

Real Estate Tokenization Platform

Functionality

This document includes a description of user stories for the Real Estate Tokenization Platform and describes roles and actions of both users and administrators in the system. A detailed description of user stories with acceptance criteria can be found in the full specification, [TokenD functionality in User Stories \(EN\)](#).

Note: TokenD is a white-label framework which is used as an underlying architectural solution for the described real estate platform to have it built fast (6 weeks) and for a price generally decreased by a factor of three. Brief description of the terms and functionality can be found in the following [two-pager document](#).

Roles

The set of roles available in the system is configured during system deployment. By default, the following roles are available:

- Platform owner. *Note: technically this role can perform other roles such as the role of a platform administrator*
- Administrators
 - Platform administrator
- Users
 - Unverified
 - Verified
 - Corporate

User and administrator roles can be configured depending on the system's goals and business processes. For example, the platform administrator role can be split into and be performed by different administrators:

- KYC/AML administrator
- Fees administrator
- Limits administrator
- Trade administrator
- Opportunity administrator



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- Security administrator
- Issuance administrator

In this case, each administrator role will only have part of the super administrator's abilities. User roles can also have extended configuration depending on the business processes.

Requirements

- Registration and log-in
- Deposit and withdrawal
- Tokenized assets lifecycle management
- Transactions and operation management
- Identity control and management
- Account access and management
- Application requirements
- Ledger synchronization

User Stories

Note: in the following examples, TokenD is being used as a brand of a platform, but that's only for demo purposes. In reality, TokenD is not the platform but rather the framework with ready-made toolsets to build your own branded platform.

Registration and log-in requirements

User

- As a **user**, I want to **sign up to the platform** by entering an email address and password.
- As a **user**, I want to **confirm registration** by email address.
- As a **user**, I want to **sign in to the platform** by entering an email address and password.

Administrator

- As an **administrator**, I want to be able to **sign up to the platform**.



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- As an **administrator**, I want to be able to **sign in to the platform** by entering an email address, password, and confirmation through 2FA code.

The screenshot shows the Tokend Sign In interface. At the top left is the Tokend logo. Below it, the title 'Sign In' is centered. There are two input fields: 'Email' and 'Password'. The Password field has a toggle icon (an eye) to its right. Below the input fields is a blue 'Sign In' button. At the bottom, there are two links: 'Don't have an account? [Register now](#)' and 'Forgot your password? [Recover it](#)'.

Deposit and withdrawal requirements

Deposit

Verified user

- As a **verified user**, I want to be able to **select asset to deposit** from the list of those available for deposit.
- As a **verified user**, I want to be able to **view asset deposit address** both **as text** and **as QR code**.
- As a **verified user**, I want to be able to **deposit cryptocurrencies and digital currencies** on the platform **from my accounts / addresses of other accounting systems**.
- As a **verified user**, I want to be able to **deposit fiat currencies** on the platform **using a credit card or bank transfer**.



Corporate user

- As a **corporate user**, I want to be able to **select an asset to deposit** from the list of ones available for depositing.
- As a **corporate user**, I want to be able to **view asset deposit address** both **as text** and **as QR code**.
- As a **corporate user**, I want to be able to **deposit cryptocurrencies and digital currencies** on the platform **from my accounts / my addresses in other accounting systems**.
- As a **corporate user**, I want to be able to **deposit fiat currencies** on the platform **using a credit card or bank transfer**.

Withdraw

Verified user

- As a **verified user**, I want to be able to **withdraw cryptocurrencies and digital currencies** on the platform **to the external address / account**.
- As **verified user**, I want to be able to **fully manage the withdrawal details of cryptocurrencies and digital currencies** as well as to **access information related to withdrawals**.
- As a **corporate user**, I want to be able to **conduct the withdrawal of fiat currencies** from the platform **to a credit card or bank account**.

Corporate user

- As a **corporate user**, I want to be able to **withdraw cryptocurrencies and digital currencies** on the platform **to external address / account**.
- As **corporate user**, I want to be able to **fully manage the withdrawal details of cryptocurrencies and digital currencies** as well as to **access information related to withdrawals**.



- As a **corporate user**, I want to be able to **conduct the withdrawal of fiat currencies** from the platform **to a credit card or bank account**.

Tokenized assets lifecycle management requirements

Real estate tokenization

Verified user


- As a **verified user**, I want to **view the list of ongoing opportunities**.

Opportunities

investor@tokend.io
General account

Investable opportunities


Live



TokenD Apartment
Project PresentationThe Josef-Ruston-Gasse 28 project is a new building project in 1210 Vienna.

