



# Introducing BitShares

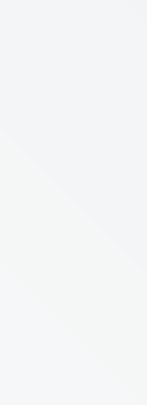


BitShares is

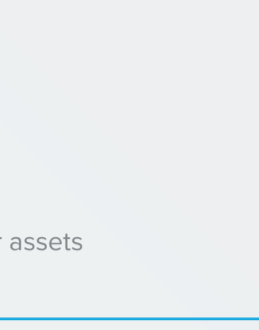


a **decentralized** network

It is operated by those who participate  
No single government or company controls it



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BitShares has **digital tokens**

These have the properties of cryptocurrencies (like Bitcoin) but maintain a stable value and can be used as a medium of exchange (money)

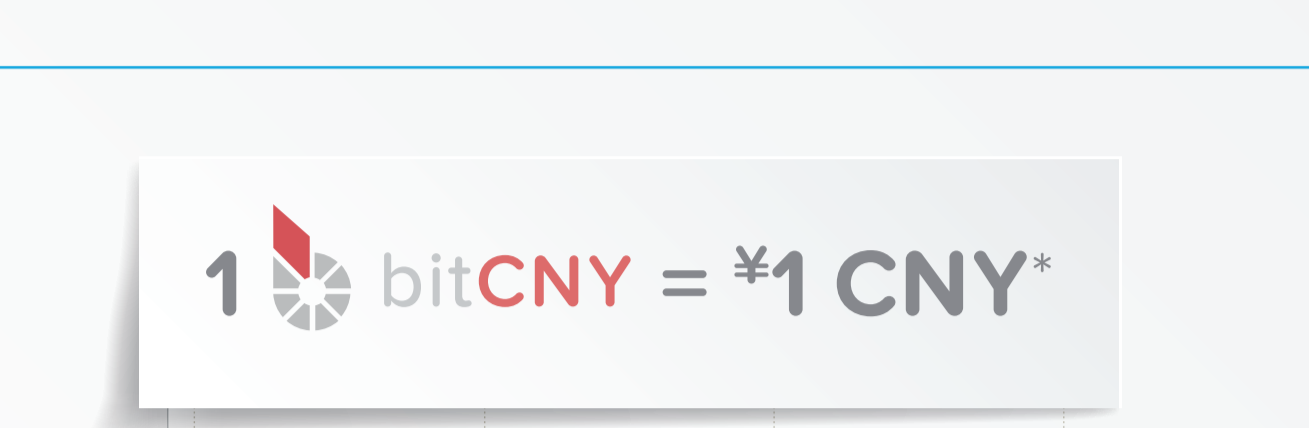
**BitShares (BTS)**



however, unlike Bitcoin

BTS can be converted into

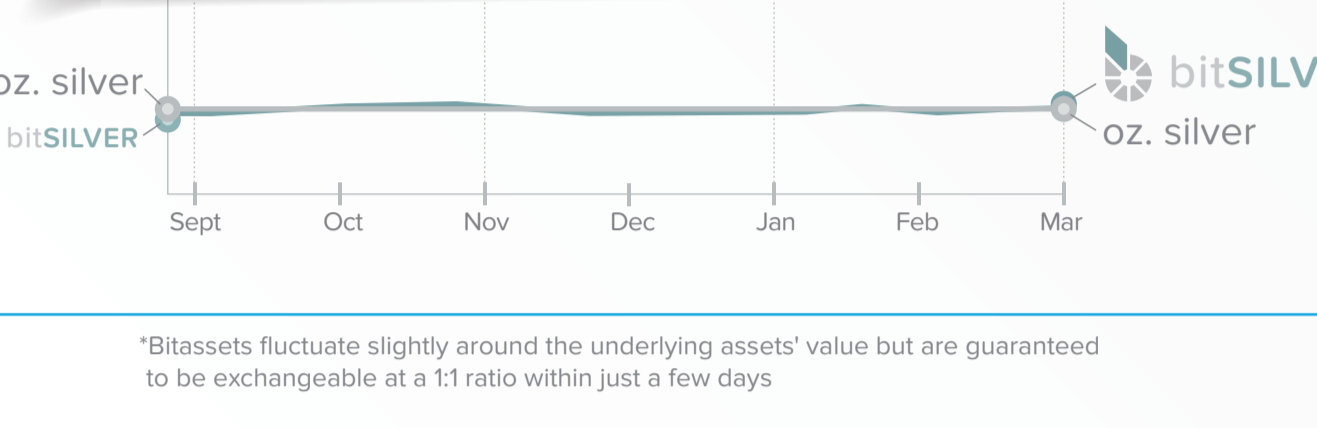
**BitAssets**



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BitAssets are **market-pegged** to currencies and other assets

