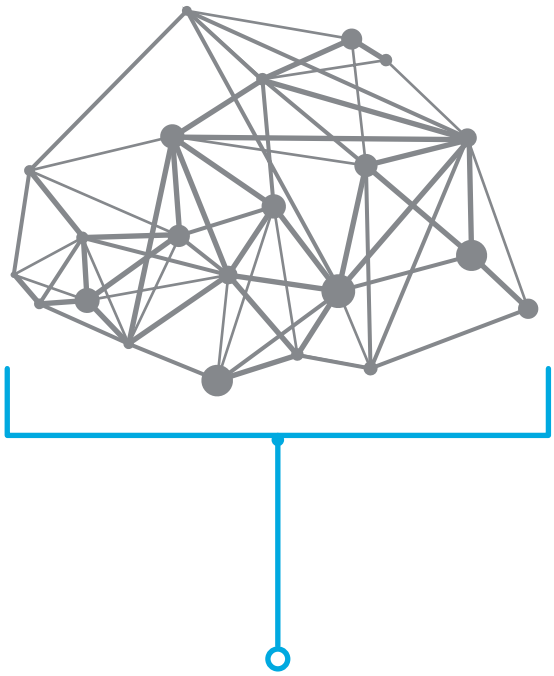
# BitShares is



## 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

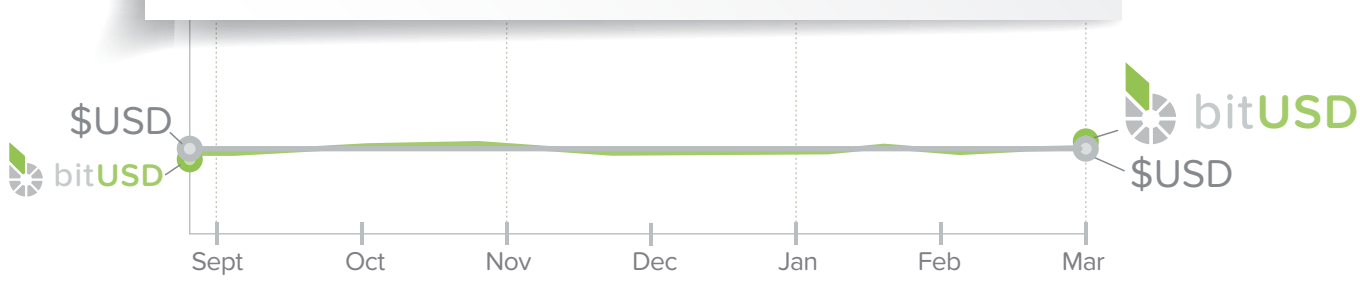
BTS can be converted into

