

TO THE BLOCKCHAIN

BASED ON BITCOIN, BUILT FOR EVERYONE.

WELCOME TO TAO

DRIVING THE FUTURE



Blockchain?

A blockchain is the distributed data storage methodology invented by Satoshi Nakamoto which lies at the heart of Bitcoin.



I've been working on a new electronic cash system that's fully peer-to-peer, with no trusted third party.

- Satoshi Nakamoto, November 1, 2008

While Satoshi never called the method a "block-chain", the name has grown to represent a distributed cryptographic ledger which creates data that may be tokenized. The difference between a blockchain and a distributed cryptographic ledger is the aspect of tokenization. Tokenization allows for the use of "coins", or units of fungible value on the network.

A smart contract is simply a piece of software which executes based upon a series of mathematically provable events. We already use smart contracts every day. In the blockchain industry, smart contracts can reach unparalleled levels of elegance and power through the application of modern cryptographic techniques.



A Solid Foundation

Future-proof Blockchain Technology Built from Bitcoin for the Next Generation of Distributed Applications



InstantX

InstantX breaks through block times allowing for instant settlements!



Encrypted Messaging

Send encrypted messages to any Tao Network address!



Encapsulated Addresses

A simple smart contract which enables the obfuscation of the destination of any transaction!



Adaptive Block

Adaptive block sizes allow for near infinite scalability without the need for a hard fork!



IntelliTx

Intelligent Transactions (IntelliTx) allow for powerful new DApps!



Analysis Resistant Transactions

AlphaSend anti-forensic anaylsis technology keeps your transactions private!



Proof-Of-Stake

Share in the long term health and profit of the network through proof-of-stake consensus!



Complete Transparency

From the crowdsale to the code base.



Nine Extended OP Codes

Entirely new smart contract options with nine new extended OP codes!

THIS IS TAO

OUR PASSION
IS TO
CONTINUOUSLY
INCORPORATE
THE LATEST
DEVELOPMENT
IN BLOCKCHAIN
TECHNOLOGY
INTO A SINGLE
NETWORK WHICH
PROVIDES
UNPRECEDENTED
LONG TERM VALUE
AND CONSUMER
UTILITY
WITHOUT
SACRIFICNG
STABILITY.

Innovating the Blockchain Intelligent Transactions

The most powerful feature of the Tao network is its Intelligent Transaction technology. This simple but elegant blockchain implementation allows for unprecedented flexibility in smart contract execution at per-transaction resolution.



IntelliTx technology allows for a smart contract payload to be attached to each and every transaction. Transactions can be created which are simply a smart contract payload and a transaction fee. Transaction payloads are content agnostic, so as to be able to accommodate Bitcoin Script, Ethereum Serpent/Solidity, or your own custom protocol, and yet are still able to be validated through Tao network consensus.

Naturally re-entrant smart contracts create a worry-free environment for developers who no longer need to be concerned about their programmatic flow being interrupted and funds being lost by a recursive contract call. The operation of IntelliTx removes the pitfalls with other smart contract networks, even if their scripting is implemented!

An Intelligent Transaction is more than just a smart contract, it is a means by which a blockchain may interact with the world outside of its network and do so while still enjoying the security of a blockchain data store and without the mandate of a virtual machine. New protocols and new DAOs may be developed and deployed without a single alteration of the operation of the Tao network or its consensus

The key to a simple, elegant smart contract system is making transactions more intelligent.

mechanisms. As such, the power of the Tao network Intelligent Transaction allows for the tokenization of any asset, creating cryptographic chains of custody for anything from gold bars, to bottles of wine, to digital music.

As a result of the design of the Tao network and similar to the design of the Hyperledger project, smart contracts may be deployed on the blockchain in any programming language: from JavaScript to Python to Go to Ethereum Solidity to Bitcoin Script.

Fees for Intelligent Transactions are computed as a function of the byte size of the transaction. Rare among Proof of Stake networks, Tao awards all transaction fees to the stakeholder which mines the block.