0.01% funded
200 USD invested
18 days to close


Buy 1,000 TDA for 2,000,000 USD



TokenD Estate
SAMARA SUITES, Jakarta Location Jakarta, Indonesia Population: 31.7 m (Greater Jakarta) GDP growth: 6.3% Sustainability Certification EDGE (39% energy savings), EcoTool Type Residential

0% funded
0 USD invested
17 days to close


Buy 1,000 TDE for 2,000,000 USD



Green hills
Hua Yuan is a low-density residential project with an attractive green outdoor space located in the New Area of Peixian, five minutes away from the traditional urban downtown area by car. Peixian is located in the middle of the Shanghai-Beijing high-speed

0% funded
0 USD invested
7 days to close

Buy 1,000 3 for 2,000,000 USD



Cool Shapes
Hamilton May is pleased to present a luxurious housing estate in the exclusive part of Wilanów. This modern project, is located on a 2-hectare plot and consists of 55 residences developed with the highest quality materials.

0% funded
22.000002 USD invested
114 days to close

Buy 10,000,000 CS for 30,000,000 USD

- As a **verified user**, I want to be able to **view the opportunities details** when they are selected.



Opportunity details

investor@tokend.io
General account

Opportunities list Campaign

Invest

TokenD Estate (TDE)

SAMARA SUITES, Jakarta Location Jakarta, Indonesia Population: 31.7 m (Greater Jakarta) GDP growth: 6.3% Sustainability Certification EDGE (39% energy savings), EcoTool Type Residential

View details



Samara Suites is part of a mixed-use complex with apartments, retail and an F&B podium in the golden triangle CBD of Jakarta. The apartments are targeted at mid-level managers working in the surrounding CBD. The property is strategically located in the central business district and is well accessible by the near-by bus and Light Railway Transit (LRT).

0 USD

0% funded

17

days to closed

Invest

- As a **verified user**, I want to be able to **invest** in crowdfunding campaigns.
- As a **verified user**, I want to be able to **settle bond opportunity assets** upon the maturity date.
- As a **verified user**, I want to be able to **participate in revenue sharing via revenue sharing opportunities**.

Corporate user

- As a **corporate user**, I want to be able to **issue tokenized assets** through real estate investment opportunities on the platform.
- As a **corporate user**, I want to be able to **create real estate investment opportunities as bonds** (fixed interest rate with redemption on the maturity date).



Create

X

1. Provide opportunity information

2. Investment information

3. Marketing information

Bond

Fixed interest with redemption on maturity date.

Revenue

Variable revenue sharing

Loan

Flexible interest rates and pay off schedule

Opportunity name

Opportunity unique code

Maturity Date

Annual return in percents

Issuance amount

Upload terms

↑

Drag a file here or click to browse

JPG, PNG, PDF, max 5 mb.

Next

- As a **corporate user**, I want to be able to **create real estate investment opportunities on the revenue sharing basis** (fixed interest rate with redemption on the maturity date).



Create

X

1. Provide opportunity information

2. Investment information

3. Marketing information

Bond

Fixed interest with redemption on maturity date.

Revenue

Variable revenue sharing

Loan

Flexible interest rates and pay off schedule

Opportunity name

Opportunity unique code

Expected revenue per year in percents

Issuance amount

Upload terms

↑

Drag a file here or click to browse

JPG, PNG, PDF, max 5 mb.

