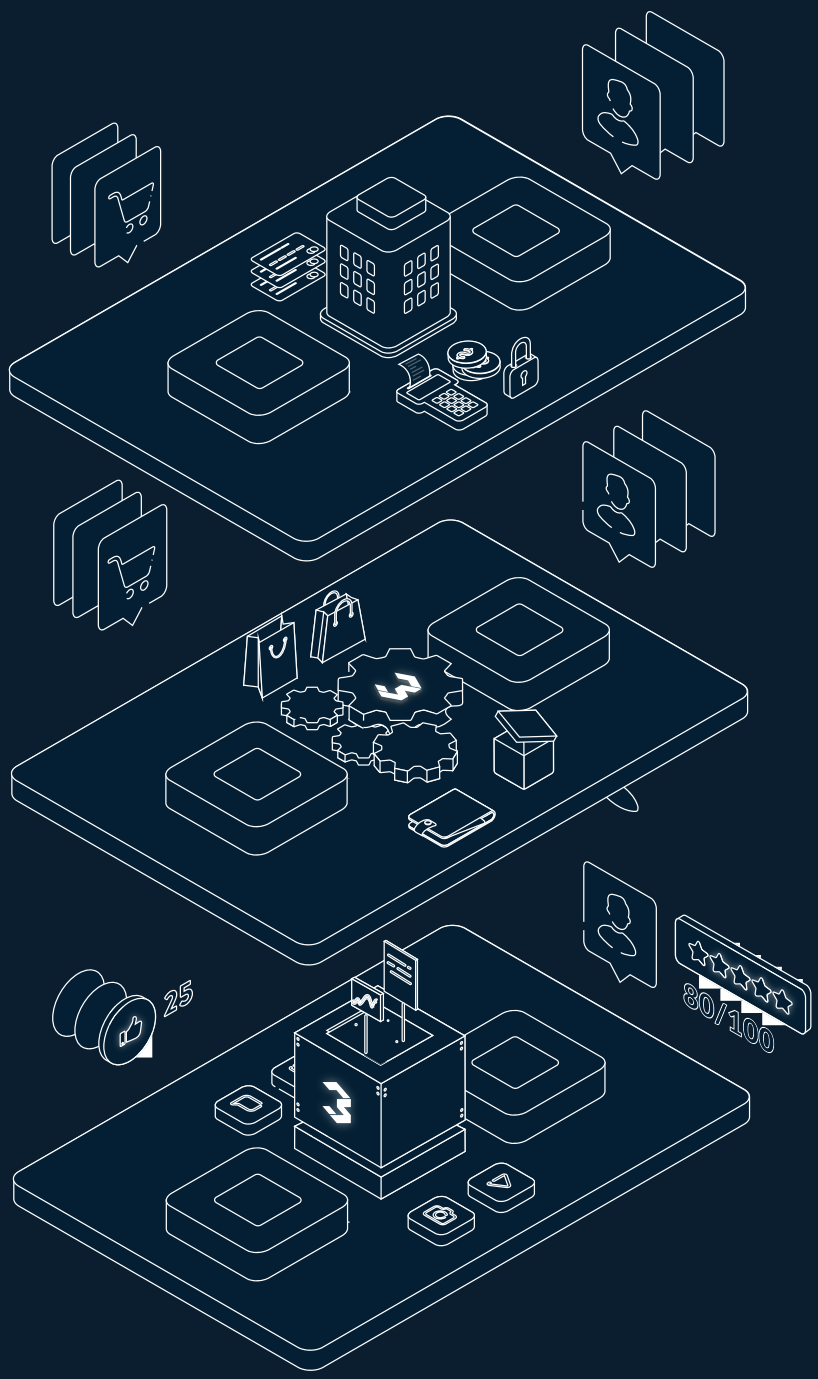


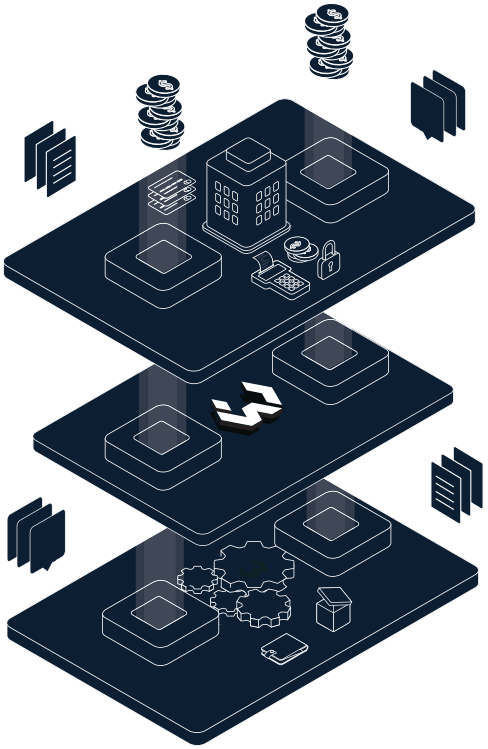
Rate3

INVESTOR PRIMER

FOR PUBLIC CIRCULATION

2018

Overview



PROTOCOL #1

TOKENIZATION PROTOCOL

A end-to-end protocol for tokenization of assets across both the Stellar and Ethereum networks

PROTOCOL #2

CROSS-CHAIN IDENTITY PROTOCOL

A protocol to create and manage a unified cross-chain identity

What is Tokenization?

Simply put, it is the process of converting rights to an asset into a digital token on a blockchain. There is great interest by financial intermediaries and technologists around the world to figure out how to move real-world assets onto blockchains to gain the advantages of digital currencies while keeping the characteristics of the underlying asset. Blockchain-compatible 'tokens' are issued in exchange for real world assets.

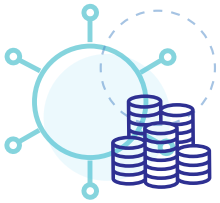
Tokenization allows for fractional ownership of the assets. For example if an apartment costs $200,000 and it is tokenized into 200,000 fractional token parts, buying 100,000 fractional token parts allows you to own 50% of the apartment.

