

2018. June

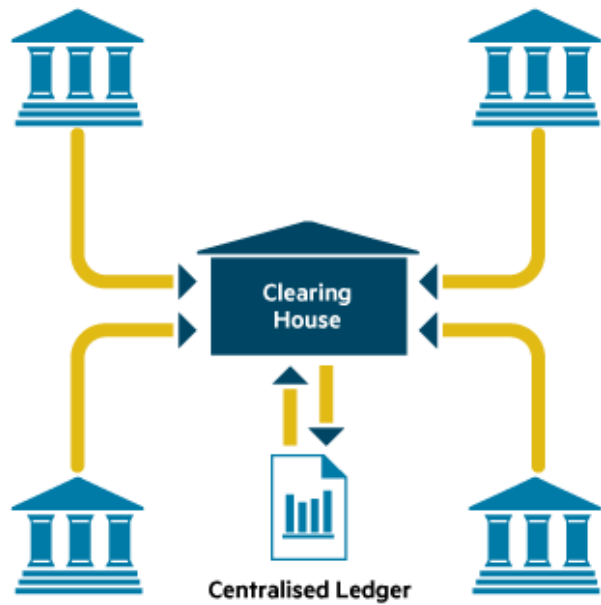
Building A
Compliance Ready
Blockchain

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2018. June

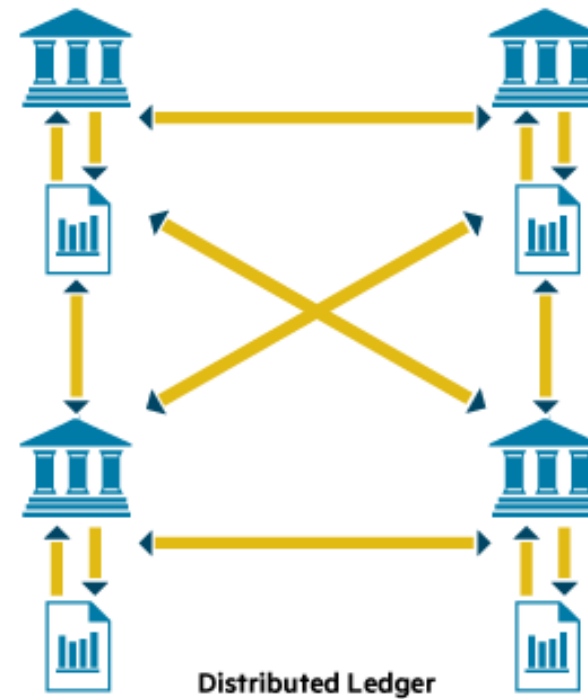




Centralized Database

Trusted third party conducts settlement, clearing and centrally-assurance.

This third party technology and accountability will hugely impact the Ledger's accountability