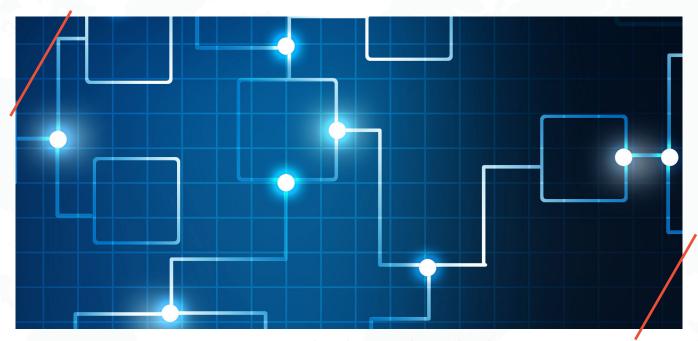


Extended OP Codes

Extended OP codes reduce the complexity and unintended consequences of smart contract development to a predictable programmatic flow within a well-documented and well-understood structure.

Subchains

Subchains instantiate a completely new Unspent Transaction Output (UTXO) data set within the main blockchain with a set rate of exchange.

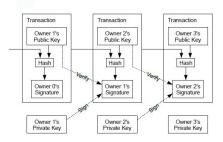


As the TAO token becomes a baseline for rates of exchange between subchained assets, entirely new economic possibilities emerge for the exchange of value and the settlement for goods and services. Every blockchain is based on public key cryptography which is comprised of two principal components: a public component and a private component. This key pair is used to create addresses on Bitcoin-based blockchain networks. Each blockchain has a specific set of parameters which make that blockchain cryptographically unique, and it is why the addresses for Tao are different than Bitcoin. However, if the specific parameters for generating an address for any given blockchain are known, a single key pair may serve for every blockchain. It is in this manner that a single set of key pairs are able to represent an almost unlimited number of addresses for subchained assets, each of which can be linked together with the most basic of smart contract implementations.

A novel solution by which one may create multiple unspent transaction output (UTXO) data sets within a single blockchain.

From the Bitcoin standard, the blockchain requires two modifications: the implementation of Intelligent Transactions and the addition of an unsigned 256-bit integer to the standard UTXO data set. While theoretically unnecessary, the inclusion of this field dramatically reduces the computational overhead of multiple UTXO data sets.

A new UTXO data set is defined through an additional OP code, OP_UTXO. An OP_UTXO transaction is created which contains a JSON payload which defines the asset and an additional parameter which determines the action to be taken: create or modify. Only certain parameters may be changed after creation, and invalid data is ignored by the consensus mechanism.



Transactions don't change, how the network uses them does.

The simple elegance of Tao resides in the minimal modification to the standard operation of a blockchain.

Identity in a

Privacy-centric Platform

One of the key features of the Tao network is the ability to identify any entity, either human or machine, for the purposes of encrypted communication.

ONLINE IDENTITY

ONLINE

As one may register an unlimited number of identities, the sacrifice for registering an identity is very small and yet carries with it tremendous benefits for the preservation of privacy. The concept of "anonymity" within blockchain technology has been widely misunderstood, and to the great detriment of the public. An immutable, immortal cryptographic ledger of financial transactions is in no way anonymous, or even pseudo-anonymous as has been often argued, but through the application of modern cryptographic techniques and business practices one may enjoy an unparalleled level of privacy. Privacy and anonymity are not the same, yet one may not aspire to be anonymous without the ability to keep their information private.

Blockchain forensic analysis is a new, but very effective, science which has already lead to arrests once the individuals involved has been properly identified. While currently benign in its use, blockchain technology is not immune to the specters of abuse and censorship that has plagued modern technological innovation. It is towards preserving the long term privacy of individuals in a landscape of constantly evolving education and innovation that the

Handle your business without people knowing your business.

Tao network employs several means of securing individual privacy, and thereby individual liberty. It is the application of end-to-end encrypted communications, encapsulated addresses, and Analysis Resistant Transactions are applied to smart contracts for everyday commerce which makes the Tao blockchain *more private and secure than ACH, debit cards, or even Bitcoin for doing business on the Internet.*



Digital Asset Management

In the Blockchain Age of decentralized data storage, ownership of digital assets is less important than the ability to establish the rights to content and the ability to assign them as a function of the act of creation.



Many promises have been made in regard to leveraging the power of blockchain technology to solve the problems of modern digital asset management. From legal documents to the latest Billboard Top 100, every digital asset requires the accounting necessary to establish who has the right to access that content.

