
- With smart contracts, conditions can pre-set on the blockchain (Self executable contracts)

Consensus Algorithms

Used to confirm that transactions are valid on <u>a</u> Blockchain.

1st & 2nd generation: Proof of Work (PoW)

Requires the solution of a mathematical puzzle. All the nodes have to compete.

3rd generation: Delegated Proof of Stake (DPoS)

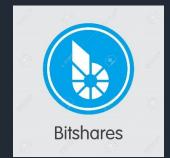
Users of a EOSIO Blockchain delegates their decision-making power to **elected** block producers (**nodes**).

By Dan Larimer, CTO Block.one – Virginia Blaksburg



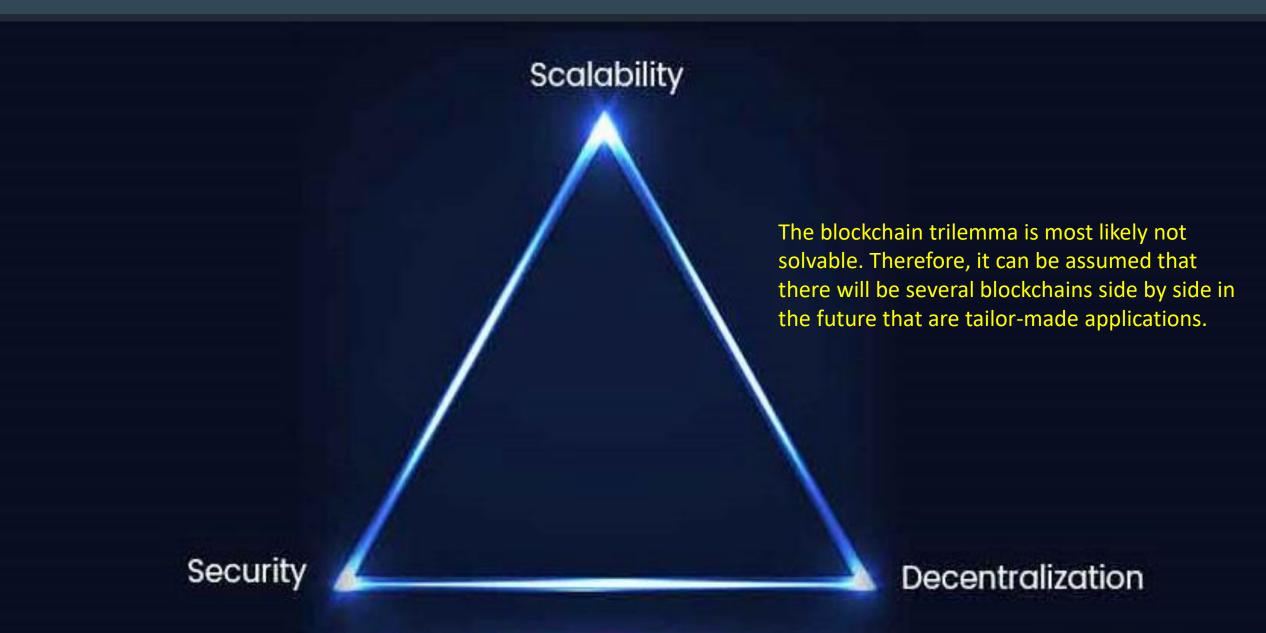








Blockchain Trilemma



dApp <> Smart Contracts

dApp	Smart Contracts
Desktop application (client-server, WEB UI) Mobile application	Connect a dApp with an EOSIO chain
Complete computer program (Business logic, the use-case to solve)	Small component of dApp program

What is EOS?

 Scalable infrastructure that supports industrial-scale decentralized applications (dApps)

Open-source and it was launched by the community

 "EOS MainNet" is one of many EOSIO networks being run by a decentralized group of Block Producers from all over the world

 Owning EOS tokens guarantees access to resources, like CPU (computational capacity), NET (bandwidth) and RAM (memory)