Blockchain

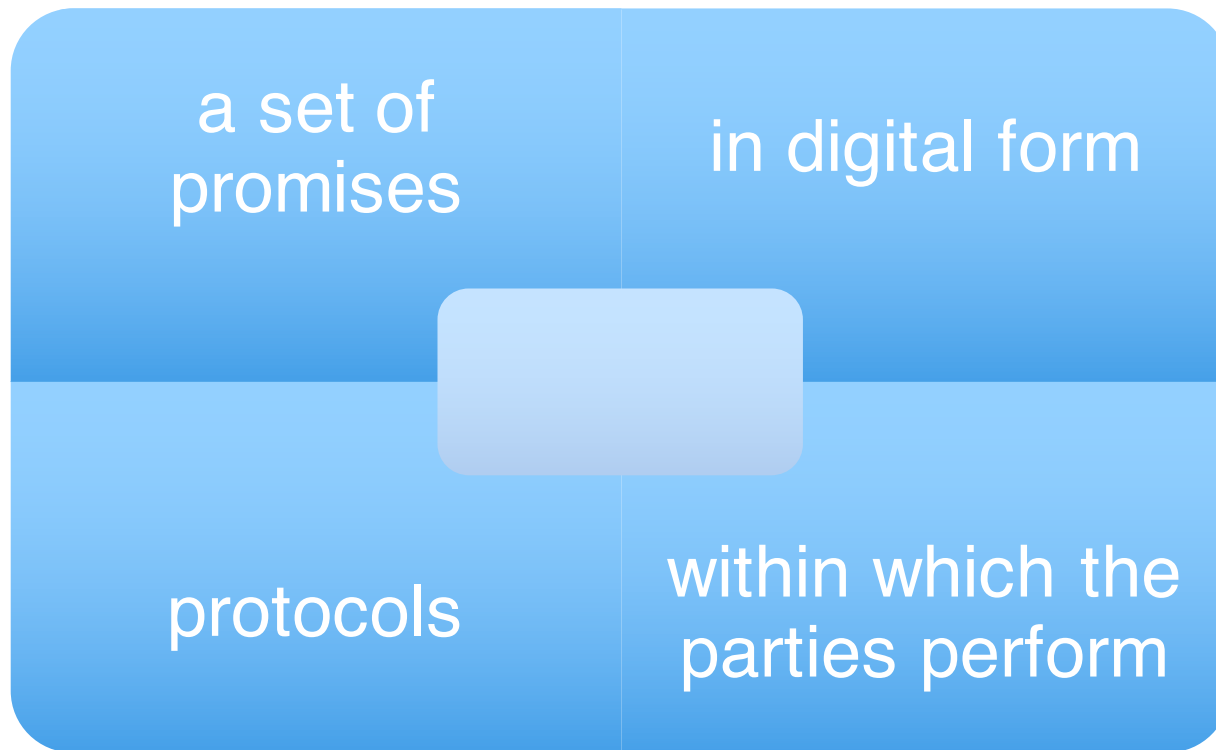
Or Distributed Ledger Technology

Third party is no longer needed, each party sync ledger on blockchain and can not alter confirmed records

SHA256

<p>When , in the Course of human events it becomes necessary for one people to dissolve the political bands which have connected them with another and to assume among the powers of the earth</p>	<p>278BB9E7D9F7B7B6E3D138FE208 A274E60A889BDD9454BA93D1C9 24A71775920</p>
<p>When in the Course of human events it becomes necessary for one people to dissolve the political bands which have connected them with another and to assume among the powers of the earth</p>	<p>44BECBD77BD13D881713E98D00 A50D4FF0996D357A77BB6F5E1C AEBE59953540</p>

In 1996, Nick Szabo described a **smart contract** as “a set of promises, specified in digital form, including protocols within which the parties perform on these promises.



In a nutshell, Smart Contract

- May involve data transfer, data ownership, credit, liability, not just payments
- Could be used in any cases, not necessarily a legal contract

Reference: digitalchamber.org

NEO is up and running since 2016 Oct

2018.June

- **NeoContract** can create a smart contract call tree through static analysis before running a smart contract. Through the deterministic call tree, the NEO node can dynamically fragment the smart contract to achieve theoretically unlimited expansion, which overcomes the "jamming effect" caused by the static fragmentation of other block chain systems.
- **NeoVM** is a lightweight, general-purpose virtual machine whose architecture is very close to the JVM and .NET Runtime, similar to a virtual CPU that reads and executes instructions in the contract in sequence, performs process control based on the functionality of the instruction operations, logic operations and so on.



Vision: Smart Economy

2018. June



- **Digitized Economy** - currencies, assets, identities, IoTs
- **Programmable Economy** – transparent & objective smart contracts
- **Trustless Economy** – trustless and no middleman



2018. June

NEO is not a cryptocurrency.

In NEO, there is no mining.