## BitAssets

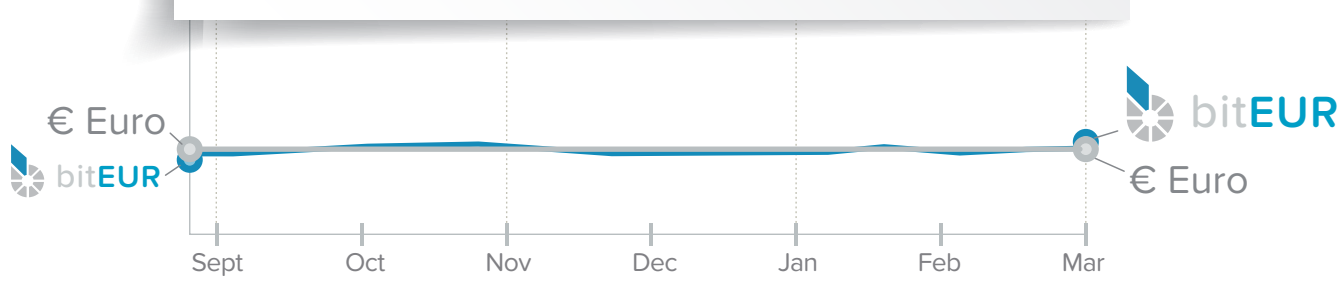
bitUSD bitEUR bitCNY bitGOLD bitSILVER

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

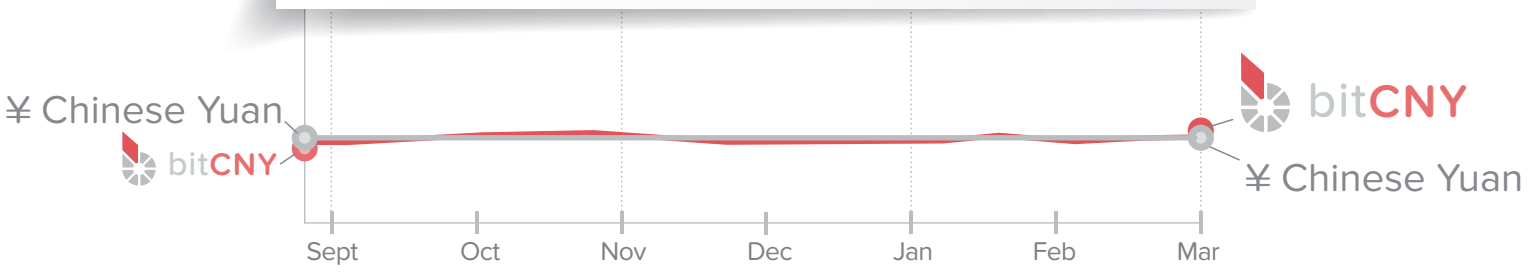
1 bitUSD = $1 USD*



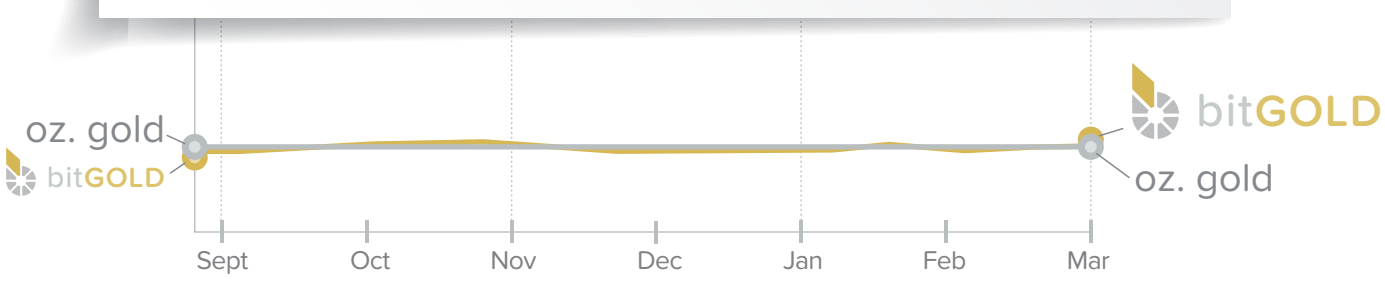