1 bitUSD = \$1 USD\*



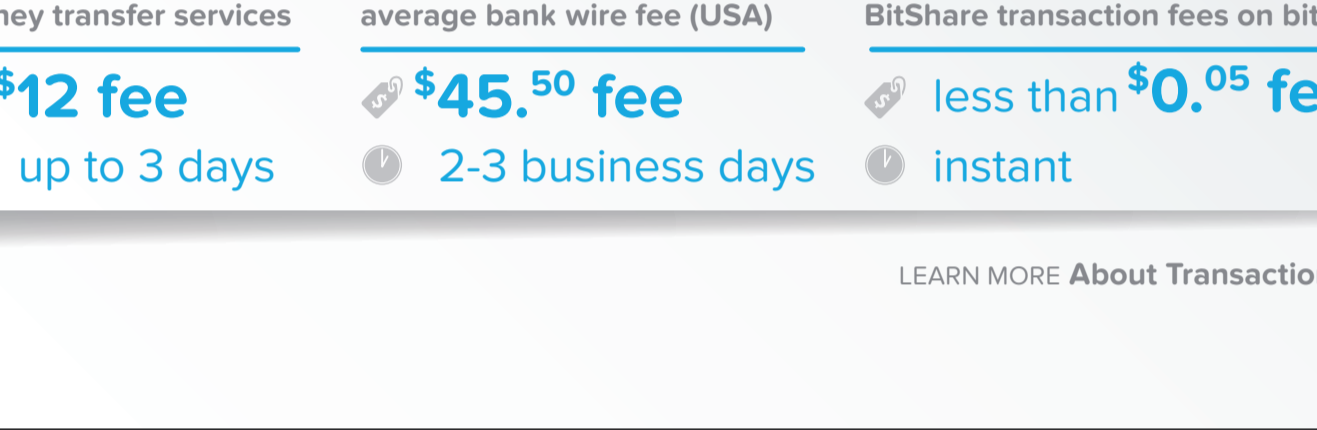
1 bitEUR = €1 EUR\*



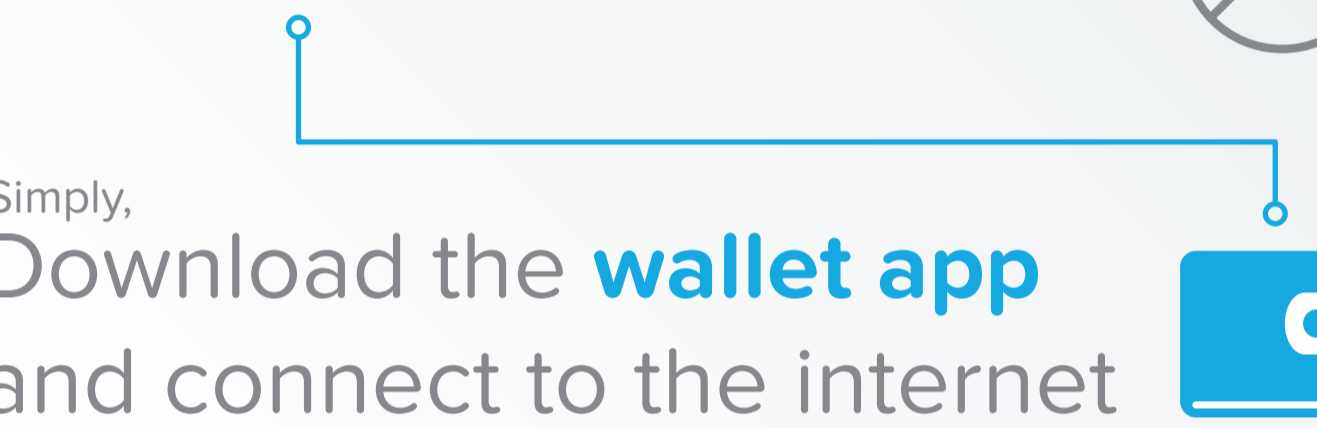
1 bitCNY = ¥1 CNY\*



1 bitGOLD = 1 oz. gold\*



1 bitSILVER = 1 oz. silver\*

