D3 ledger.com

Distributed Depository Network for Digital Assets

Safely tokenize traditional assets
Store, trade and exchange digital assets
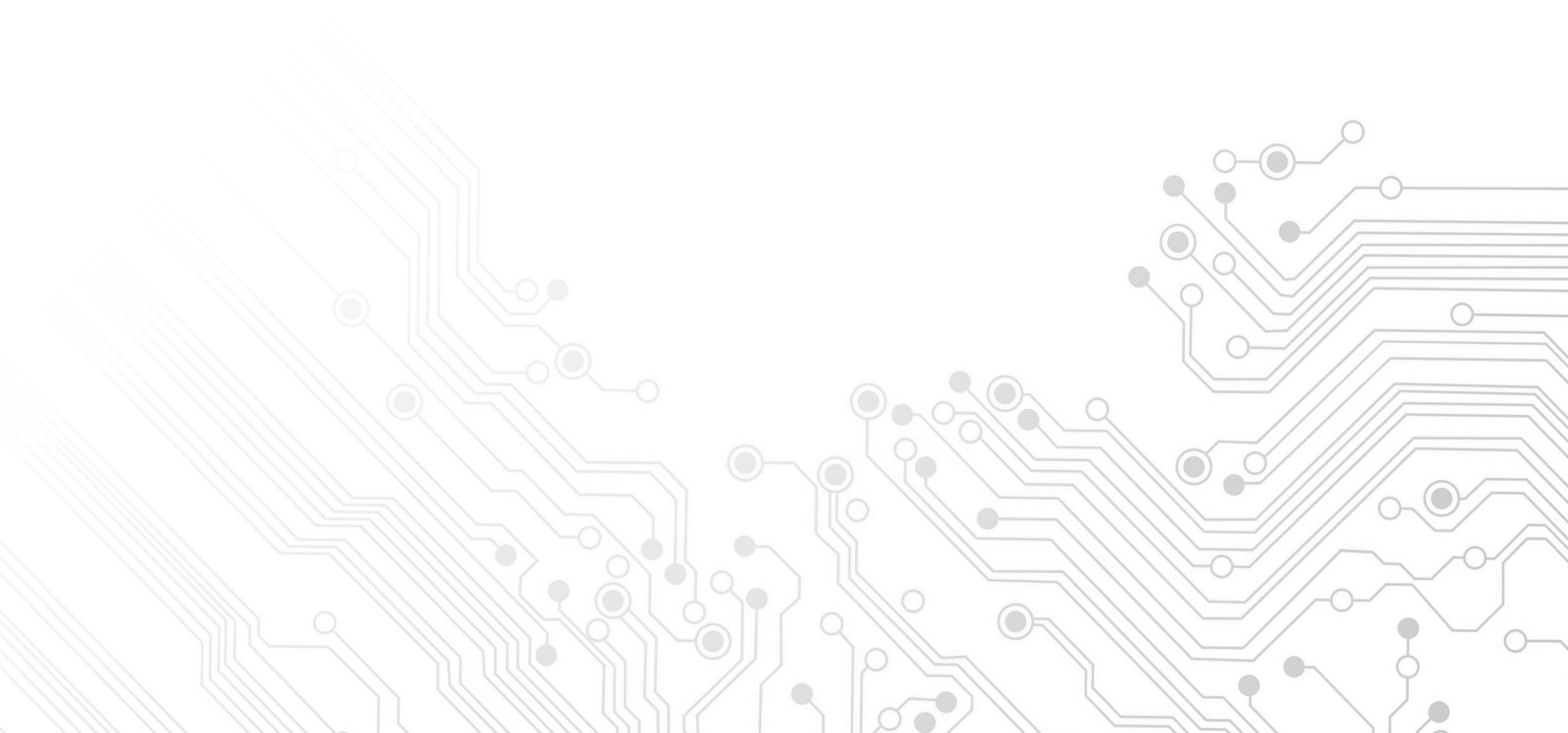
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D3ledger Story

In 2017 a growing group of forward-looking CSDs, including Russia's National Settlement Depository, initiated an R&D effort on servicing digital assets in that regulated market.

Recognizing the high potential of this new asset class, members of the working group undertook several rounds of research and publications. This work culminated in the well-received paper named "Infrastructure for Crypto-Assets: A Review by Infrastructure Providers."