1 bitEUR = €1 EUR*



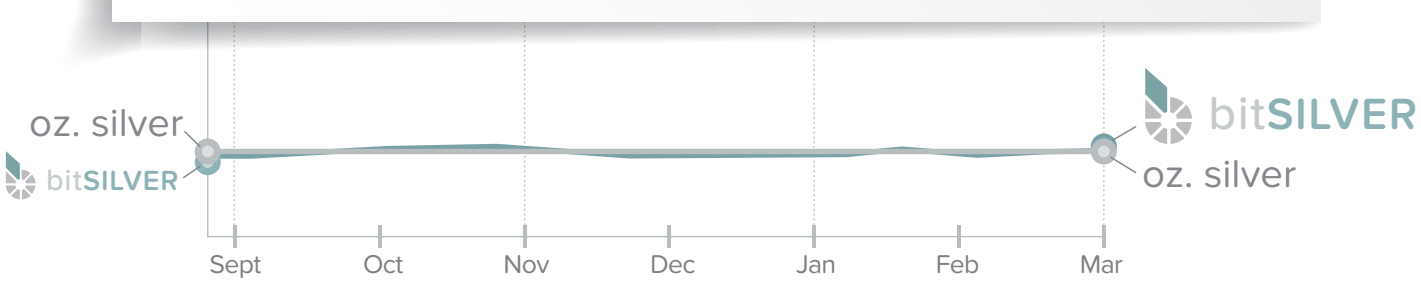

1 bitCNY = ¥1 CNY*




1 bitGOLD = 1 oz. gold*



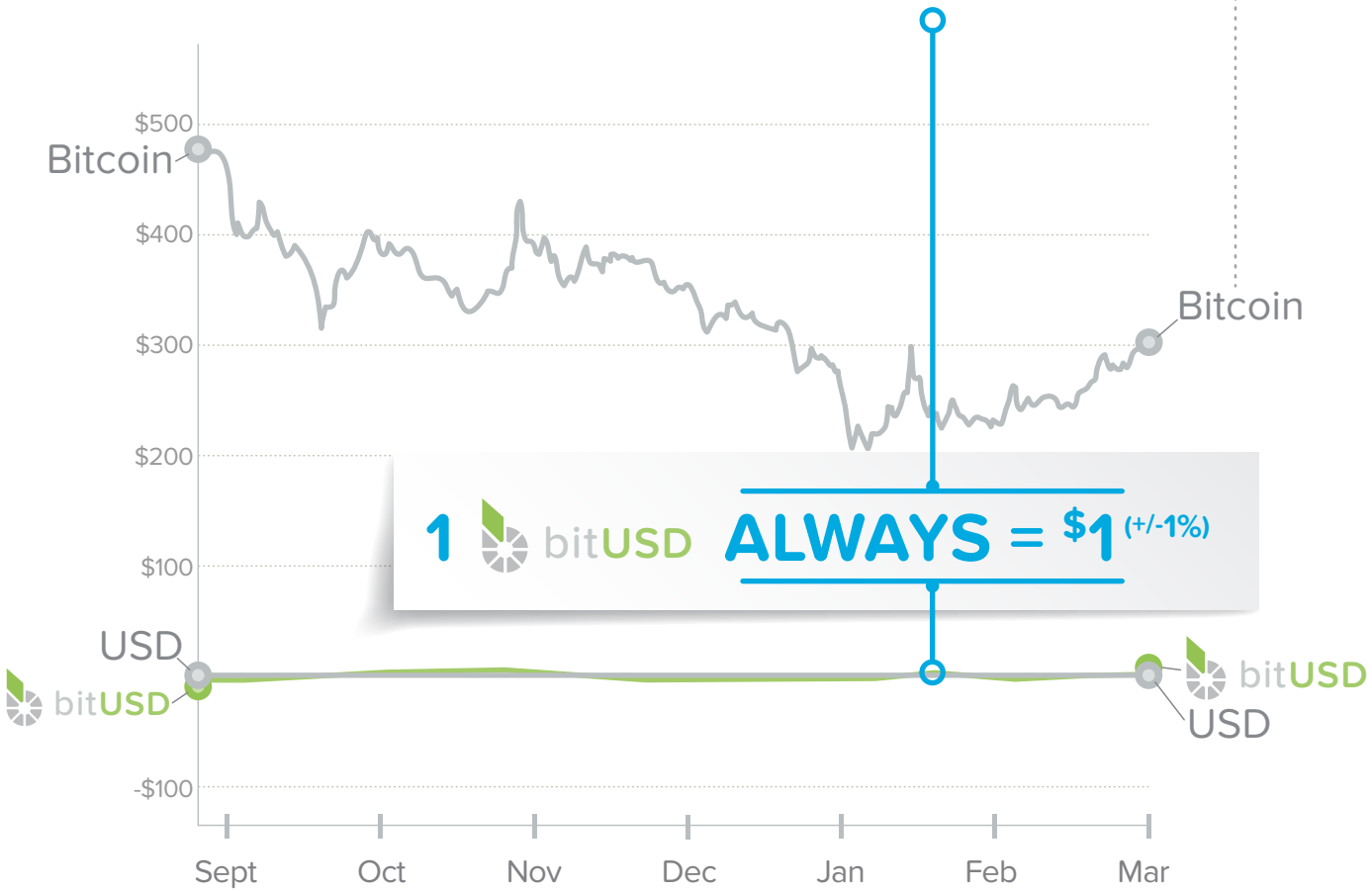

1 bitSILVER = 1 oz. silver*