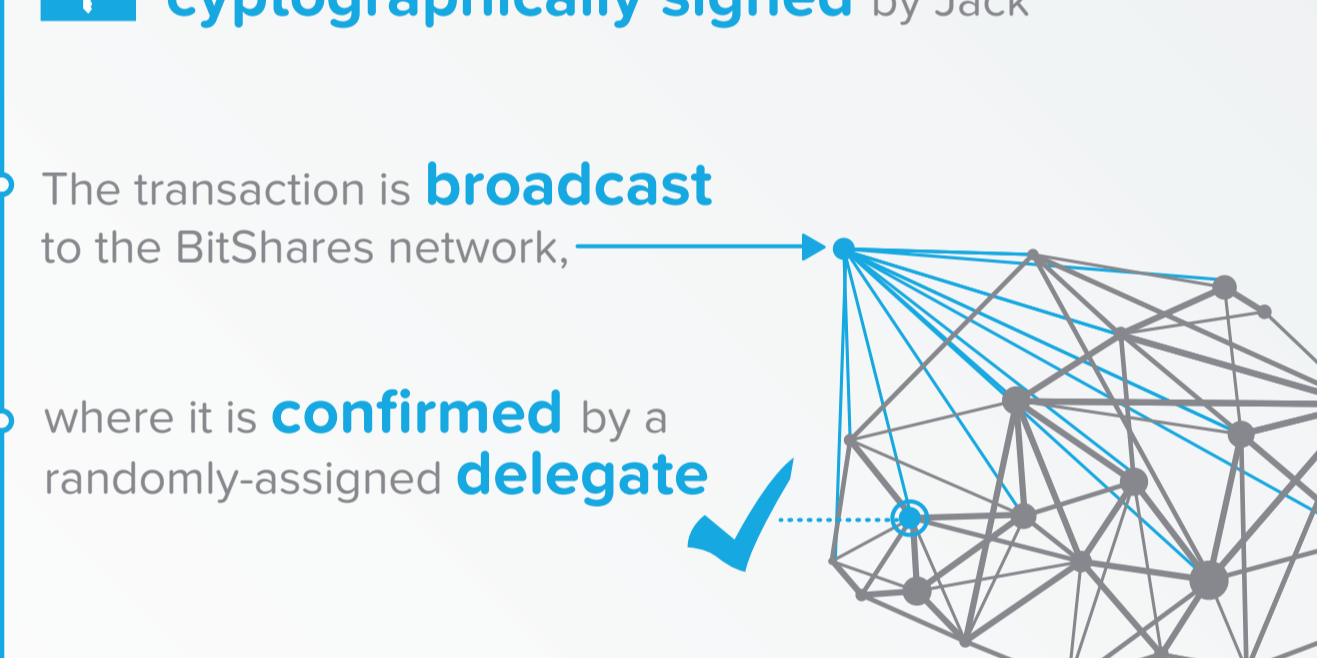


\*BitAssets fluctuate slightly around the underlying assets' value but are guaranteed to be exchangeable at a 1:1 ratio within just a few days.