The EOS token is defined as a Utility Token

EOS features

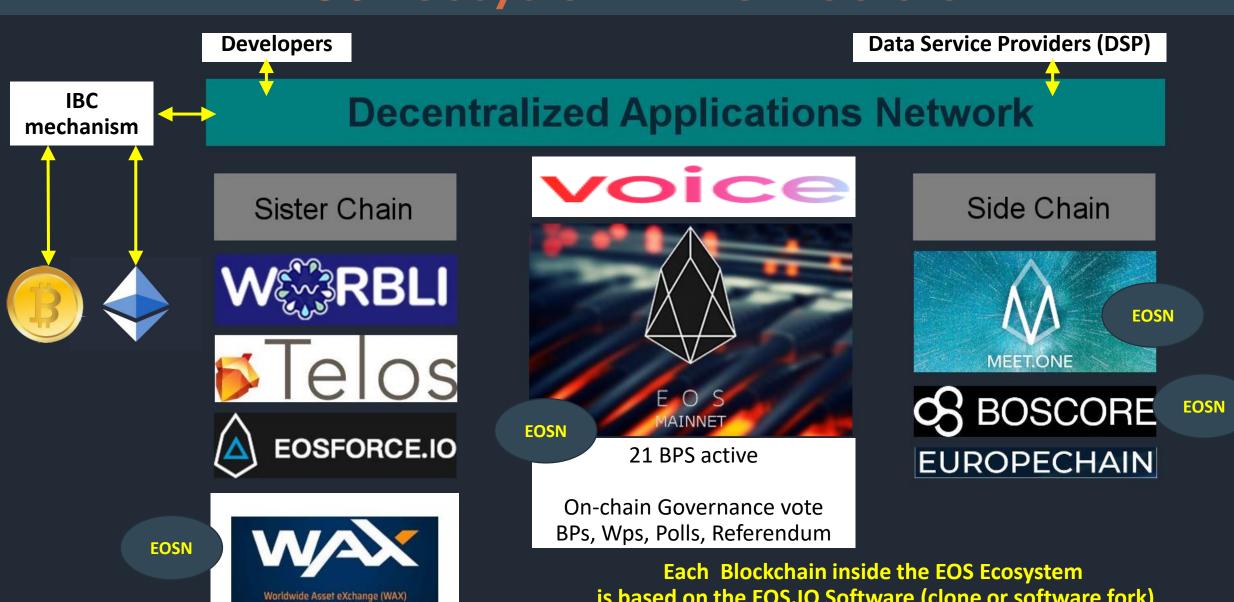
- For the users: operations within the EOS Ecosystem are free of costs ← Watch video
 (Smart Contract's actions)
- For the developers: flexible Smart Contract (Mutability, Immutability)
 dApp Network Middleware Layer | Inter-Blockchain communication(IBC)
 programming languages interoperability with Web Assembly (EOS VM)

- High number of transactions (about 4'000 TPS on the EOS MainNet)
- Governance on-chain vote (BPs, Polls, WPS, Referendum)
- Carbon neutral (Energy efficient)
- Big worldwide representation (Decentralized community)

Each EOSIO based chain improves the EOS Ecosystem and helps breakdown the blockchain trilemma.

EOS is a complex Ecosystem that is constantly improving and upgrading its various components.

EOS Ecosystem - Architecture



is based on the EOS.IO Software (clone or software fork)

- EOSIO version 1.8 UPGRADE 23th September is required to launch the Voice social network and other planned decentralized applications.
- In addition, after the upgrade, a series of additional functions for developers will appear in EOS smart contracts.
- RAM resource management mechanisms will be optimized and users will receive additional protection against fraudulent activities.

DAPP NETWORK SECOND SCALING LAYER SOLUTION

- **EOSIO chains introduce** staking as means of accessing network resources such as CPU, NET, RAM
- Instead of incurring a recurring monthly cost in order to access these service packages, developers purchase DAPP tokens up front
- Developers stake the DAPP tokens for the package of their choice (One to many DSP)
- DSPs operate in a completely free market and have full autonomy when designing service packages, deciding on specifications such as the package duration, quota of available actions, and minimum staking amount, among other things.
- The DAPP Network expands the capabilities of staking
- Turning it into a key that unlocks a range of service packages provided by DSPs
- As the staking economy continues to progress, staking for resources and services will become a dominant sub-sector with the potential to unlock a whole new era of dApp scalability.

- EOS Nation is a high-grade security DSP
- EOS Nation deploys infrastructure across two separate legal jurisdictions, accessing different power grids and different internet backbones to ensure maximum redundancy and maximum uptime.
- Since the EOS MainNet launch back in June 2018, EOS Nation has proven itself to be a reliable EOSIO Block Producer, having produced over 500,000 blocks with 99.991% round availability.



Ethereum Challengers:

EOS

Delegated Proof of Stake. ERC20 token swapped for native token at launch.



GOVERNANCE

DEVELOPMENT COMPLEXITY

TIMELINE

GENERALIZED FEATURES (identity, authentication, file storage, etc.)