Token issuers have to be trusted, since tokens are backed by asset (hence 'tokenized'). You can trust that you can redeem your real world asset at a future time, or that others will not spend your real world asset while they are already tokenized. At any point, only either the real world asset or the tokenized version should 'exist' and be tradable.

The bridge between the real world & the blockchain space

Tokenization

The two conditions required for an effective tokenization framework are:



LEGALLY COMPLIANT TOKENIZATION PROTOCOL

UNIFIED CROSS-CHAIN IDENTITY

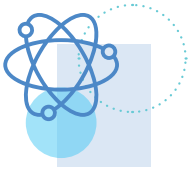
Why Tokenize?

INCREASED LIQUIDITY

Tokenized asset instantly becomes tradable as tokens are divisible up to 18 decimals which allows co-ownernership of a fraction of an asset.

GLOBALISATION

Tokenization creates smart assets embedded with features of voting, dividends distribution and fast transfers of ownership – greatly improving global trade.



PROGRAMMABILITY

Metadata added to a tokenized asset allows tracking of owners, location, stats and legal documents – facilitating global commerce and data transfer

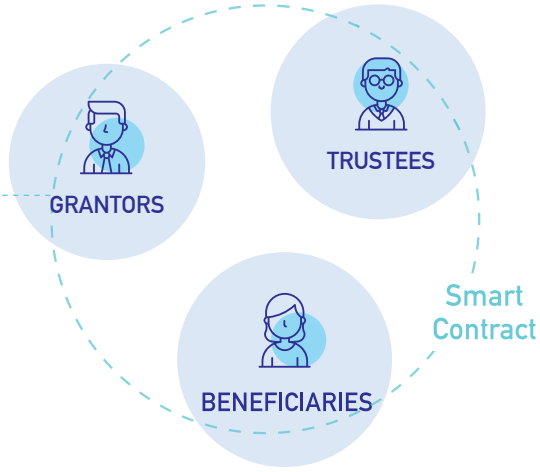
PROTOCOL #1

TOKENIZATION

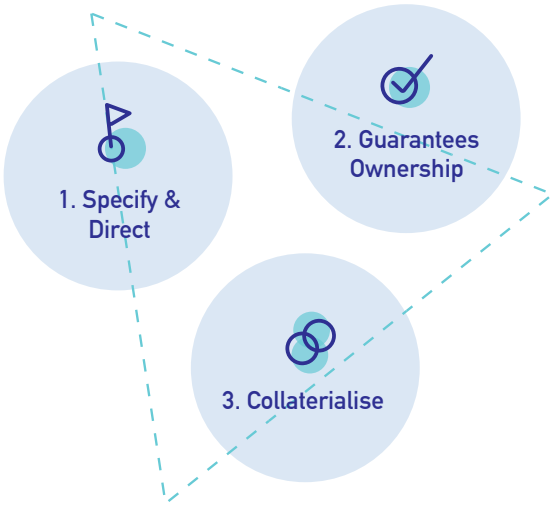
The Rate3 Tokenization Protocol is an end-to-end protocol for tokenization of assets across both the Ethereum and Stellar Networks.

WHAT ARE TRUSTS?

We believe that the key to legally-compliant tokenization is a **trust system** enforced by smart contracts, with various participants such as grantors, trustees, and beneficiaries.



LEGALLY-ENFORCEABLE SMART CONTRACTS

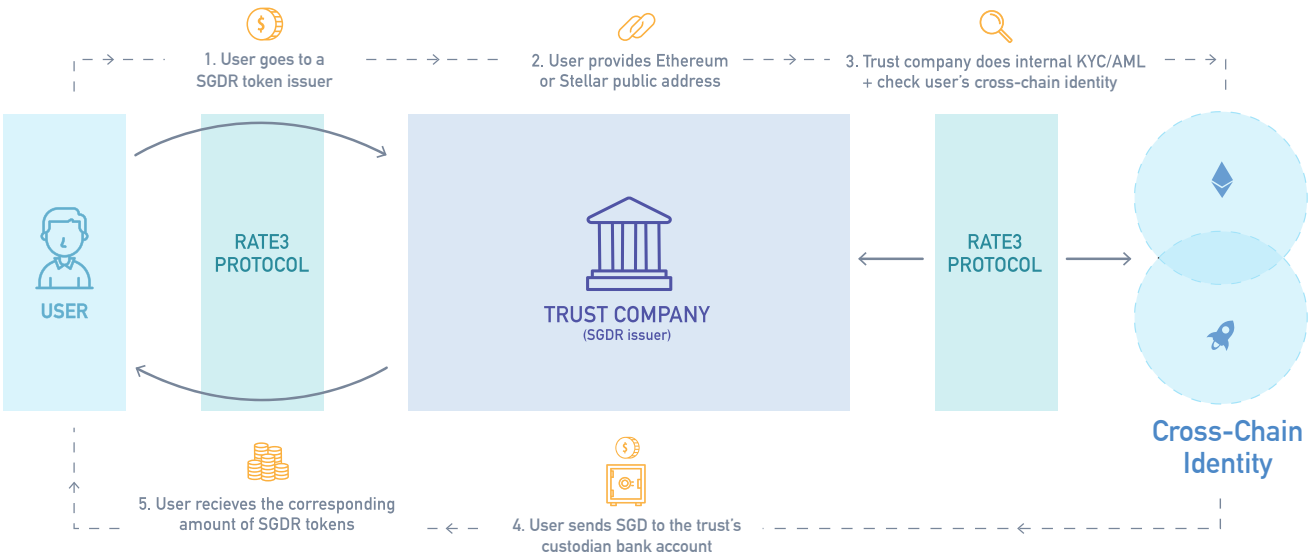


1. Specifies how smart contracts direct trustees to manage assets

2. Guarantees legally-recognized ownership rights to through trusts

3. Collaterialise underlying assets through staking

How It Works?