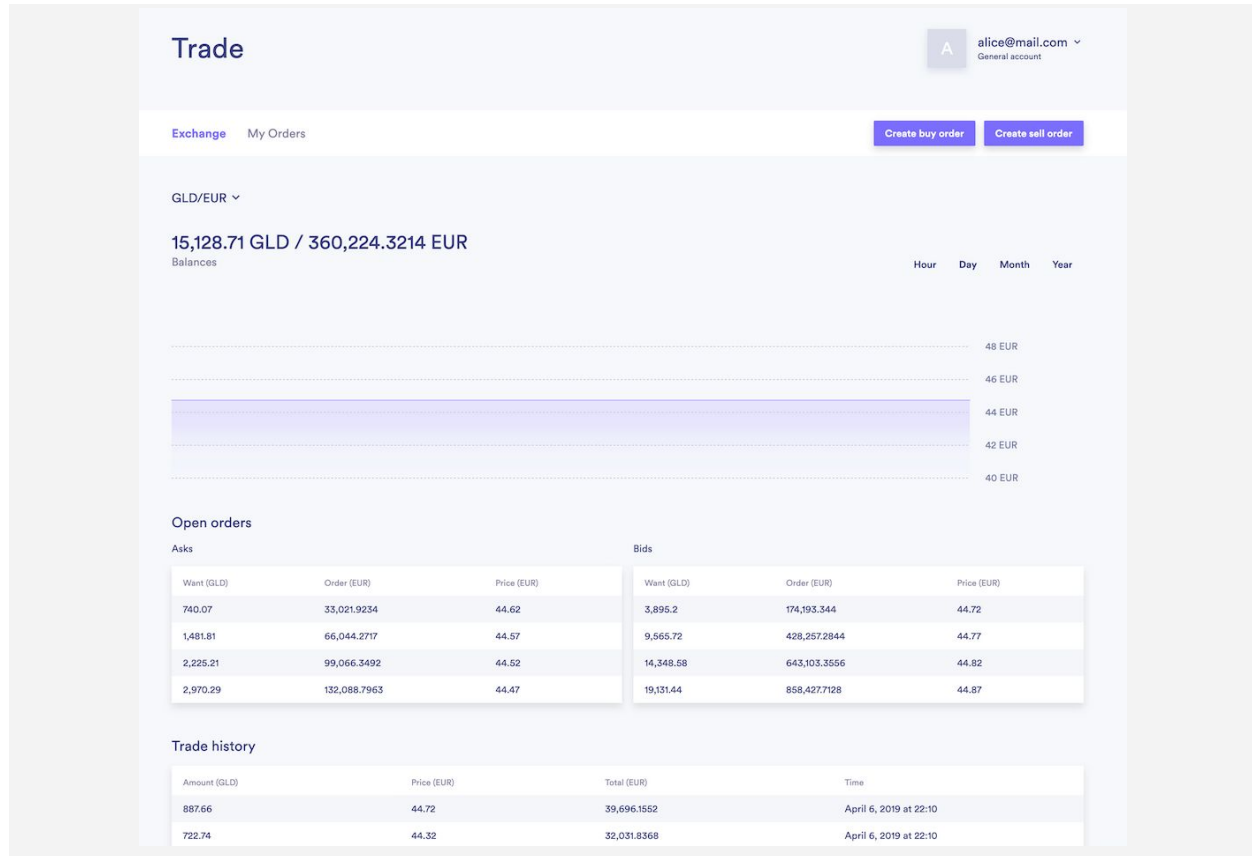
Next

- As a **corporate user**, I want to be able to **manage setup parameters**.
- As a **corporate user**, I want to be able to **configure the price of assets sold during the real estate investment opportunity in the selected assets**.
- As a **corporate user**, I want to be able to **submit information about the real estate opportunity I create** on the platform
- As a **corporate user**, I want to be able to **submit information about what I back my assets by**.
- As a **corporate user**, I want to be able to **make dividend payouts** for bond investment opportunities upon the maturity date.



- As a **corporate user**, I want to be able to **perform revenue sharing** via revenue sharing investment opportunities.

Tokenized assets trading



Verified user

- As a **verified user**, I want to be able to **exchange one asset for another** without risking of losing the first one.
- As a **verified user**, I want to be able **to trade assets** within the platform.
- As a **verified user**, I want to be able to **create orders** for buying and selling assets.
- As a **verified user**, I want to be able to **manage orders**.
- As a **verified user**, I want to be able to **sell / buy assets for cryptocurrencies and digital currencies**.



Trade

A **alice@mail.com** ▾
General account

Exchange My Orders

Create buy order

Create sell order

GLD/USD ▾

15,128.71 GLD / 37,551.884 USD

Balances

Hour Day Month Year



Open orders

Asks

| Want (GLD) | Order (USD) | Price (USD) |
|------------|--------------|-------------|
| 17,151.8 | 55,228.796 | 3.22 |
| 34,410.46 | 110,457.5766 | 3.21 |
| 51,776.99 | 165,686.368 | 3.2 |
| 69,252.41 | 220,915.1879 | 3.19 |

Bids

| Want (GLD) | Order (USD) | Price (USD) |
|------------|-------------|-------------|
| 4,738.47 | 15,352.6428 | 3.24 |
| 9,476.95 | 30,800.0875 | 3.25 |
| 14,215.43 | 46,342.3018 | 3.26 |
| 18,953.91 | 61,979.2857 | 3.27 |

Trade history

| Amount (GLD) | Price (USD) | Total (USD) | Time |
|--------------|-------------|--------------|------------------------|
| 20,454.26 | 3.23 | 66,067.2598 | April 6, 2019 at 22:10 |
| 13,636.17 | 3.22 | 43,908.4674 | April 6, 2019 at 22:10 |
| 6,819.08 | 3.21 | 21,886.0368 | April 6, 2019 at 22:10 |
| 34,468.67 | 3.15 | 108,576.3105 | April 6, 2019 at 22:10 |
| 17,179.79 | 3.16 | 54,288.1364 | April 6, 2019 at 22:09 |
| 7,014.83 | 3.19 | 22,377.3077 | April 6, 2019 at 22:09 |
| 3,507.41 | 3.18 | 11,153.5638 | April 6, 2019 at 22:09 |
| 8,846.47 | 3.16 | 27,954.8462 | April 6, 2019 at 22:09 |
| 4,423.23 | 3.15 | 13,933.1745 | April 6, 2019 at 22:08 |
| 19,792.54 | 3.12 | 61,752.7248 | April 6, 2019 at 22:08 |
| 13,195.03 | 3.11 | 41,036.5433 | April 6, 2019 at 22:08 |
| 6,597.51 | 3.1 | 20,452.281 | April 6, 2019 at 22:07 |

More

Corporate user

- As a **verified user**, I want to be able to **exchange one asset for another** without the risk of losing the first one.