*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**



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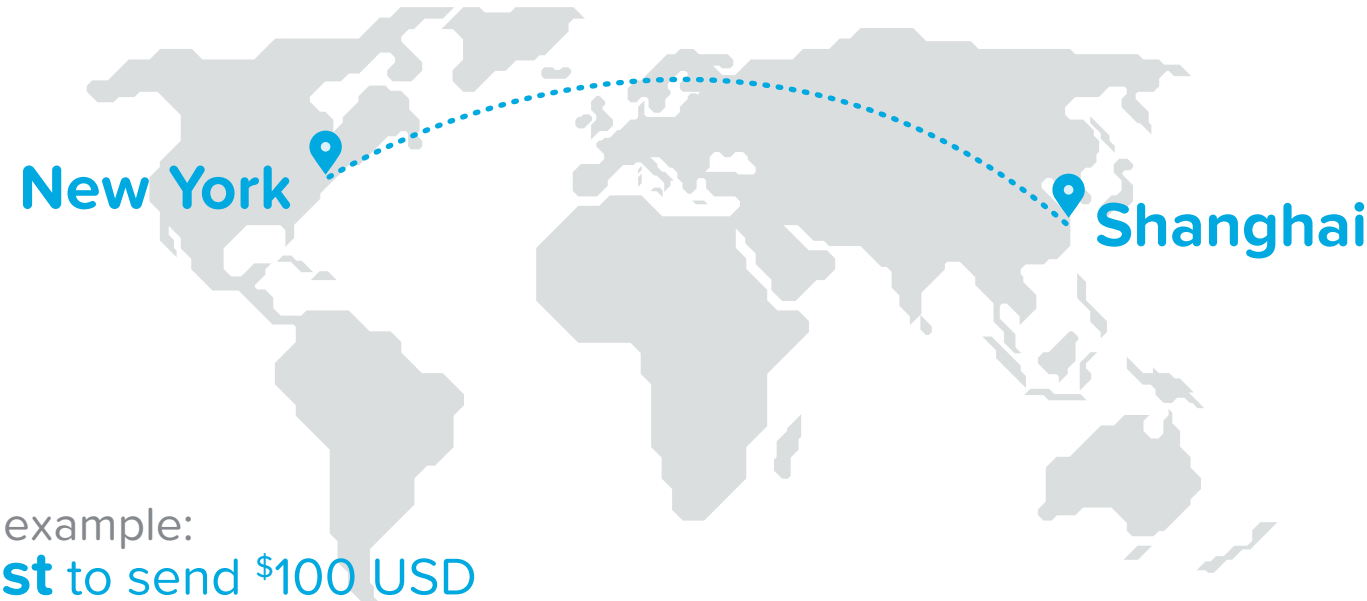
# BitAssets can be sent around the world for **minuscule fees**