EXAMPLE OF TOKENIZATION PROCESS (SINGAPORE-DOLLARS BACKED STABLECOIN)

1. User goes to a SGDR token issuer.

2. The user provides his or her Ethereum or Stellar public address

3. Trust company does internal KYC/ AML checks, while also checking the user's cross-chain identity

4. Once user is approved; user sends physical SGD assets to the trust's custodian bank account and the Rate3 smart contract mints an equivalent amount of SGDR tokens.

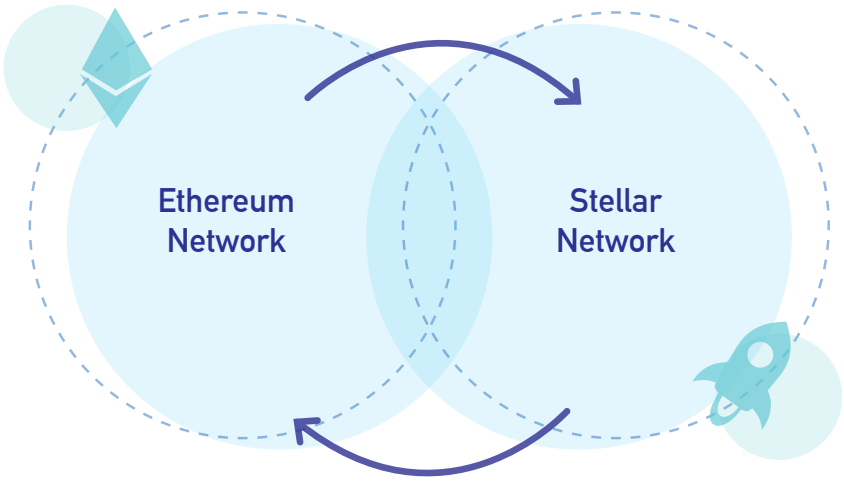
5. User receives minted SGDR tokens in their Stellar/ Ethereum address.

Through using independant trusts, Rate3 does not touch the underlying assets at all.

WHY ETHEREUM–STELLAR CROSS CHAIN?

Ethereum	Stellar
Turing-complete smart contracts, allowing for more complex use cases	Relatively low and fixed transaction fee
Strong and established ecosystem, with existing blockchain companies providing other services	In-built pathfinding makes converting between different assets smoother
Ideal for more complex use cases	3-5 seconds confirmation time
	Ideal for payments / high-velocity assets

NON-EXCLUSIVITY OF TOKENS TO A CERTAIN NETWORK



Tokens can be issued and easily swapped across both networks depending on the use cases.

PROTOCOL #2

CROSS-CHAIN IDENTITY

A protocol to create and manage a unified cross-chain identity

AVERAGE COMPLIANCE COST
$60M
PER YEAR

COMPANIES SPENDING
$500M
ON COMPLIANCE

AVERAGE
22%
ONBOARDING TIME

The current KYC/AML process is costly, laborious, and duplicative with 2 main challenges:

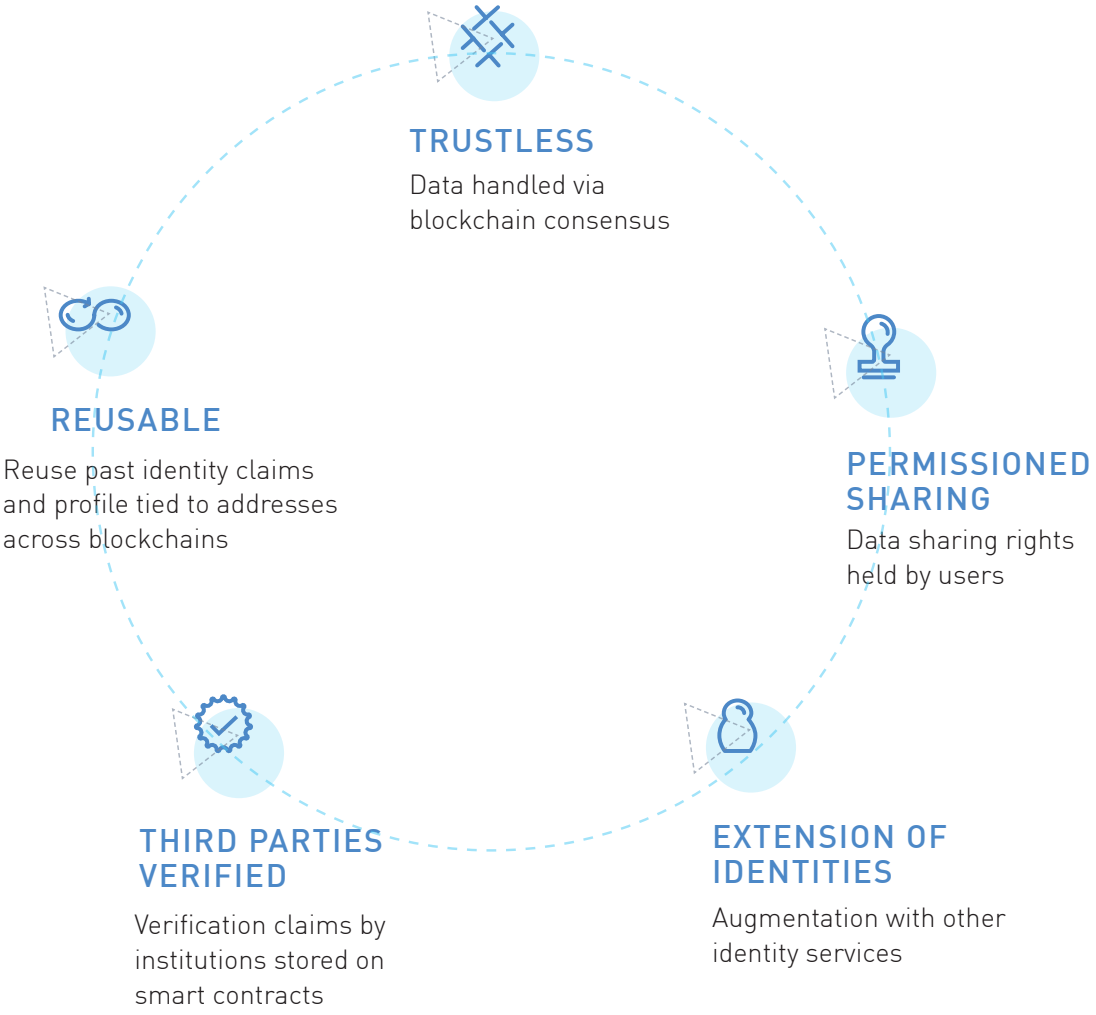
CHALLENGE 1: FRAGMENTED KYC/AML PROCESS

Different institutions have their own methods for KYC/AML and do not share their data.