Open-sourced since May 2015

2018. June

neo-project / neo

Unwatch 410 Unstar 2,251 Fork 692

Code Issues 25 Pull requests 4 Wiki Insights

NEO Smart Economy

381 commits 2 branches 1 release 21 contributors MIT

Branch: master New pull request Create new file Upload files Find file Clone or download

Erik Zhang and erikzhang update dependency: Neo.VM v2.2.0 Latest commit cae8575 9 days ago

neo.UnitTests	Changed multiplication for Fixed8 (#208)	10 days ago
neo	update dependency: Neo.VM v2.2.0	9 days ago
.gitignore	coreclr (#19)	2 years ago
.travis.yml	upgrade to .NET Standard 2.0 and .NET Framework 4.7 (#102)	5 months ago
LICENSE	Initial commit	3 years ago
README.md	Added the requirement to have .Net Fx 4.7 DevPack installed to compil...	11 days ago
neo.sln	Core unit tests (#26)	9 months ago

README.md

- BFT style consensus
- Dual Token Model
- Smart Contract in C# / Java / Python / JS
- NeoX - Interoperability Protocol



Rebranding June 2017



2018. June



NEO DevCon 1 @SF Jan. 2018

2018. June



Where We Are Today: Online

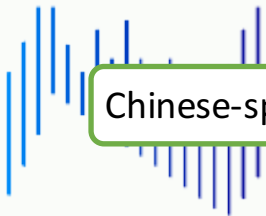
2018. June

CITY OF ZION

Home of the Open-source Global NEO Developer Community

We are an independent group of open source developers, designers and translators

English-speaking developers community



Chinese-speaking developers community

NEEL
NEW CONDLAB

RED4SEC

NEOResearch

NEO Docs

docs.neo.org 是 NEO 全新的技术文档体验

NEO 全部的技术文档都在这里, 还有还有

点击 [中文](#) 开始阅读中文技术文档。

See the [English](#) documentation.

Ver documentaci3n en [Espa1ol](#).

日本語版ドキュメントを参照して下さい

[한국어](#) 문서를 참조하시길 바랍니다.

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Lees de [Nederlandse](#) documentatie.

Acesse a documenta3o em portugu4s (brasileiro) [aqui](#).

Voir la documentation en [Fran7ais](#).

Vedi la documentazione [Italiana](#).