ADOPTABILITY

MARKET POSITION



ETHEREUM

~15 transactions/second; PoS & sharding will improve this

Similar to BTC, with additions (e.g. Ethereum Foundation)

Solidity language; fixes & updates hard to implement

Scalability improvements may take years

Intentionally avoided

Not grandma-friendly, losing keys is catastrophic, fees

First mover advantage. Many developers and \$\$ behind it



E O S

1000s of transactions/second at launch. Millions w/ parallelization

DPoS. Producers elected by token holders & subject to constitution

Many languages supported via WASM. Fixes and updates easy

Release Candidate TestNet live, MainNet launching June 2018

Robust permissions, user identity, storage, assorted other features

Human-readable addresses, no fees, key recovery, anti-hacking

Billions of dollars, VC backing, Everipedia and more apps

Source: bitgenste.in/eos



Some applications inside the EOS Ecosystem





Lynx mobile Wallet – Mobile and Desktop Version

LYNX Wallet | dApps portal | News







Wallet | Secure messaging



Everipedia

The decentralized blockchain Encyclopedia



Block explorer

The most powerful Block Explorer with MSIG support

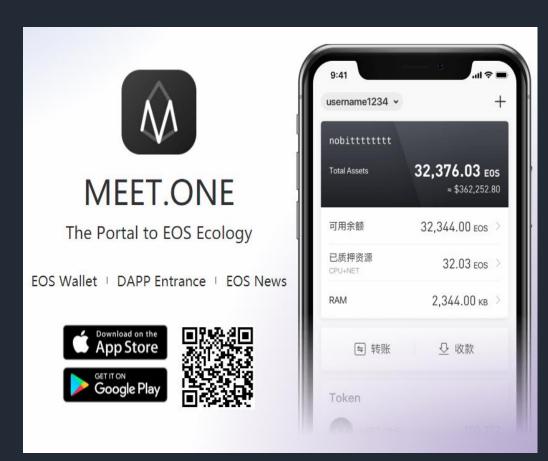


Scatter

Secure user identity to transact on the EOS blockchain

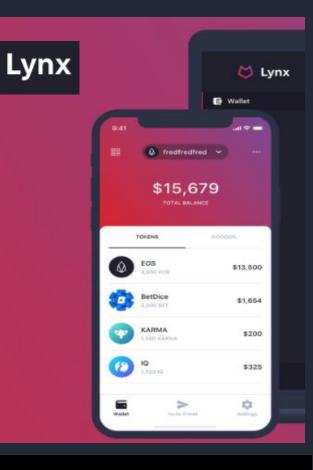
Wallet Application

everyday consumer.





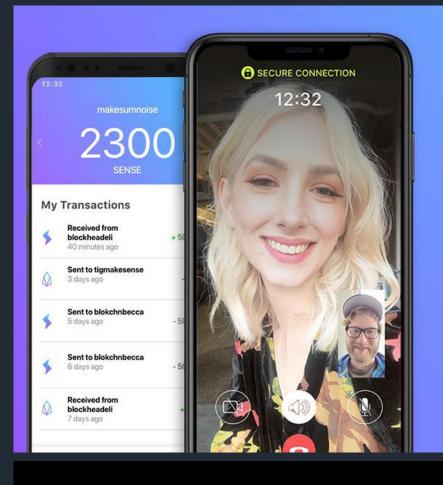
Download For Desktop



Features:

- 1. Transfer/Receive EOS tokens by using the wallet
- 2. Vote for block producers (with staked EOS)
- 3. Access dApps
- 4. Read news

Sense.chat – Secure Messaging





What we will discover:

- 1. Transfer **Sense** and **EOS** tokens
- 2. Peer-to-peer secure messaging



ERC-20 to EOS-21 Teleport Protocol Works, Move Tokens From Ethereum to EOS

Secure transactions on the EOS blockchain

Block explorer



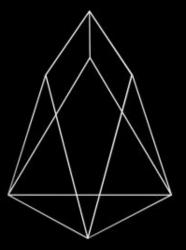
This schema using Scatter to secure user identity is also valid for other EOS applications doing transactions via Internet.



User Secure Identity







Because Scatter is a desktop application it makes phishing almost impossible.

https://www.publish0x.com/eosmastering/eosmastering-talks-to-nsjamesscatter-xxzdy

Everipedia

Wikipedia



Features

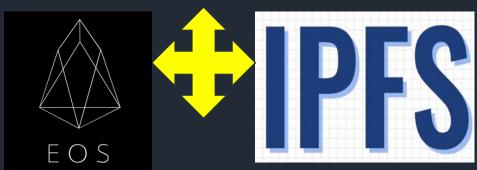
- Central Servers
- No blockchain
- No model Learn + Earn

IPFS SIMPLY EXPLAINED ← Watch video

Everipedia



The decentralized blockchain encyclopedia



Features

- Online encyclopedia
- EOS + IPFS
- Over 6 million articles
- Including all articles from the English Wikipedia



EOSIO Smart Contract is flexible

Easy Upgrades and Bug Recovery

When all else fails and an "unstoppable smart contract" acts in an unpredictable manner

a blockchain using the EOSIO software allows the block producers to replace the account's smart contract code without hard forking the entire blockchain.

This replacement of the code requires a 15/21 vote of elected block producers.

EOSIO software - https://developers.eos.io



Social networks







Meetup groups