CHALLENGE 2: MAINTAINING USERS' PRIVACY

Sensitive personal data is surrendered to institutions and users have to trust that they are compliant.

PROPERTIES OF AN IDEAL CROSS-CHAIN IDENTITY



An ideal cross-chain identity requires 2 key parts:

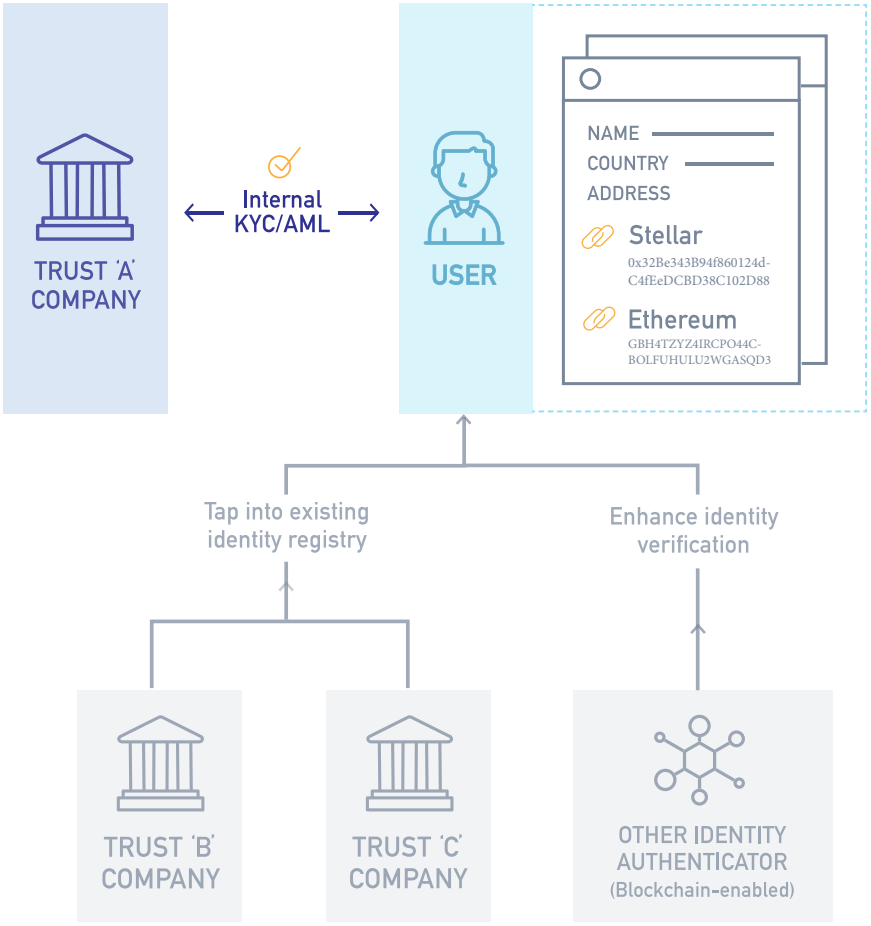
PART 1

A shared identity registry

PART 2

An interoperable cross-chain identity

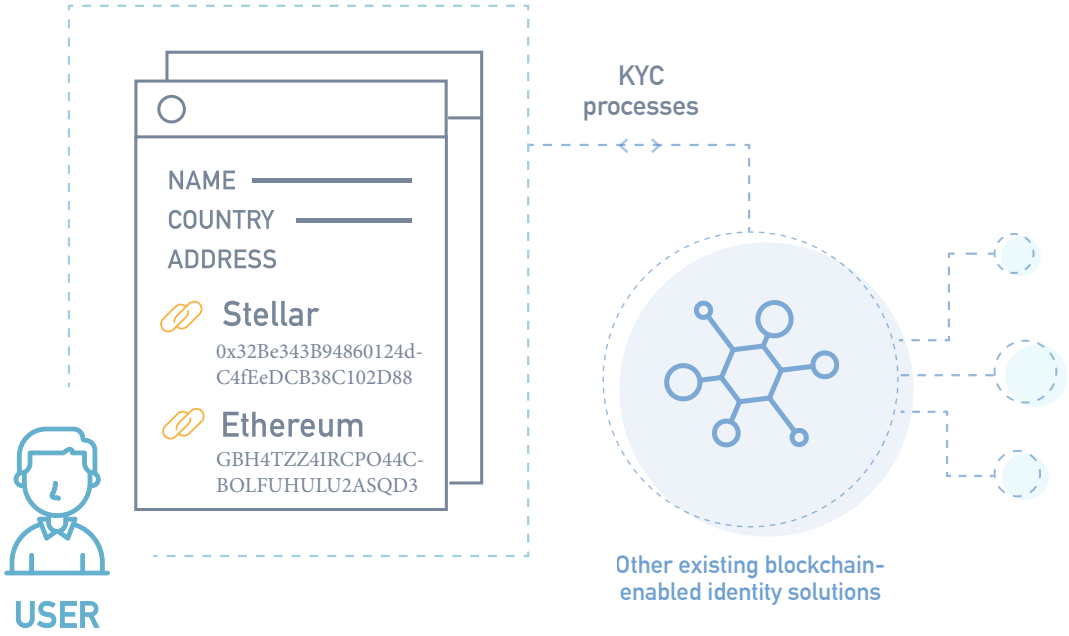
Part 1:
Shared Identity Registry



The Rate3 Identity Protocol provides a shared identity framework for KYC/AML and other compliance checks.