NEO
smart economy





















NEO
86,114 readers
停止訂閱

NEO
smart economy

Where We Are: dApps

2018. June

<https://neo.org/dapps>

 <p>NEX by The NEX Team</p> <p>NEX combines the NEO blockchain with an off-chain matching engine to enable much faster and more complex trades than existing decentralized</p> <p>Website Whitepaper Twitter</p>	 <p>Moonlight by The Moonlight Team</p> <p>Moonlight is a distributed workforce and analytical project management platform featuring a global public ledger of contributor work experience and a</p> <p>Website</p>	 <p>Red Pulse by Red Pulse</p> <p>Red Pulse Tokens (RPX) are NEO tokens issued by Red Pulse, an event-driven research firm covering market events impacting Chinese companies, sectors and</p> <p>Website Reddit</p>	 <p>AdEx by adex.network</p> <p>AdEx is a decentralized ad exchange built on the blockchain and smart contracts. The core feature of AdEx will be the so-called AdEx User Profile - a</p> <p>Website Medium Facebook</p>	 <p>Zeepin by Zeepin</p> <p>The Distributed Creative New Economy. Zeepin, a decentralized innovation community, is dedicated to promoting highly efficient</p> <p>Website Telegram Twitter</p>	 <p>Qlink by Allen Li</p> <p>Qlink, developed by Qlink Foundation in Singapore, adopts the blockchain technology and creates a decentralized mobile network for D2D and WiFi sharing</p> <p>Medium Page AMA summary</p>	<p>Neo Smart IoT by hal0x2328, phetter</p> <p>Control IoT (Internet of Things) devices via Neo smart contracts (first device is an ESP8266).</p> <p>Website GitHub</p>	 <p>Imusify by DavidWalters123, geek96, Nikolaj-K, metachris</p> <p>Imusify is a free, blockchain based, incentivized and decentralized platform for music related digital content such as audio, video, anime, imanes and blogging where</p> <p>Website GitHub</p>	 <p>CHAIN LINE MVP by notatestuser</p> <p>Peer-to-peer courier platform. Couriers transport items to fulfill demands and earn courier fees.</p> <p>Website GitHub</p>
 <p>BlockAuth by revelt</p> <p>BlockAuth allows users to login (authenticate) to apps and websites by invoking a NEO smart contract from a NEO address tied to the user's account. It aims to</p> <p>Demo GitHub Whitepaper</p>	 <p>Phantasma by Relfos</p> <p>Phantasma is a platform where the users control their own content, instead of relying in third parties servers. The platform support any kind of transactions</p> <p>Demo Website GitHub</p>	<p>Neo Trade by birmas</p> <p>NeoTrade is a NEP5 trading platform. Inspired by Etherdelta, NeoTrade is a NEO based smart contract that allows users to deposit NEO, GAS or any other</p> <p>Website GitHub</p>	 <p>Turing Complete Smart Contract by Nikolaj-K</p> <p>A smart contract which interprets encoded classical Turing machines.</p> <p>Youtube GitHub</p>	 <p>KRYPTON.live by MediaServe</p> <p>KRYPTON is a Smart Contract and ecosystem to provide SIP registration on the NEO blockchain using a KRYPTON compatible SIP provider</p> <p>Youtube Demo GitHub</p>	 <p>Switcheo by RavenXce, henrychua, jackyeu</p> <p>Switcheo is a decentralised exchange built on NEO's blockchain. It supports trading of NEP-5 tokens and NEO system assets like GAS & NEO. It aims to</p> <p>Youtube Website GitHub</p>	<p>Trip Shares by xtolya</p> <p>Trip sharing with deposits. Travellers commit to a shared seat by depositing \$TRS NEP-5 tokens, which are used as insurance when the passenger cancels the trip.</p> <p>Website GitHub</p>	 <p>BlockSaver by mpetronic, morgan</p> <p>Saving smart contract, with interests and fines. You can define how long to lock NEO and GAS assets, the smart contract defines an interest rate, and the system</p> <p>GitHub</p>	<p>Lucky NEO by mmoravec, leorong, StefanDasbach, WesleyLeung, tammerabi</p> <p>Lucky NEO allows anyone to send their extra gas to a raffle contest. One winner will be chosen every two weeks and automatically paid out. Lucky NEO uses an admin</p>
<p>Neo Fund by nickazg</p> <p>Neo Fund is a decentralised crowdfunding platform, similar to Kickstarter. The basic function is to set a goal amount, and date limit. If the goal is reached the</p> <p>GitHub</p>	 <p>Neo Raffle by ambethia</p> <p>A smart contract that enables a raffle/lottery on the Neo blockchain. Send GAS, win GAS! This project also demonstrates a solid way to use random numbers in a</p> <p>Website GitHub</p>	<p>Nep Swap by block-shaman</p> <p>Protocol and smart contract for trading NEP-5 based assets. NepSwap is a protocol and smart contract for trading NEP-5 assets. This prototype idea is</p> <p>GitHub</p>	 <p>Smart Promise by SergeyAnkarenko, marlyonyia</p> <p>Smart Promise is an electronic journal of smart promises developed through Blockchain. User of such an environment receives a reward for each of his</p> <p>Youtube Website GitHub</p>	<p>Sunny dApp by JorritvandenBerg</p> <p>This dApp allows you to insure against bad weather conditions on a given day. If the relative sunshine duration on that day is lower than 50 percent, you get</p> <p>Website GitHub</p>	 <p>NNS NEO Name Service by NewEconLab(NEL)</p> <p>Distributed domain name service ending with .neo based on NEO blockchain</p> <p>Website GitHub</p>	 <p>THEKEY by THEKEY team</p> <p>THEKEY is a Decentralized Ecosystem of Identity Verification Tool Using National Big-data and Blockchain.</p> <p>THEKEYV Direct Team is now</p> <p>website GitHub telegram</p>	 <p>蓝鲸淘 OTCGO.CN 蓝鲸淘 by 串一科技</p> <p>蓝鲸淘智能资产去中心化管理平台。通过开源的区块链技术与管理合约规则，为用户提供点对点、无中介的数字资产流转服务。降低数字资产在流转过程中的佣金成本</p> <p>Website GitHub</p>	 <p>TRINITY by Trinity team</p> <p>Trinity is applicable to blockchain transfer of NEP-5 standard tokens. As a Neo-version lightning network, Trinity achieves real-time payment, low transaction fees</p> <p>website GitHub telegram</p>

