



All About BitShares — in Infographics



BitShares is



a **decentralized** network

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



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

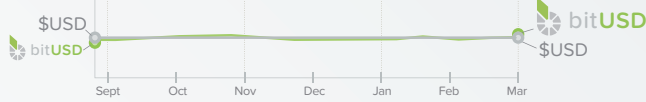
BTS can be converted into

BitAssets

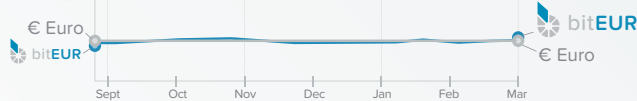


BitAssets are **market-pegged** to currencies and other assets

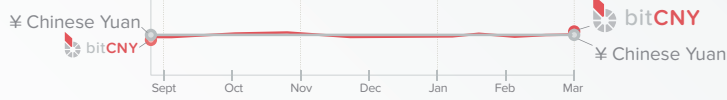
1 bitUSD = \$1 USD*



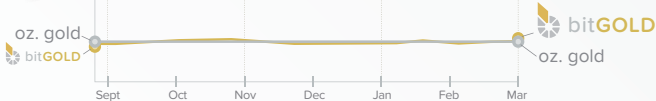
1 bitEUR = €1 EUR*



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

Unlike other cryptocurrencies, BitAssets are **less volatile**



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



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

WESTERN UNION	average bank wire fee (USA)	BitShare transaction fees on bitUSD
money transfer services		
\$12 fee	\$45.50 fee	less than \$0.05 fee
up to 3 days	2-3 business days	instant



All About **BitShares** — in Infographics

No bank account needed



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



Jack sends BitUSD to Jill

How it works:



Jack → Jill
-\$1000 +\$1000

Via the wallet app,

1. **Jack requests** his account to be -\$1000 BitUSD and Jill's to be +\$1000 BitUSD



2. The transaction is **cryptographically signed** by Jack

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

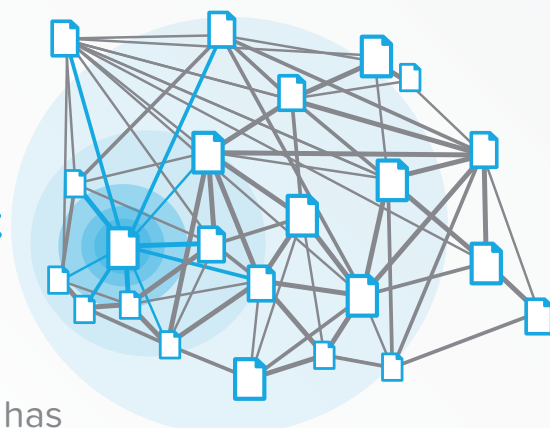
4. where it is **confirmed** by a randomly-assigned **delegate** ✓



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



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



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



All About **BitShares** — in Infographics



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**

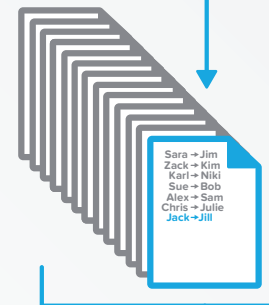


The delegate **confirms** the transactions & packages them into a **secure 'block'**

there are 101 delegates in the BitShares network



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



All About **BitShares** — in Infographics

Delegates do the 'work'

Building and maintaining BitShares as a company*

How it works:

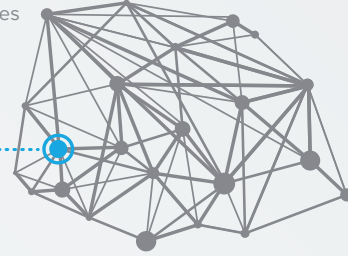
*BitShares is not really a company in the standard sense...but can function in a similar way

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



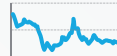
Responsibilities include:



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)



All About **BitShares** — in Infographics

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**



CONSENSUS METHOD



Delegated Proof of Stake (DPOS)

Proof of Work (POW)

TRANSACTION VALIDATORS

(Validators are incentivized to maintain the network by being paid block rewards)

Delegates



Voted in

They essentially **work for the blockchain**

Miners

Miners 'pool' together to increase the **chance** to be rewarded

BLOCK REWARDS

(How those running the system are 'paid')

Reward is **shared** by delegates

Reward corresponds to the **percentage of total hash** (mining) **power** one has

Delegates (people) are paid for **maintaining & improving** the system

Miners use **powerful computer equipment** to 'mine'

Reward is **looped back** into BitShares to **enrich the environment**

Miners use a portion of reward to **pay for equipment and resource use** (electrical utilities) to run the computation

CONSENSUS EQUATIONS

Pre-determined order



Luck



Efficient; based on trust of delegates

Inefficient; no trust required

Works by relying on trust of the delegates that are voted in

Works by solving cryptographical math puzzles the hard way

Delegates verify each other

Because of the complexity of the algorithm, energy is wasted during to validation/mining

System holds block producers accountable

DECENTRALIZATION



101 delegates



Less than 10 mining pools



Located **all over the world**

Located where electricity is cheap