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Unlike other cryptocurrencies,

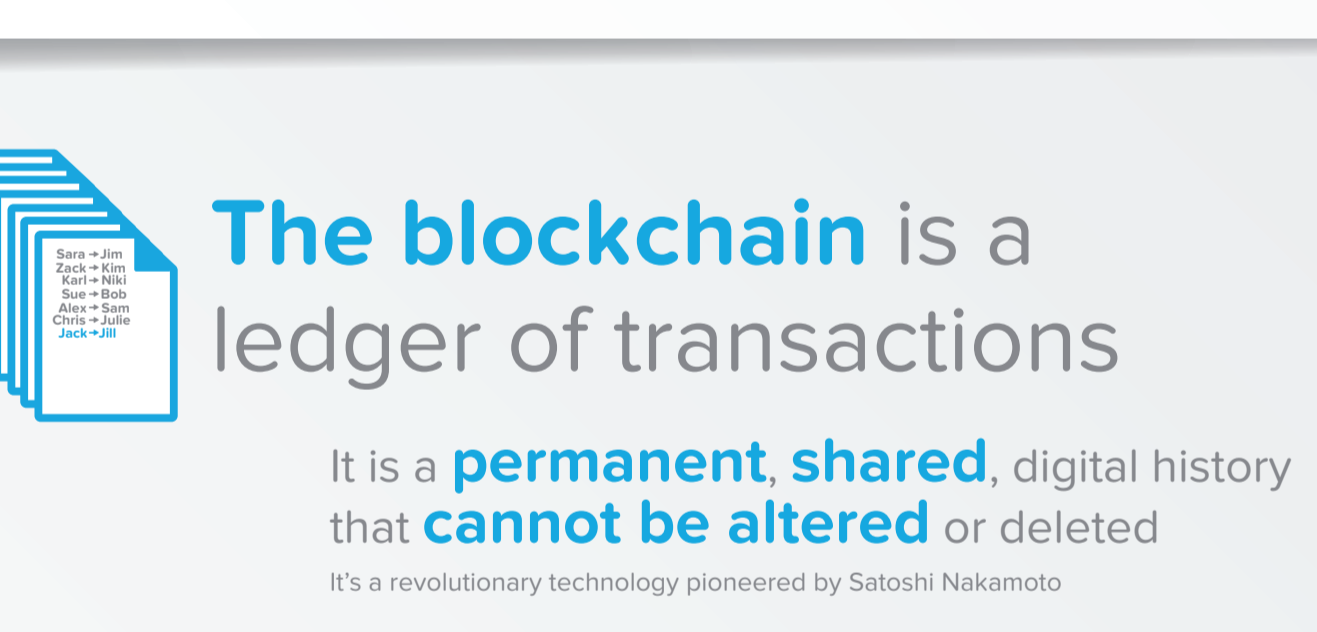
BitAssets are **less volatile**



1 bitUSD ALWAYS = \$1 (+/-1%)

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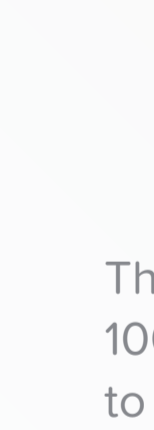
BitAssets can be sent around the world for **minuscule fees**



For example:  
**Cost to send \$100 USD**

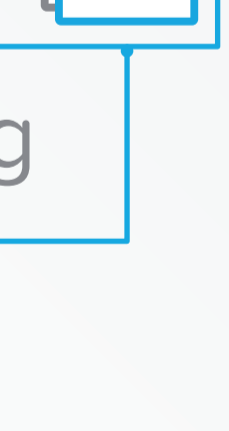
<b>WESTERN UNION</b> money transfer services \$12 fee up to 3 days	<b>average bank wire fee (USA)</b> \$45.50 fee 2-3 business days	<b>BitShare transaction fees on bitUSD</b> less than \$0.05 fee instant
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[LEARN MORE About Transaction Fees>](#)