The paper corresponds well with several DLT initiatives launched by major financial players, most recently by SIX with SDX and JP Morgan with JP Coin. However, those projects mostly operate under a vertical business model. They are limited to one jurisdiction and serve only clients of the financial organization owning the blockchain.

While it's easier to create isolated blockchains, this strategy will lead to a fragmented infrastructure with low interoperability. If we want DLT to bring new efficiency to the global post-trade, we need a horizontal solution.

D3ledger was launched to solve this problem. It is the first interoperable blockchain network enabling financial institutions from different markets to issue, store, trade, and exchange digital assets.

D3ledger is a joint venture between NSD and Soramitsu, one of the leading Hyperledger developers. In this partnership, NSD leverages expertise in asset servicing and international finance, while Soramitsu brings in technical know-how.
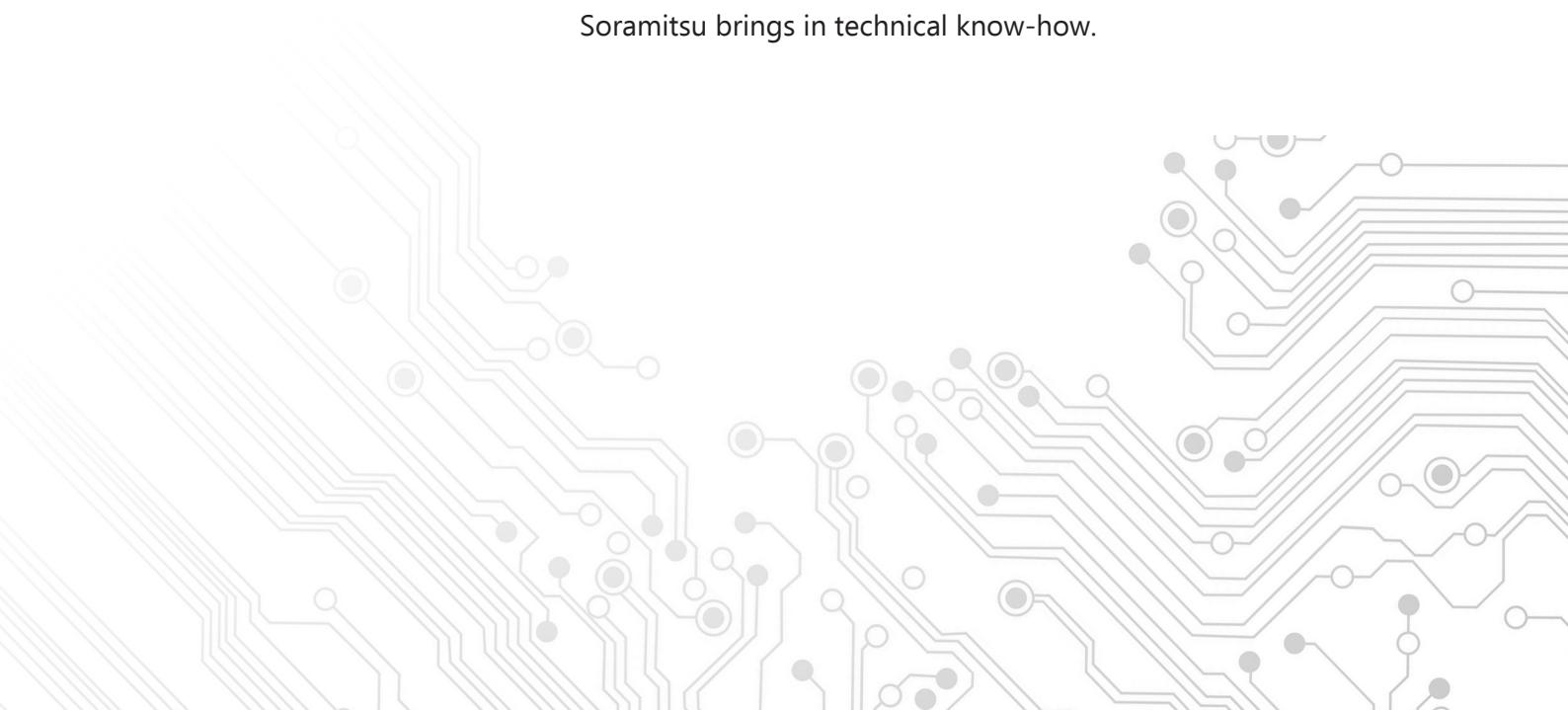
What is D3ledger

D3ledger is a distributed depository network providing post-trade services for a wide range of digital assets through a unified interface. The network supports safekeeping, token generation, OTC and on-exchange trades settlement.