Three Dimensions of Competition

2018.June



Why Compliance Is Important

- It eliminates regulatory uncertainty
- It reduces frauds, Ponzi schemes, manipulations, hacks...
- It brings mainstream financial institutions onboard
- It makes doing real business on-chain possible

**What is
Needed**

a non-anarchism mindset

To Be

digital identity – KYC/AML

Compliant

a compliance ready tech. stack

dBFT - delegated Byzantine Fault Tolerance

Block N-1

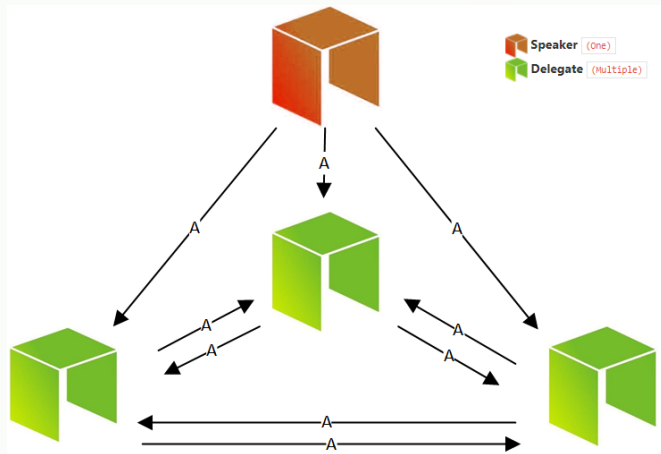
- Transfer TX
- Smart Contract TX
- Voting TX

Block N+1

- NEO holders vote in Consensus Nodes
- Consensus Nodes reach consensus with BFT

dBFT Consensus

2018.June



dBFT tolerates $< 1/3$ malicious Consensus Nodes

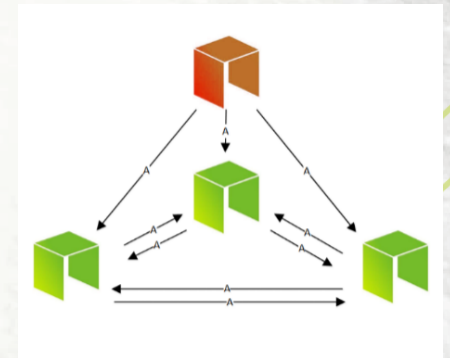
- **Fast & Final** : finality in seconds – no fork
- **Ininitely Scalable**: scales to infinite nodes
- **Eco-friendly**: no mining needed
- **Great Operability**: Identifiable delegates



Governance: Decentralization

2018. June

1. Consensus Nodes will be decentralized starting 2018
2. A campaign website will be put online
3. Major Organizations committed to run CN including:
 - **City of Zion:** The biggest NEO developers' community
 - **KPN:** The biggest Dutch telecommunications company
 - **Fenbushi Capital/Wanxiang Blockchain Lab:** The biggest blockchain VC from China



Two Programs Planned

2018. June

- Incubator Network
- Neo For Enterprise



2018. June

Thank you!

Email: zhaochen@neo.org