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- As a **verified user**, I want to be able **to trade assets** within the platform.
- As a **verified user**, I want to be able to **create orders** for buying and selling assets.
- As a **verified user**, I want to be able to **manage orders**.
- As a **verified user**, I want to be able to **sell / buy assets for cryptocurrencies and digital currencies**.



Trade

corporate@mail.com
Corporate account

Exchange My Orders

Create buy order

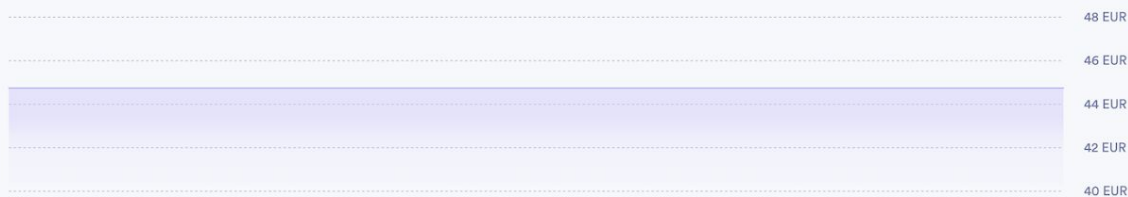
Create sell order

GLD/EUR ▾

17.41 GLD / 0 EUR

Balances

Hour Day Month Year



Open orders

Asks

| Want (GLD) | Order (EUR) | Price (EUR) |
|------------|--------------|-------------|
| 740.07 | 33,021.9234 | 44.62 |
| 1,481.81 | 66,044.2717 | 44.57 |
| 2,225.21 | 99,066.3492 | 44.52 |
| 2,970.29 | 132,088.7963 | 44.47 |

Bids

| Want (GLD) | Order (EUR) | Price (EUR) |
|------------|--------------|-------------|
| 3,895.2 | 174,193.344 | 44.72 |
| 9,565.72 | 428,257.2844 | 44.77 |
| 14,348.58 | 643,103.3556 | 44.82 |
| 19,131.44 | 858,427.7128 | 44.87 |

Trade history

| Amount (GLD) | Price (EUR) | Total (EUR) | Time |
|--------------|-------------|--------------|------------------------|
| 887.66 | 44.72 | 39,696.1552 | April 6, 2019 at 22:10 |
| 722.74 | 44.32 | 32,031.8368 | April 6, 2019 at 22:10 |
| 518.75 | 44.42 | 23,042.875 | April 6, 2019 at 22:10 |
| 1,116.62 | 44.42 | 49,600.2604 | April 6, 2019 at 22:10 |
| 642.82 | 44.33 | 28,496.2106 | April 6, 2019 at 22:09 |
| 1,496.52 | 44.12 | 66,026.4624 | April 6, 2019 at 22:09 |
| 2,468.04 | 43.92 | 108,396.3168 | April 6, 2019 at 22:09 |
| 1,072.4 | 44.12 | 47,314.288 | April 6, 2019 at 22:08 |
| 1,643.49 | 43.97 | 72,264.2553 | April 6, 2019 at 22:08 |
| 820.81 | 44.02 | 36,132.0562 | April 6, 2019 at 22:08 |
| 393.02 | 43.75 | 17,194.625 | April 6, 2019 at 22:08 |
| 1,572.08 | 43.75 | 68,778.5 | April 6, 2019 at 22:08 |

More

Tokenized assets transfer



Verified user

- As a **verified user**, I want to be able to **transfer assets** to other platform users **without intermediaries**.
- As a **verified user**, I want to be able to **receive tokenized assets** from other platform users **without intermediaries**.
- As a **verified user**, I want to be able to **fully configure details of asset transfers**.

The screenshot shows a 'Send' modal window with a close button (X) in the top right corner. The form contains the following fields and elements:

- Asset:** A dropdown menu currently showing 'Swiss franc (CHF)' with a downward arrow icon.
- Balance:** A text label indicating 'Balance is 799999.000000 CHF.'
- Amount:** An input field with an upward arrow icon to its right.
- Recipient email or account ID:** An input field.
- Add note:** A large text area for adding a note, with a character count '0/250' in the bottom right corner.
- Continue:** A blue button at the bottom of the form.

- As a **verified user**, I want to be able to **invest** in real estate investment opportunities.
- As a **verified user**, I want to be able to **trade assets** received via real estate investment opportunity **on the secondary market**.

Corporate user

- As a **corporate user**, I want to be able to **transfer assets** to other platform users **without intermediaries**.



- As a **corporate user**, I want to be able to **receive assets** from other platform users **without intermediaries**.
- As a **corporate user**, I want to be able to **fully configure the details of asset transfers**.

Administrator

Issuance requirements for administrator

- As an **administrator**, I want to be able to **create assets** on the platform.
- As an **administrator**, I want to be able to **update configuration of a specific asset**.
- As an **administrator**, I want to be able to **view and process requests for issuance**.