The network consists of the distributed ledger to maintain accounts and tokens, two-way links to other blockchains, as well as web and mobile interfaces.

The platform was founded by established financial players. D3ledger operates in several jurisdictions.

What is the goal of D3ledger project

Our goal is to provide investors and financial institutions with reliable and efficient infrastructure for digital assets.

We are building a safe and secure environment for operations with digital assets while complying with regulatory requirements in our jurisdictions.

What services does D3ledger provide

Safekeeping

Digital assets safekeeping with multi-signature protection.

OTC settlement

Settlement of OTC trades using internal swap transactions of D3ledger.

Exchange trades settlement

Settlement of trades completed on the partnering exchanges.

Token generation

Generation of asset-backed tokens.

D3ledger works in several jurisdictions: UK, EU, Switzerland, the Bahamas. The list is constantly updating as new partners are joining the network.

Which assets does D3ledger currently support

- BTC and ETH
- Coming soon: support of XOR token for the Sora project.
- Coming soon: support of SMARC token.

What types of assets can be tokenized with D3ledger

Technically, we support any asset types as long as they comply with the local law and financial regulations.

We offer tokenization in the jurisdictions where we have at least one partner. Please contact us to know more.

What are the benefits of D3ledger for partners

- We offer quick time-to-market for digital asset servicing. Launch new products fast and with minimum overhead.

- You'll be able to service all asset types in one network. With D3ledger there is no need to integrate different blockchains or install many nodes.

- We provide tech support for every blockchain supported in D3ledger.

- We've already solved major compliance and risk management issues.

How to become a D3ledger partner

To become a partner, please write to us at partner@d3ledger.com. We'll bring you up to speed with the current partnership terms and benefits.

We have several levels of partnership depending on the services you want to provide.

We partner with financial players and crypto assets companies which operate in compliance with the local regulations and do have all the required licenses and accreditations.

What are the benefits of D3ledger for asset managers

Safe operations with digital assets
Both safekeeping and trade take place inside our secure environment.

Quick and inexpensive transactions
The main bulk of the transactions happens inside our network which drives down commissions and increases speed.

How much do D3ledger services cost for the clients

Service pricing varies from jurisdiction to jurisdiction. Please ask your D3ledger partner for the details.

To find a D3ledger partner, please contact us at welcome@d3ledger.com, and we'll put you in touch with a partner.

How to become a client

You can connect to D3ledger network via one of our partners.

Please write us at welcome@d3ledger.com, and we'll point you to a best-suited partner.

Who is responsible for digital asset safety

D3Ledger, Inc. is responsible for losses incurred by its clients (account owners) due to malfunction of the platform, as well as malicious or negligent actions of the partners.

This liability is guaranteed by D3Ledger capital and regression claims to the partners whose malicious or negligent actions cause the losses.

How will clients be reimbursed for incurred losses

If a client has permanently lost access to digital assets, she/he should raise a claim to the partner with the request to reimburse the losses.

The partner will consider the claim and reimburse the client if the loss is caused by the partner's actions. Otherwise, the partner will complete the subsequent claim to D3Legder on behalf of the client, and will further act as its authorized representative in the case.