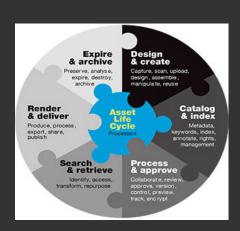
The traditional concept of ownership is disappearing and is being replaced by the ability to assign rights and execute those rights. The assignment of rights begins at the moment an asset is created, therefore the creator - be it a single entity or a collaborative effort - determines how that asset is to be consumed. In the case of a land title, that authority is bestowed by the government. In the case of digital entertainment, that authority is the colloborative wishes of those who participated in the creation of content through the lense of negotatiated contracts.

Blockchain-based digital asset management systems should not seek to replace the law, but act as an accountable means of enforcing agreements. This requires a technical framework flexible enough to account for every individual contribution to the creation of an asset, as well as the ability to maintain a true

The act of creation is that by which provenance is established.

cryptographic chain of custory for those rights and an immutable ledger of each instance when those rights were executed.

A blockchain cannot stand on its own, and a truly effective solution provides the bridges and plugins to popular creative software packages in order to establish provenance from the moment of creation. Such plugins are already being designed and developed to provide an end-to-end application interface to the Tao Network blockchain, from the act of creation via Microsoft Word, After Effects, ProTools, and FruityLoops to delivery systems such as the ambitious DotBlockchain project to more standard implementations such as Google Widevine, WebDAM, and Box. If it be a document in a courtroom or a track in the studio, the Tao Network has the ability to establish effective cryptographic provenance for the purposes of rights execution.



Standard DAM Integration

The best technology in the world doesn't matter if it's impossible to use. The Tao Network follows industry accepted methodologies for digital asset management for easy integration into your business or organization.

The Crowd Sale

The Crowd Sale is the chance for everyone, all over the world, to participate in one of the most ambitious projects in the blockchain industry.



The Experience Required To Make The Future Happen

Respecting the markets is vital to the long term success of any blockchain network. The Tao Network Crowd Sale is designed with the long term economic future of the network in mind, which includes the initial distribution of coins and providing enough information for accurate price discovery. Every trade has two sides, but the Tao Network Crowd Sale is designed to maximize the profit potential for every single investor.

JULY 28
2016

A Balanced Future



The Crowd Sale

The crowd sale opens July 28th, 2016. This is the first opportunity the public will have to participate in the guidance of the future of the Tao Network!

The crowd sale shall last for 30 days and individuals have a chance to earn up to 50% bonuses on their deposits through our referral program!



The Marketplace

The flagship implementation of Tao Network smart contracts is the "always on" blockchain-based marketplace!

- Uncensored, unstoppable, unregulated commerce
- Securely buy and sell anything physical or digital with anyone, anywhere in the world
- USD Pricing
- No Credit Card Fees
- Instant Settlements
- Automated Escrow

The full power of blockchain technology, made accessible to everyone!

The UI

The new features of the Tao Network require a major overhaul to the UI of the Crowdsale MVP. Initial development efforts will focus around a simple, clean, elegant, user-friendly UI design which enables access to all of the new and powerful features incorporated into the Tao Network!





... and Beyond!

This is only the beginning! Several major development partnerships and distributed applications are being built and designed right now for deployment on the Tao Network!

WE HAVE ELECTED
TO PUT OUR MONEY
AND FAITH IN A
MATHEMATICAL
FRAMEWORK THAT IS
FREE OF POLITICS
AND HUMAN ERROR.

Tyler Winklevoss, Co-creator of Facebook

Popular Questions

Some easily answered questions about Tao technology and what sets it apart.

01

Why not use Bitcoin?

While Bitcoin could theoretically implement Tao's features, doing so would require several hard forks and community consensus which is not likely. Tao represents the pinnacle of technological iterations on the Bitcoin code base, and as such can do things that Bitcoin can never do.

02

Why have a crowd sale?

Developing blockchain technology for business use cases takes more than just spare time: it requires an investment in time and resources to create usable functionality. The crowd sale provides those resources so more developers can be engaged to bring the Tao vision to full fruition.

03

Can anyone participate?

Absolutely! While cryptocurrency investments are considered high risk, there are no governing regulations regarding blockchain-based crowdsales. Accredited and non-accredited investors are both welcome to participate on equal footing, creating truly unique investment opportunities.



Twitter http://twitter.com/taoblockchain

Slack http://taoblockchain.slack.com

GitHub http://github.com/taoblockchain