Issuance

Receiver (email or address)

Reference

Amount

Asset

BTC

▼

Available: 20,999,800.000000 BTC

Issue

HistoryRequests

State

Approved

▼

Asset

▼

| Value | Date | Requestor |
|--------------------|-------------------------|-----------------------------------|
| 1,000.000000 USD | 11 Mar 2019 at 06:35:25 | GBA4EX43M25UPV4WIE6RRMQOFTWXZZ... |
| 100,000.000000 USD | 11 Mar 2019 at 06:54:16 | GBA4EX43M25UPV4WIE6RRMQOFTWXZZ... |
| 100.000000 EUR | 11 Mar 2019 at 06:55:28 | GBA4EX43M25UPV4WIE6RRMQOFTWXZZ... |

Transactions and operation management requirements

User

- As a **user**, I want to be able to **view details of transactions associated with my account**.

Movements

A
alice@mail.com
General account

Show: Swiss franc (CHF)

Withdraw
Deposit
Send

| Type | Operation | Date | Amount |
|----------------|----------------------------|------------------------|---------------|
| Charged | Payment | June 24, 2019 at 18:05 | -1 CHF |
| Matched | Sale closed | May 20, 2019 at 18:04 | -200,000 CHF |
| Locked | Investment | May 20, 2019 at 18:03 | -200,000 CHF |
| Issued | Issuance/deposit requested | May 20, 2019 at 18:01 | 1,000,000 CHF |

Verified user

- As a **verified user**, I want to be able to **view** the transaction details **about outgoing payments**.
- As a **verified user**, I want to be able to **view** the transaction details **about incoming payments**.
- As a **verified user**, I want to be able to **view** the details **about deposit transactions**.
- As a **verified user**, I want to be able to **view** the details **about withdrawal transactions**.
- As a **verified user**, I want to be able to **view the details of transactions regarding asset selling**.
- As a **verified user**, I want to be able to **view the details of transactions regarding asset buying**.

Corporate user

- As a **corporate user**, I want to be able to view **statistics associated with a specific opportunity**.



Identity requirements

User

- As a **user**, I want to be able to **provide my KYC data to change my account permissions**.
- As a **user**, I want to be able to see the **current state** of my request on the **review of my KYC data**.

Unverified user

- As an **unverified user**, I want to be able to **provide my KYC data** to be able to upgrade to a **verified user account**.
- As an **unverified user**, I want to be able to **provide my KYC data** to be able to **upgrade** to a **corporate user account**.

Verified user

- As a **verified user**, I want to be able to change (update) my KYC data.

Corporate user

- As **corporate user**, I want to be able to view and update my KYC data.

Account management and access requirements

Platform owner

- As a **platform owner**, I want to be able to **perform the initial configuration** of the platform by **changing the initialization scripts**, namely to configure the roles of users and administrators of the platform as well as system assets and asset trading pairs.
- As a **platform owner**, I want to **have access to all transactions** performed on the platform.



User (Unverified, Verified, Corporate)

- As a **user**, I want to **have access to all transactions** associated with my account.

Movements

A

alice@mail.com

General account

Show: Digital Gold (GLD) Withdraw Deposit Send

| Type | Operation | Date | Amount | |
|---------|-----------|------------------------|---------------|---|
| Matched | Offer | April 6, 2019 at 15:47 | 5,251.87 GLD | ▼ |
| Matched | Offer | April 6, 2019 at 15:45 | 3,923.33 GLD | ▼ |
| Matched | Offer | April 6, 2019 at 15:28 | 786.1 GLD | ▼ |
| Matched | Offer | April 6, 2019 at 15:18 | 2,605.25 GLD | ▼ |
| Matched | Offer | April 6, 2019 at 15:18 | -2,597.41 GLD | ▼ |
| Matched | Offer | April 6, 2019 at 15:18 | -214.07 GLD | ▼ |
| Matched | Offer | April 6, 2019 at 15:17 | -2,108.61 GLD | ▼ |
| Matched | Offer | April 6, 2019 at 15:17 | -2,565.37 GLD | ▼ |
| Matched | Offer | April 6, 2019 at 15:17 | 588.94 GLD | ▼ |
| Matched | Offer | April 6, 2019 at 15:17 | -1,924.02 GLD | ▼ |

More

- As a **user**, I want to be able to **view other users' account identifiers**.

Movements







A **alice@mail.com** ▾
General account

Show: Swiss franc (CHF) ▾

Withdraw

Deposit

Send

| Type | Operation | Date | Amount | |
|--|--|------------------------|---------------|---|
|  Charged | Payment | June 24, 2019 at 18:05 | -1 CHF | ^ |
| Type | Charged | | | |
| Operation | Payment | | | |
| Date | June 24, 2019 at 18:05 | | | |
| Amount | 1 CHF | | | |
| Source pays for destination | false | | | |
| Subject | | | | |
| Payment sender | alice@mail.com  | | | |
| Payment recipient | bob@mail.com  | | | |
|  Matched | Sale closed | May 20, 2019 at 18:04 | -200,000 CHF | ▾ |
|  Locked | Investment | May 20, 2019 at 18:03 | -200,000 CHF | ▾ |
|  Issued | Issuance/deposit requested | May 20, 2019 at 18:01 | 1,000,000 CHF | ▾ |

- As a **user**, I want to be able to **change the password** of my account.