E.g. When user passed KYC/AML checks at Trust 'A' Company; results are stored in individual identity registry (smart contract). Trust 'B' Company can then directly tap on user's existing identity registry to complete KYC/AML process.

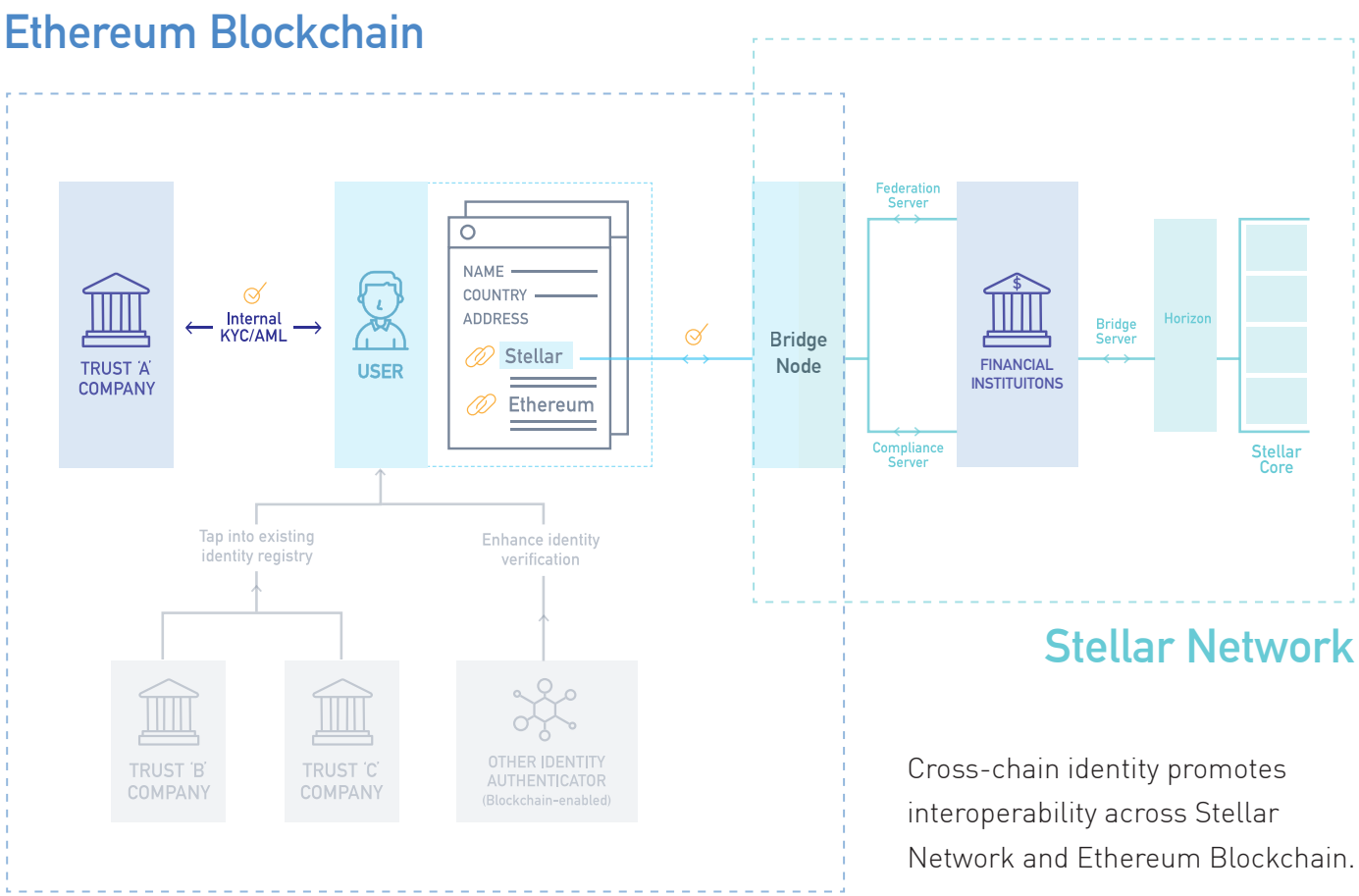
TAPPING ON OTHER ETHEREUM-BASED IDENTITY ATTESTORS



Individual's identity can be further enhanced by tapping on existing on-chain identity solutions. For instance, identity providers like Bloom can provide a decentralised Ethereum-based credit score.

This shared identity registry will greatly help to reduce onboarding time/ effort for other trust companies who wish to tap on these data.

Part 2:
Cross-Chain Identity



Cross-chain identity promotes interoperability across Stellar Network and Ethereum Blockchain.

An ideal cross-chain identity consists of the following elements:

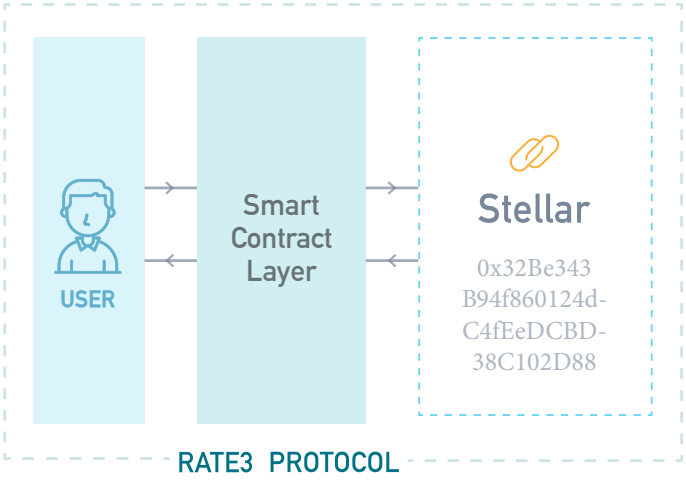
PART 2.1

Link different blockchain addresses to a single identity

PART 2.2

Integration with blockchains' protocols

2.1 LINK DIFFERENT BLOCKCHAIN ADDRESSES TO A SINGLE IDENTITY

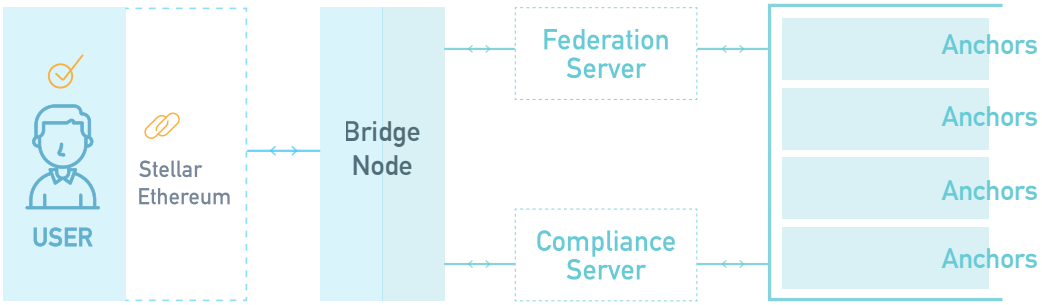


The Rate3 Identity Protocol provides a smart contract layer to link user's Stellar address with his identity in 2 steps:

1. User uses blockchain address to make a claim with his identity record
2. User signs off with registered Ethereum address to verify claim.

Single identity can store multiple addresses.

2.2 INTEGRATION WITH BLOCKCHAINS' PROTOCOL



In Stellar Network; Bridge node allows for easy integration with existing Stellar's infrastructure, such as the Federation and Compliance protocols.

The protocols allow financial institutions to know who their customers are sending and receiving money from.

Bridge node acts as a decentralized service – Reading data from Ethereum smart contracts and formating response according to the two Stellar protocols.

Anchors and institutions on Stellar Network can check user's Stellar address on Rate3 ecosystem and request for KYC information.

Smart Contracts Layer

Consisting of both Ethereum and Stellar smart contracts, Rate3 Protocol serve different purposes:

MINTING AND BURNING OF TOKENS

Allows token issuers to mint and burn tokens when assets are being sent/ withdrawn from custodian

REGISTRY TO STORE USER' KYC INFORMATION

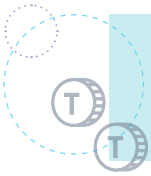
Stores KYC information for users who have received tokens

CROSS-CHAIN IDENTITY

Allows users to map identity information to both Ethereum and Stellar addresses

RTE STAKING

Staking contract that allows RTE staking and withdraw dividends



STELLAR-ETHEREUM TOKEN SWAP

Allows tokenized assets to exist as Stellar asset or as Ethereum token

STORE INFORMATION ON TOKENISED ASSETS

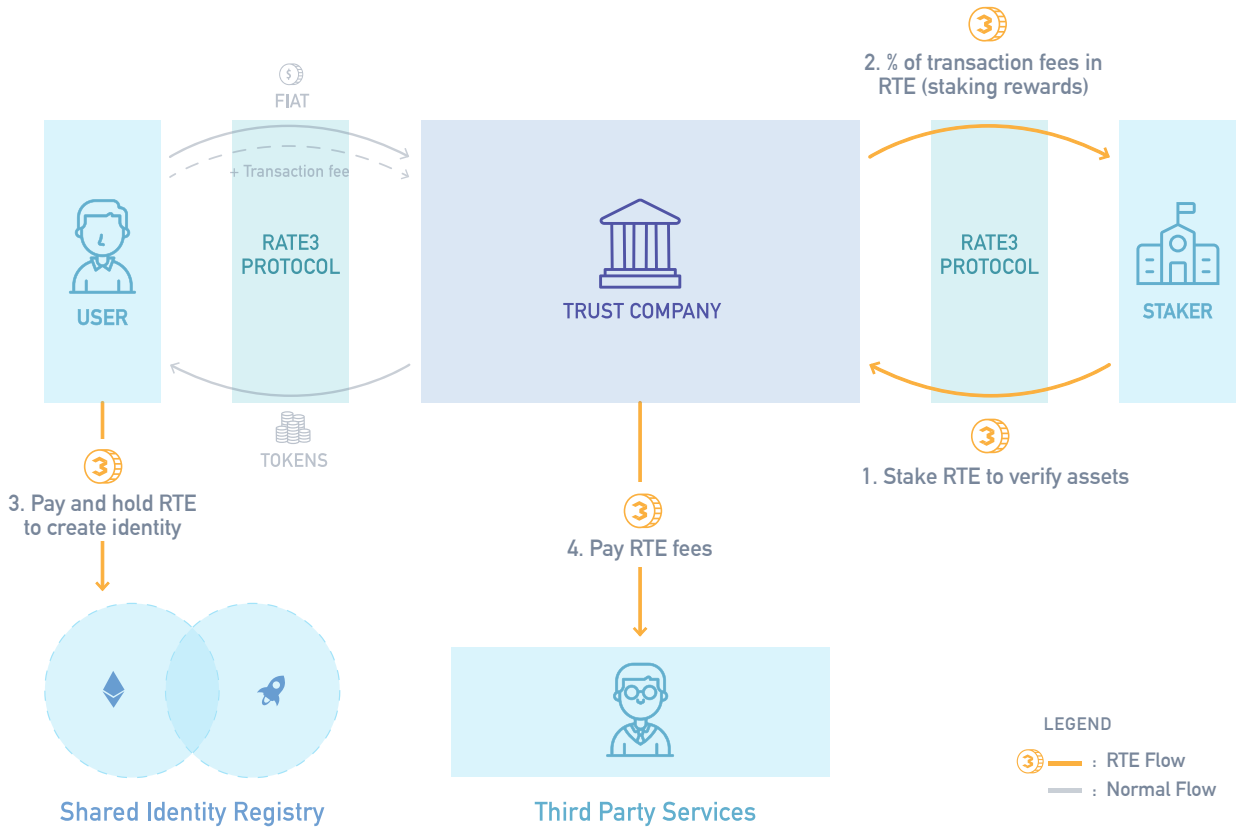
Important information on tokenized assets are encrypted and stored on-chain. Eg. Audit reports and legal documents

RTE Token Economy

The RTE token – A utility token required for work to be completed on the Rate3 ecosystem. It also serves to incentivize good behaviour and punish bad actors.