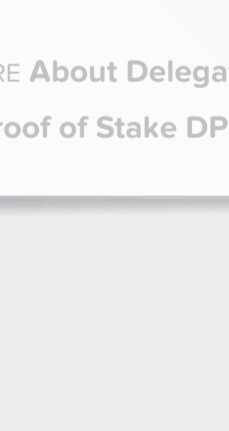


## How BitShares Works

**No bank account** needed



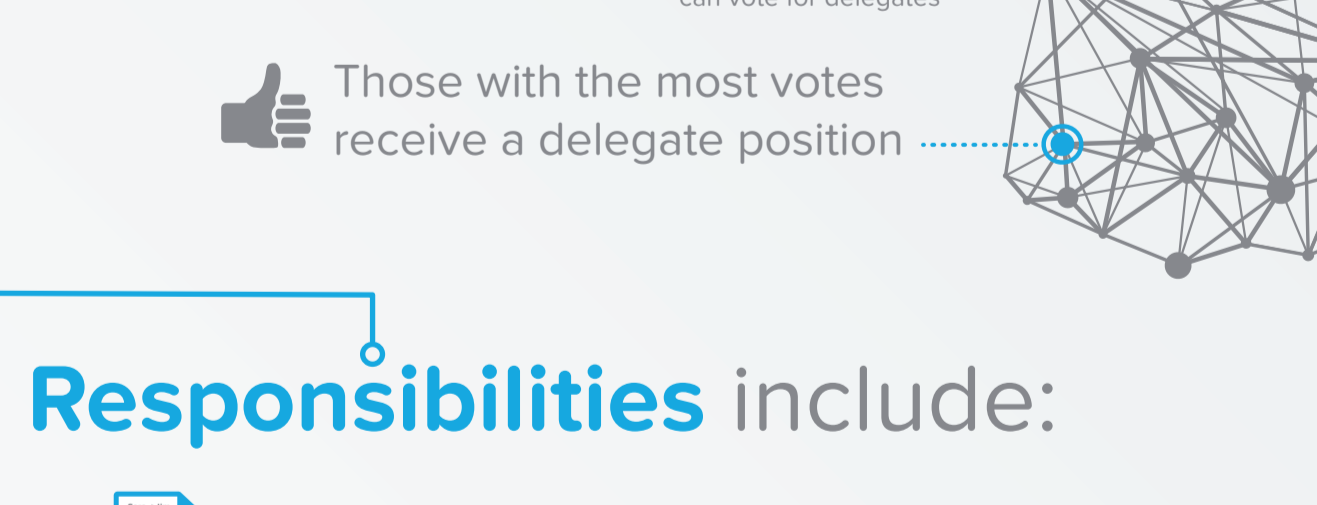
Simply, Download the **wallet app** and connect to the internet



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**Jack sends BitUSD to Jill**

**How it works:**



Via the wallet app, **Jack requests** his account to be -\$1000 BitUSD and Jill's to be +\$1000 BitUSD

The transaction is **cryptographically signed** by Jack

The transaction is **broadcast** to the BitShares network,

where it is **confirmed** by a randomly-assigned **delegate**

The transaction is added to a **ledger** (called the blockchain)

The ledger is **updated across the entire BitShares network**

**Everyone** in the network has the **same copy** of the ledger that includes Jack's transaction

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**The blockchain** is a ledger of transactions

It is a **permanent, shared**, digital history that **cannot be altered** or deleted

It's a revolutionary technology pioneered by Satoshi Nakamoto

**How it works:**

Every 10 seconds, transactions are sent to a **randomly-selected delegate**

The delegate **confirms** the transactions & packages them into a **secure 'block'**

This block is **validated** by the other 100 delegates and **digitally 'chained'** to **ALL** previous BitShares transactions

This continuously expanding ledger is **the blockchain**

It is **secure** because it is signed (confirmed) by an authority (delegates)