Change password
×

Current password
👁

New password
👁

Confirm new password
👁

Change password

- As a **user**, I want to be able to **restore access to my account** in the case its password is lost.




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- As a **user**, I want to be able to **configure two-factor authentication** to increase account security.

Enable 2FA

×

Scan the QR with your 2FA app. We recommend Google Authenticator for most users. It doesn't require an internet connection or phone service to use, and is more secure than SMS due to being offline and local to your device.



Or manually set the secret code

Secret

WQVBLC2DPFIFEXIV

📋

And enter your 2FA code to continue

2FA code

Enable

- As a **user**, I want to be able to **view the balances** of my account.
- As a **user**, I want **to view the balances** of my assets **as a catalog**.

Assets

Explore assets **My balances**

C
CHF
Swiss franc
Balance: 799,999 CHF

E
EUR
EUR
Balance: 360,224.3214 EUR

R
RBL
Red Baloon
Balance: 1,000 RBL

U
USD
USD
Balance: 37,551.884 USD

T
TDT
TokenD Token
Balance: 99,999 TDT

P
PBP
PBP
Balance: 13,700 PBP

B
BTC
BTC
Balance: 0 BTC

B
BST
Blocksport Token
Balance: 0 BST

Asset details

E **EUR**
EUR

| | |
|----------------|-----------------------|
| Balance | 360,224.3214 EUR |
| Maximum | 1,000,000,000 EUR |
| Issued | 1,101,124 EUR |
| Available | 998,898,876 EUR |
| Transferable | Yes |
| Withdrawable | Yes |
| Deposit method | Non-depositable |
| Asset type | Requires verification |
| Terms | No terms |
| Owner | Master |

- As a **user**, I want to be able to **view the trading history** as an asset **ratio diagram**.

Trade


A **alice@mail.com** ▾
General account

Exchange My Orders Create buy order Create sell order

GLD/EUR ▾

15,128.71 GLD / 360,224.3214 EUR
Balances

Hour Day Month Year



- As a **user**, I want to be able to **view the details of the fees details** for my account.



- As a **user**, I want to be able to **view the fees details for a particular asset** on the platform.

Fees

Aalice@mail.com
General account

Asset: Digital Gold (GLD) ▾

| Type | Direction | Fixed | Percent | Lower bound | Upper bound |
|---------|-----------|----------|---------|------------------|------------------------------|
| Payment | Incoming | 0 GLD | 2% | 0 GLD | 100 GLD |
| Payment | Incoming | 0 GLD | 1% | 100.000001 GLD | 1,000 GLD |
| Payment | Incoming | 2 GLD | 0% | 1,000.000001 GLD | 9,223,372,036,854.775807 GLD |
| Payment | Outgoing | 0.01 GLD | 2% | 0 GLD | 100 GLD |
| Payment | Outgoing | 0 GLD | 1% | 100.000001 GLD | 1,000 GLD |
| Payment | Outgoing | 1 GLD | 0% | 1,000.000001 GLD | 9,223,372,036,854.775807 GLD |

- As a **user**, I want to be able to **view the order history**.

| Trade history | | | |
|---------------|-------------|--------------|------------------------|
| Amount (GLD) | Price (USD) | Total (USD) | Time |
| 20,454.26 | 3.23 | 66,067.2598 | April 6, 2019 at 22:10 |
| 13,636.17 | 3.22 | 43,908.4674 | April 6, 2019 at 22:10 |
| 6,818.08 | 3.21 | 21,886.0368 | April 6, 2019 at 22:10 |
| 34,468.67 | 3.15 | 108,576.3105 | April 6, 2019 at 22:10 |
| 17,179.79 | 3.16 | 54,288.1364 | April 6, 2019 at 22:09 |
| 7,014.83 | 3.19 | 22,377.3077 | April 6, 2019 at 22:09 |
| 3,507.41 | 3.18 | 11,153.5638 | April 6, 2019 at 22:09 |
| 8,846.47 | 3.16 | 27,954.8452 | April 6, 2019 at 22:09 |
| 4,423.23 | 3.15 | 13,933.1745 | April 6, 2019 at 22:08 |

Verified user

- As a **verified user**, I want to be able to **create requests for changing limits** of my account.



Change limits

×

Operation type limit
Deposit ▾

| Type | Limit |
|---------------|--------------|
| Daily Limit | 100.000000 |
| Weekly Limit | 700.000000 |
| Monthly Limit | 3100.000000 |
| Annual Limit | 35600.000000 |

Request new limits

| | |
|-------------------------------------|-------------------------------------|
| Daily Limit 100.000000 | Weekly Limit 700.000000 |
| Monthly Limit 3100.000000 | Annual Limit 35600.000000 |

Note (optional)

0/250

Send request

- As a **verified user**, I want to be able to view the state of the request for changing limits.

| Requests | | | | |
|-------------------------|--------------|---------|-------|-------------------------|
| Date | Request type | State | Asset | |
| August 6, 2019 at 16:40 | Initial | Pending | GLD | Details |

- As a **verified user**, I want **to receive information about the documents required for changing limits**.