Rate3 aims to provide a standardised protocol and smart contract layer for different trust companies in various jurisdictions to use.

UTILITY OF RTE TOKENS



1. Asset Staking
Collateral for tokenized assets

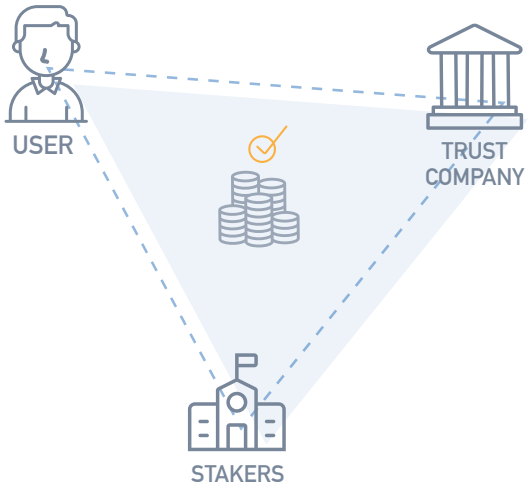
2. Transaction fees for key services:
Token swaps, minting and burning tokens

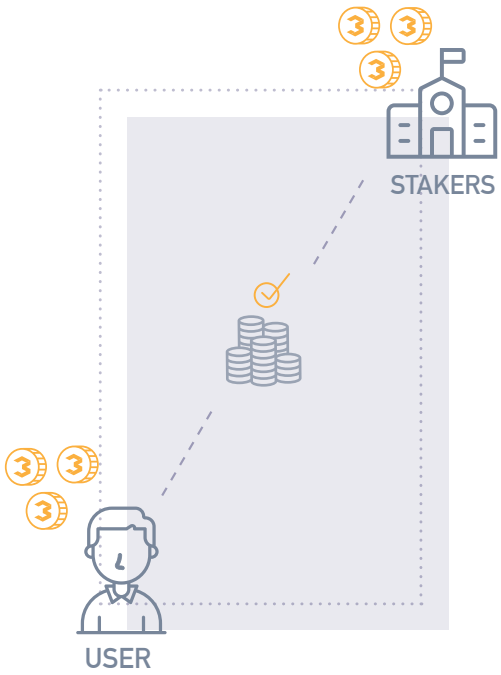
3. Identity Creation and Staking:
To create and hold an identity

4. Incentives for third-party users:
E.g. Asset evaluation, auditing, and legal verification

UTILITY #1: ASSET VERIFICATION THROUGH ASSET STAKING

Staking is key to asset verification and building up trust in the system. Although regular audits are conducted on underlying assets, there is a possibility that it will be lost if trust company misappropriated funds or when custodians bank fail. A robust staking system takes care of these "black swan" events.



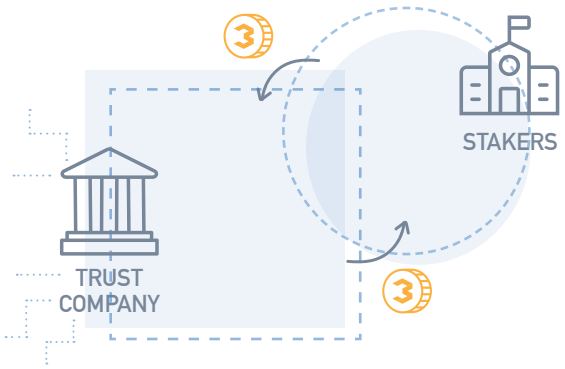


WHY WILL ANYONE CHOOSE TO STAKE?

Staking provides collateral-backed review of the tokenized underlying assets, increasing trust amongst token holders who wishes to buy.

RTE stakers evaluate the risks of tokenizer and the underlying assets (or delegate to another third-party), and take on these liabilities by staking their own RTE tokens.

In return for these liabilities, they earn transaction fees based on their stake. For e.g. Party A stake 800,000 RTE and party B stake 200,000 RTE on an asset, party A recieves 80% and party B recieves 20% of transaction fees generated.

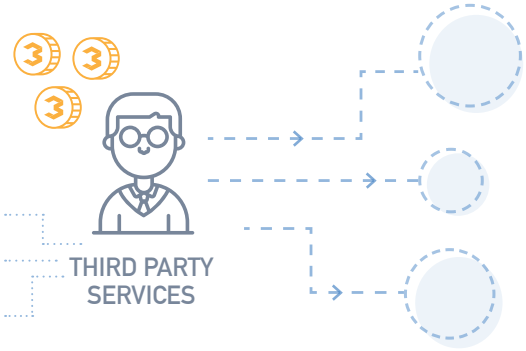


UTILITY #2: TRANSACTION FEES

Transaction fees are paid for each key action. When token holders initiate token swap with trust company; they pay RTE tokens as transaction fee. Likewise, for minting and burning of tokens, the trust company will pay in RTE tokens to stakers, according to the tokenized asset value.