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 |

# **No bank account** needed

Simply,

## Download the **wallet app** and connect to the internet

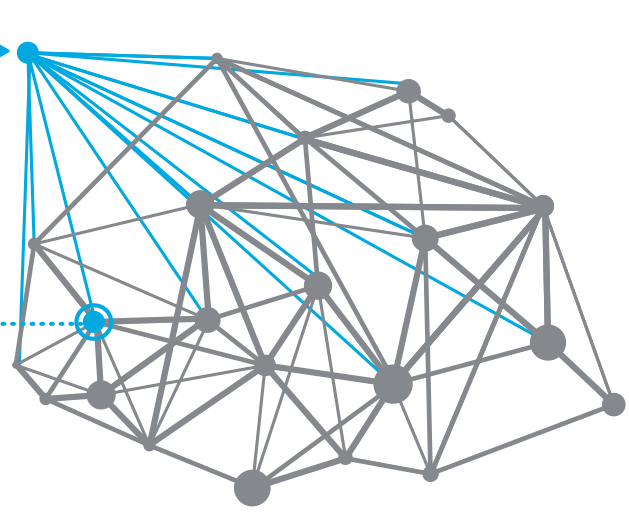
# Jack sends BitUSD to Jill

## How it works:

**Jack → Jill**
-$1000 +$1000

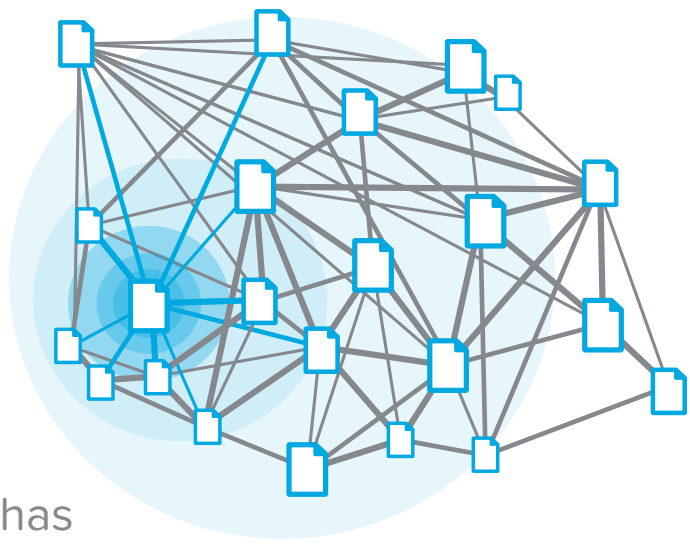
Via the wallet app,

- **Jack requests** his account to be -$1000 BitUSD and Jill's to be +$1000 BitUSD
- The transaction is **cyptographically 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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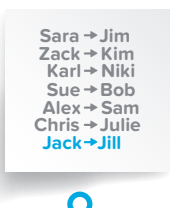
# **The blockchain** is a ledger of transactions

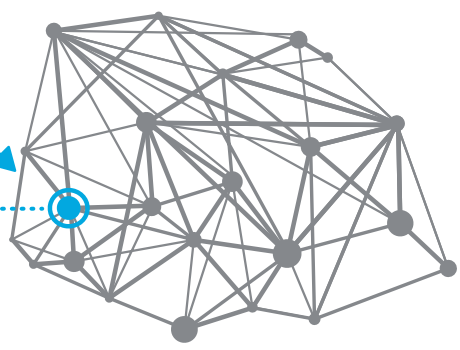
It is a **permanent**, **shared**, digital history that **cannot be altered** or deleted

It's a revolutionary technology pioneered by Satoshi Nakamoto

## How it works:

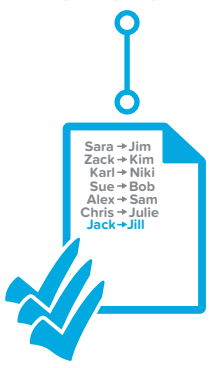



Every 10 seconds,
transactions are sent to a
**randomly-selected delegate**

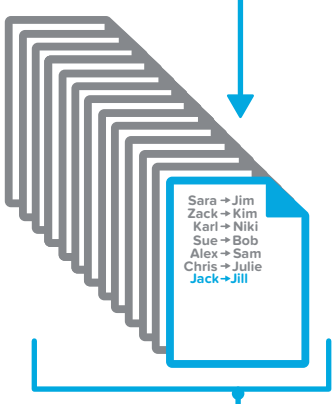


there are 101 delegates in the BitShares network

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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# Delegates do the 'work'

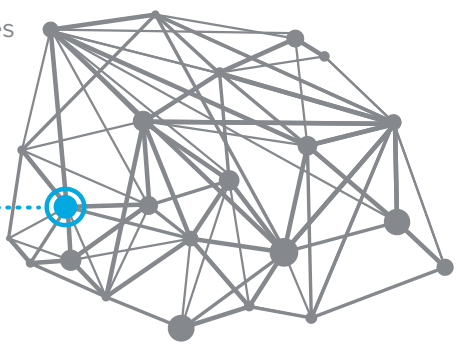
Building and maintaining BitShares as a company*

## 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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# 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

| | Delegated Proof of Stake (DPOS) | Proof of Work (POW) |
|---|---|---|
| CONSENSUS METHOD | | |
| TRANSACTION VALIDATORS (Validators are incentivized to maintain the network by being paid block rewards) | **Delegates** | **Miners** |
| | Voted in | Miners 'pool' together to increase the **chance** to be rewarded |
| | They essentially **work for the blockchain** | |
| 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<br>Delegates verify eachother<br>System holds block producers accountable | Works by solving cryptographical math puzzles the hard way<br>Because of the complexity of the algorithm, energy is wasted during to validation/mining |
| DECENTRALIZATION | **101** delegates | **Less than 10** mining pools |
| | Located **all over the world** | Located where electricity is cheap |



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