- As a **verified user**, I want to be able to **upload the documents required for changing limits**.

Limits request details

×

Your request was submitted. Please wait until it is reviewed

| Request type | Initial |
|---------------|-------------------|
| Daily limit | 1000.000000 GLD |
| Weekly limit | 7000.000000 GLD |
| Monthly limit | 31000.000000 GLD |
| Annual limit | 356000.000000 GLD |

Upload documents

- As a **verified user**, I want to be able to **view my limits on asset transfers**.
- As a **verified user**, I want to be able to **view my limits on asset withdrawals**.
- As a **verified user**, I want to be able to **view my limits on asset deposits**.



Limits

A

alice@mail.com ▾
General account[Explore limits](#)[Change limits](#)

Requests

| Date | Request type | State | Asset | |
|-------------------------|--------------|---------|-------|-------------------------|
| August 6, 2019 at 16:40 | Initial | Pending | GLD | Details |

Current limits

GLD ▾

| Operation type | Daily (left/total) | Weekly (left/total) | Monthly (left/total) | Annual (left/total) |
|----------------|--------------------|---------------------|----------------------|---------------------|
| Withdraw | 200 / 200 | 1,400 / 1,400 | 6,200 / 6,200 | 70,000 / 70,000 |
| Deposit | 100 / 100 | 700 / 700 | 3,100 / 3,100 | 35,600 / 35,600 |
| Payment | 100 / 100 | 700 / 700 | 3,100 / 3,100 | 35,600 / 35,600 |

Corporate user

- As a **corporate user**, I want to be able **to view portfolio of my investment opportunities**.



Opportunities

A **alice@mail.com**
Corporate account

Investable opportunities **My opportunities**

+ Create

Live



TokenD Apartment

Project PresentationThe Josef-Ruston-Gasse 28 project is a new building project in 1210 Vienna.

0.01% funded
200 USD invested
18 days to close

Buy 1,000 TDA for 2,000,000 USD



TokenD Estate

SAMARA SUITES, Jakarta Location
Jakarta, Indonesia Population: 31.7 m
(Greater Jakarta) GDP growth: 6.3%
Sustainability Certification EDGE (39%
energy savings), EcoTool Type Residential

0% funded
0 USD invested
17 days to close

Buy 1,000 TDE for 2,000,000 USD



Green hills

Hua Yuan is a low-density residential project with an attractive green outdoor space located in the New Area of Peixian, five minutes away from the traditional urban downtown area by car. Peixian is located in the middle of the Shanghai-Beijing high-speed

0% funded
0 USD invested
7 days to close

Buy 1,000 3 for 2,000,000 USD



Cool Shapes

Hamilton May is pleased to present a luxurious housing estate in the exclusive part of Wilanów. This modern project, is located on a 2-hectare plot and consists of 55 residences developed with the highest quality materials.

0% funded
22.000002 USD invested
114 days to close

Buy 10,000,000 CS for 30,000,000 USD

- As **corporate user**, I want to be able to **view a summary of a specific opportunity**.



Sale overview



Opportunity

**TDE**
TokenD Estate

| | |
|---------------------------|--------------------------------|
| Maximum | 1,000 |
| Issued | 0 |
| Available | 0 |
| Transferable | Yes |
| Withdrawable | No |
| Deposit method | Non-depositable |
| Asset type | Requires verification |
| Requires KYC | Yes |
| Terms | Download terms |
| Maturity Date | May 21, 2020 at 12:00 |
| Annual return in percents | 12% |

Details

| | |
|-------------------------|--------------------------------|
| Start time | May 26, 2019 at 12:00 |
| Close time | August 25, 2019 at 12:00 |
| Soft cap | 1,000,000 USD |
| Hard cap | 2,000,000 USD |
| TDE to sell | 1,000 TDE |
| Whitelisted | No |
| Owner | alice@mail.com |
| Video about opportunity | No video |

Administrator

- As an **administrator**, I want to be able to view the **details of all the users' accounts**.



User index admin_demo

Role Requestor

| Email | Account ID | Role | State |
|-----------------------|-------------|------------|--------|
| pp@distributedlab.com | GAIG...HNQF | Unverified | Active |
| corporate@mail.com | GBZN...QXQC | Corporate | Active |
| qqq@qqq.qqq | GB3F...GTKI | Unverified | Active |
| bilbo@mail.com | GD5M...BHJ5 | General | Active |

- As an **administrator**, I want to be able to **view the list of all other platform administrators**.

Admin index admin_demo

Admin list + New admin

| | Role | Account ID | Weight | Identity |
|-------------------|---------------------|-------------|--------|----------|
| Dev admin | Super Administrator | GCNU...XT5D | 1000 | 1 |
| Super Admin (you) | Super Administrator | GCLD...M3AR | 1000 | 0 |

- As an **administrator**, I want to be able to **view the updates** associated with **platform administrators' accounts**.