UTILITY #3: IDENTITY CREATION AND STAKING

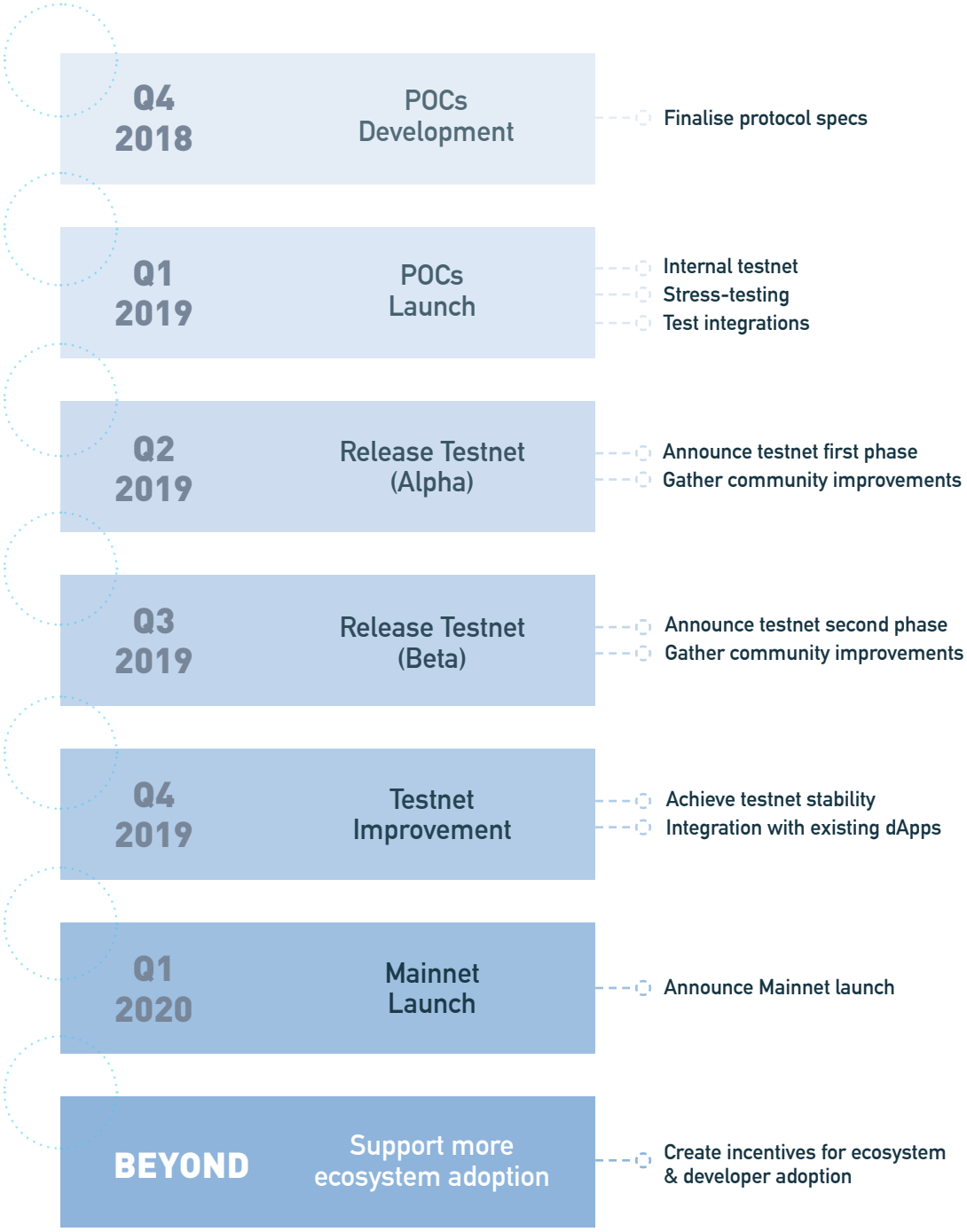
Users pay and hold a small amount of RTE tokens for identity creation. This reduces bad actors through identity staking and prevent spam creation of accounts. In the future, third-parties outside of Rate3 ecosystem might pay RTE fees to access these information.



UTILITY #4: INCENTIVES FOR THIRD-PARTY SERVICE PROVIDERS

Third-party service providers, such as audit firms, legal services, custodian banks or even KYC verification services are incentivized through RTE tokens for providing services and adding value to the ecosystem.

Roadmap


Q4 2018
POCs Development
Finalise protocol specs
Q1 2019
POCs Launch
Internal testnet
Stress-testing
Test integrations
Q2 2019
Release Testnet (Alpha)
Announce testnet first phase
Gather community improvements
Q3 2019
Release Testnet (Beta)
Announce testnet second phase
Gather community improvements
Q4 2019
Testnet Improvement
Achieve testnet stability
Integration with existing dApps
Q1 2020
Mainnet Launch
Announce Mainnet launch
BEYOND
Support more ecosystem adoption
Create incentives for ecosystem & developer adoption

Investors

matrix PARTNERS CHINA 经纬中国
FENBUSHI CAPITAL
NODE CAPITAL
LEDGER CAPITAL
Kenetic
AlphaCoin Fund
ALTONOMY
SIGNUM CAPITAL
SPARTAN
kyber. network
CollinStar 科银资本
双花资本
INSIGNIA VENTURES PARTNERS
Nirvana Capital
Current Capital
BKFUND
LEEK ICO
LONGHASH
Jun Capital Partners
哈希资本 Hash Capital
Blockchain Ventures
Reflexion
UniValues Associates
ALPHA JWC VENTURES

Partners

PayPal
IOST

Exchanges

Bibox
Coinrail
FCOIN
abcc
DEx.top
DDEX
BitForex

Vision

The tokenized future is one that Rate3 envision and enable. We are committed to helping enterprises create and connect a tokenized world through our tokenization and identity protocols. Our core philosophy of a tokenized world and everything it entails, underpins our roadmap and all that we want to achieve. Rate3 wants to – and is clearly poised to – be the bridge between enterprises today and the tokenized world. We believe that assets can be tokenized in a legally-compliant, interoperable and scalable way, so they will become widely liquid, usable, tradable and accepted for as many varied use cases as possible.

This requires a tremendous effort. It requires a fundamental paradigm shift in how society views ownership, how government and financial regulators view the legality of smart contracts, and how legal institutions and instruments will evolve to fit these demands. We are committed to collaborating with everyone to work towards this grand vision of a unified tokenized world - one that is more transparent, accessible and inclusive.

We look forward to shaping to creating and connecting the tokenized world together.