In a highly unlikely event of a partner bankruptcy or other types of organizational failure, the client's assets are safe inside D3ledger. Thanks to the governance framework and distributed structure of our digital depository, a client will be able to access the assets and transfer them to another partner.
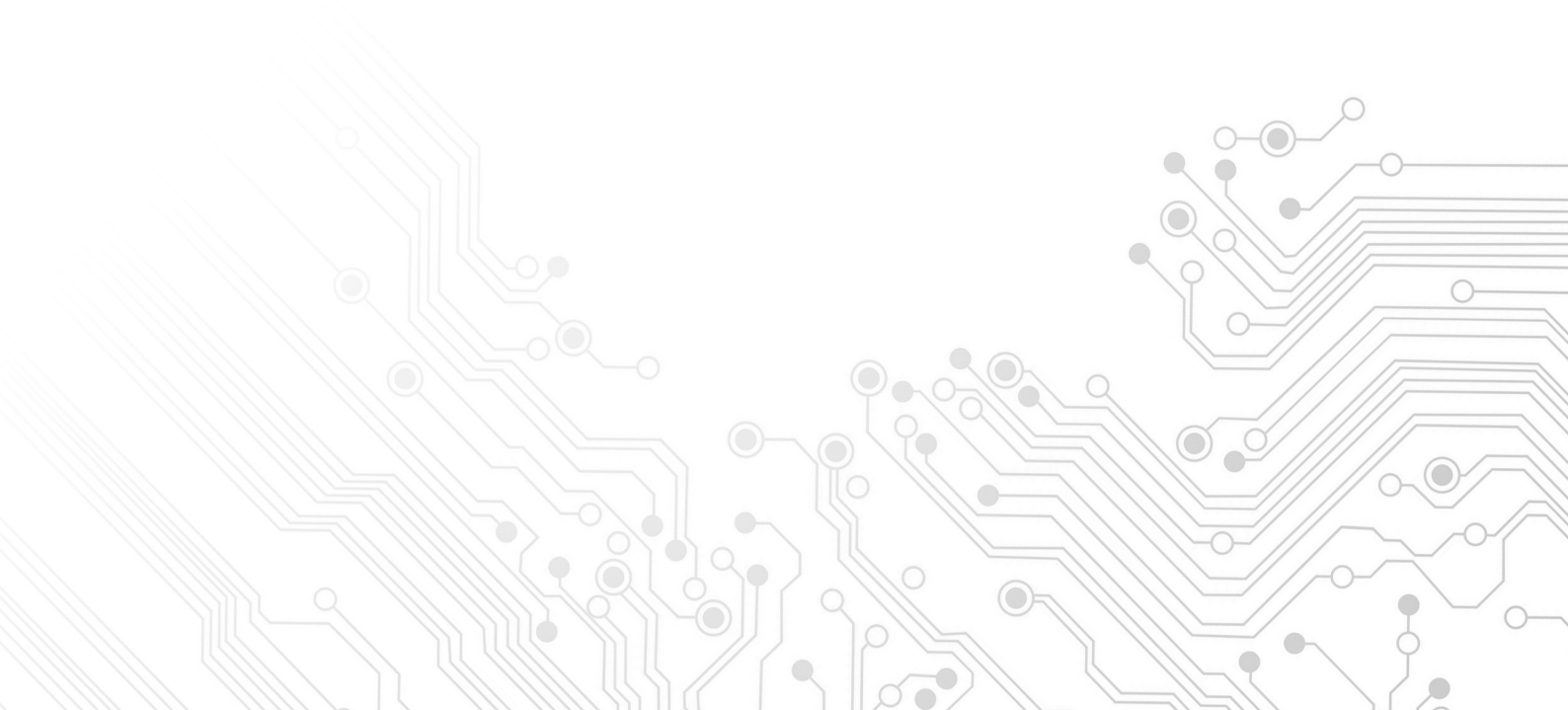
How does safekeeping work

A typical safekeeping cycle includes three phases: deposit, transfer, and withdrawal.

Deposit

When a client deposits digital asset into D3Ledger for safekeeping, the digital asset tokens are moved to a «depo» address, which is controlled by multi-signature of the D3Ledger partners. Then the tokens «freeze» untill the withdrawal.

Transfer

To track the transfer of ownership rights, the partners create the internal tokens in the D3 internal ledger. Internal tokens correspond to «frozen» tokens one-to-one. These internal tokens work as depository receipts. They give the owner the right to withdraw the corresponding amount of the digital asset tokens out of D3Ledger.

Once internal tokens are created, they can be easily transferred to other clients in D3Ledger. No transactions in the originating digital asset blockchain are required.

Withdrawal

A current owner of internal tokens can transfer the corresponding amount of the digital asset tokens out of D3Ledger. To achieve that the owner creates a withdrawal order in D3Ledger. Then the owner signs the order and has it signed by the agent.

When the validators have verified the withdrawal order, they create a transaction and sign it using multi-signature. The digital asset tokens are then transferred from «depo» address to the address specified by the client. The internal tokens are destroyed.

How does settlement of exchange trades work

An exchange can establish custody relationship with D3Ledger and allow its clients to trade funds kept in D3Ledger without the necessity to transfer them through public blockchains.

The trade scenario includes three phases: funds reservation, trading, and settlement.

Funds reservation
The client reserves funds on her/his accounts in D3Ledger for trading on the exchange.

Trading
The client trades on the exchange on the amount not exceeding the funds reserved.

Settlement
The client trades are transferred from the exchange to D3Ledger and posted as transactions. The reserved funds are released.