It is **consistent** because there is only one valid blockchain that is shared

It is **representative** because the delegates are elected by BitShares shareholders

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[LEARN MORE About Delegated Proof of Stake DPOS>](#)

**Delegates do the 'work'**

Building and maintaining BitShares as a company\*

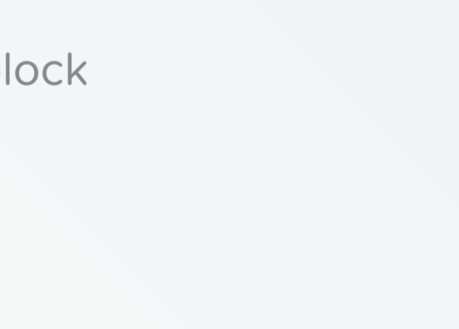
**How it works:**

\*BitShares is not really a company in the standard sense...but can function in a similar way

**101 participants** of BitShares are voted in as **delegates**

All those who own BitShares can vote for delegates

Those with the most votes receive a delegate position



**Responsibilities** include:

Package transactions into blocks and validate them (done automatically through a cryptographic algorithm)

Maintain a consistent blockchain and verify every other delegates blocks for consistency

Publish price feeds (this facilitates bitAsset trading)

# Provide a random number in each block

Improve the ecosystem (through code development, marketing, design and other roles)

Delegates are **paid by the blockchain**

For most delegates, the payrate is to **cover costs** of running a block-producing server (3% of the 50BTS currently paid out per validated block)

Delegates can campaign for a **higher payrate** (typically this is used to develop the BitShares ecosystem: developers, marketers and designers)

'Employment' is a **democratic process**

The Board of Directors, CEOs, CTOs, marketing team, etc. are all elected by the BitShares Community. All are #paidbyprotocol

Delegates are held **accountable** to BitShares shareholders and other delegates through:

Published statistics (See bitsharesblocks.com/delegates)

News of their marketing and other efforts (Online forums and the monthly newsletter)

If a delegate misbehaves or **fails to deliver** s/he is quickly voted out by shareholders (this creates positive competition among delegates)

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[LEARN MORE About Delegated Proof of Stake DPOS>](#)

The BitShares network uses a **Delegated Proof of Stake (DPOS)** system to ensure security

**How it works:**

DPOS is a mechanism to **achieve 'consensus'** about the content of a database (in this case account balances, account names, etc.)

BitShares and other cryptocurrencies (like bitcoin) use **similar blockchain technology** (which addresses how consensus is distributed, so everyone has the same data)

There are differences in **how consensus is achieved**

bitshares vs bitcoin

CONSENSUS METHOD	Delegated Proof of Stake (DPOS)	Proof of Work (POW)
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TRANSACTION VALIDATORS (Validators are incentivized to maintain the network by being paid block-rewards)	<b>Delegates</b> Voted in They essentially <b>work for the blockchain</b>	<b>Miners</b> Miners 'pool' together to increase the <b>chance</b> to be rewarded
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BLOCK REWARDS (How those running the system are 'paid')	Reward is <b>shared</b> by delegates	Reward corresponds to the <b>percentage of total hash</b> (mining) power one has
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Delegates (people) are paid for <b>maintaining &amp; improving</b> the system	Miners use <b>powerful computer equipment</b> to 'mine'
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Reward is <b>looped back</b> into BitShares to <b>enrich the environment</b>	Miners use a portion of reward to <b>pay for equipment and resource use</b> (electrical utilities) to run the computation
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CONSENSUS EQUATIONS	<b>Pre-determined order</b> Efficient; based on trust of delegates Works by relying on trust of the delegates that are voted in Delegates verify each other System holds block producers accountable	<b>Luck</b> Inefficient; no trust required Works by solving cryptographic math puzzles the hard way Because of the complexity of the algorithm, energy is wasted during validation/mining
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DECENTRALIZATION	<b>101 delegates</b> Located <b>all over the world</b>	<b>Less than 10</b> mining pools Located where electricity is cheap
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