How does OTC settlement work

Trades done by D3Ledger clients on OTC market can be safely settled on D3Ledger without exposure to the principal risk.
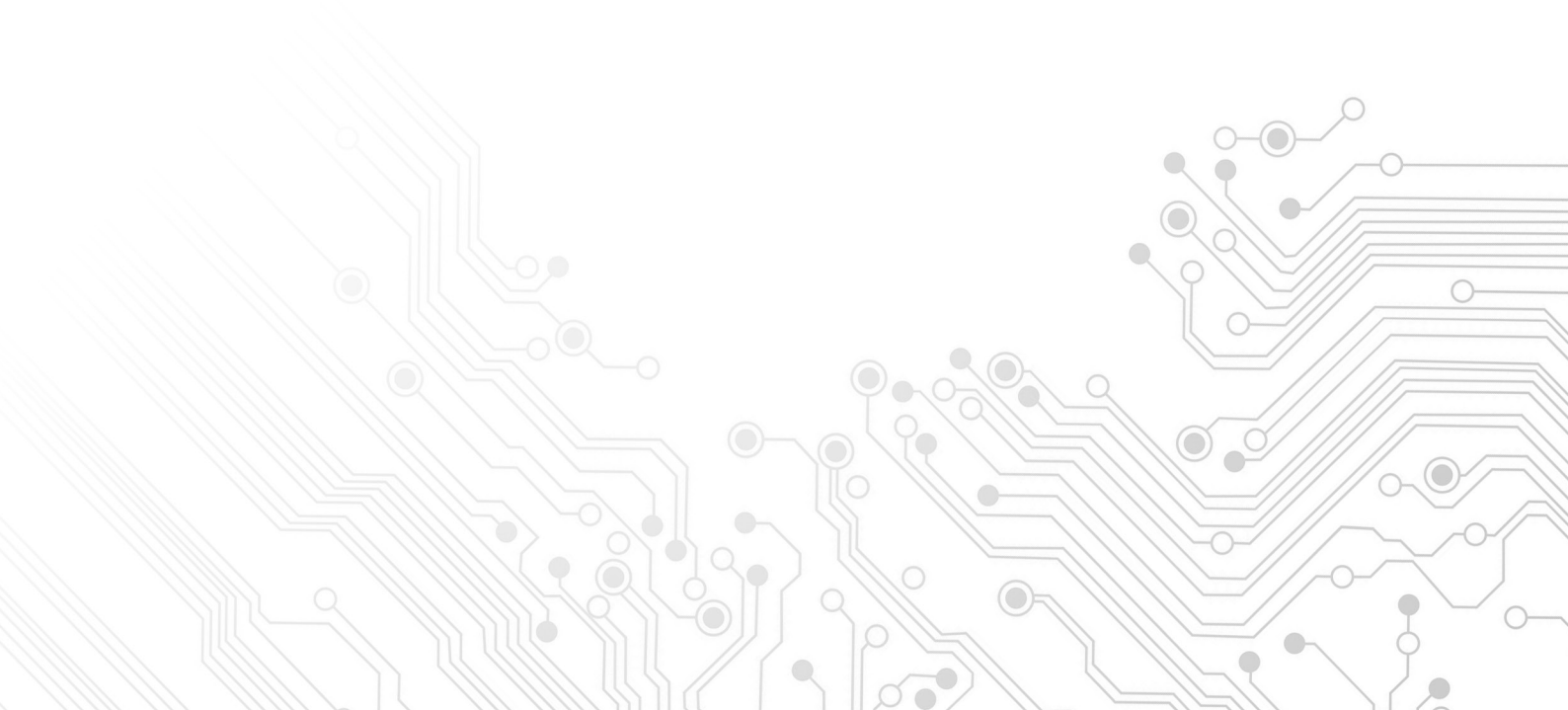
To achieve that one of the clients should capture the trade details as a transaction in D3Ledger. Once the other client approves the transaction, it is immediately settled.

D3Ledger guarantees that either both legs of the transaction are posted in the ledger or they both are rejected.

How does token generation work

Any client can register a new token type, then add or redeem as many tokens as needed. All these transactions have to be approved by the agent before they are posted to the ledger.

It is the responsibility of the partner to ensure all those transactions are compliant. Applicable laws and regulations may vary depending on jurisdiction and the underlying asset. D3Ledger doesn't provide any guidance in that and doesn't guarantee that all transactions are compliant. However, D3Ledger ensures that all transactions done by the issuer are approved by the partner, and the partner meets the requirements set by D3Ledger.

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