Admin index

Manage administrator

Account ID
GCNUPUQ6HCPGLW4FIEEELVLJFXSCRRVJONJVU52IRBK5RCOXMPAXT5D

Name
Dev admin

Identity
1

Weight
1000

Signer role
License Admin

Able to manage system licenses

Update Delete

- As an **administrator**, I want to be able to **create platform administrators** using predefined templates.

Admin index

Add new administrator

Account ID

Name

Identity Weight

- Master
- Super Administrator
- ✓ KYC/AML
- External Systems Administrator
- License Admin

Add

- As an **administrator**, I want to be able to **update administrator accounts** on the platform.



- As an **administrator**, I want to be able to **delete platform administrators**.

Acceptance criteria:

- Select administrator account from the list;
- Confirm account deletion.

Manage administrator

| | |
|--|--------|
| Account ID | |
| GCNUPUQ6HCPGXLW4FIEEELVLJFXSCRRVJONJVU52IRBK5RCOXMPAXT5D | |
| Name | |
| Dev admin | |
| Identity | Weight |
| 1 | 1000 |
| Signer role | |
| Super Administrator | |
| Have full access to system administration functionality | |
| Update | Delete |

KYC/AML and identity management requirements for administrator

- As an **administrator**, I want to be able to **view and verify the users' KYC data**.

User details

Account information

| | |
|---------------|--|
| Email | bob@mail.com |
| Account ID | GAEAJAIAH5GHRTPYAWTF6CINPLYPY6KVVSS2ESG36NCYUWLKJ... |
| Account role | General |
| Account state | Active |

Previous approved KYC Request

KYC information

Can be uploaded one of the documents:

- Valid Passport;
- Valid Identity card;
- Valid Residence permit;
- Driving license - full, not provisional, with a color photograph;

| | |
|----------------|-------------------------|
| First name | Bob |
| Last name | Sponge |
| Date of birth | 05 Aug 2019 at 01:04:01 |
| Address Line 1 | |



- As an **administrator**, I want to be able to **view the history of KYC requests**.
- As an **administrator**, I want to be able to **view the list of pending KYC requests**.
- As an **administrator**, I want to be able to **view new pending KYC requests**.
- As an **administrator**, I want to be able to **view the update KYC requests of verified users**.
- As an **administrator**, I want to be able to **view new pending KYC requests of corporate users**.
- As an **administrator**, I want to be able to **view new pending update KYC requests of corporate users**.

The screenshot shows a web interface with a dark blue header. On the left, there are tabs for 'Index' and 'Queue', with 'Queue' being the active tab. On the right of the header, there is a user profile icon with the letter 'A' and the text 'admin_demo' followed by a dropdown arrow. Below the header is a light gray sidebar. The main content area is white and contains a filter bar with four dropdown menus: 'Role to set', 'State' (with 'Waiting for review' selected), 'Pending tasks', and 'Requestor'.

Issuance management requirements for administrator

- As an **administrator**, I want to be able to **view all assets** on the platform.
- As an **administrator**, I want to be able to **view the requests for issuing tokenized assets**.



System assets

Asset requests

Issuance

Asset pairs

Withdrawals

Manage assets

Request type

State

Requestor

Asset code

Create

Approved

| | State | Requestor |
|-----|----------|------------------------|
| BST | Approved | GBMNRAXCI6UNH4K5G... |
| FBT | Approved | GBMNRAXCI6UNH4K5G... |
| PIA | Approved | GAI4JPE7LS2ML3SOVPY... |

- As an **administrator**, I want to be able to **view** the entire **history of events** related to **asset issuance**.

Manage assets

Request type

State

Requestor

Asset code

Create

Approved

Pending

Canceled

✓ Approved

Rejected

Permanently rejected

| | State | Requestor |
|-----|----------|----------------------|
| BST | Approved | GBMNRAXCI6UNH4K5G... |



TOKEND

- As an **administrator**, I want to be able to **view pre-issuance files**.
- As an **administrator**, I want to be able to **approve requests for asset issuance**.
- As an **administrator**, I want to be able to **reject requests for asset issuance**.

The screenshot shows the 'Manage assets' section of the application. At the top, there are navigation tabs: 'System assets', 'Asset requests' (selected), 'Issuance', 'Asset pairs', and 'Withdrawals'. Below the tabs, the title 'Manage assets' is displayed. A filter bar contains four fields: 'Request type' with a dropdown menu showing 'Create', 'State' with a dropdown menu showing 'Pending', 'Requestor', and 'Asset code'. Below the filter bar, there is a table with two rows of data. The first row shows 'ETH' as the asset, 'Pending' as the state, and 'GBRIJ4O6KJH7E4U4RW...' as the requestor. The second row shows 'TDT3' as the asset, 'Pending' as the state, and 'GBZNAXDKJW6PFJLBXJ...' as the requestor.

| Asset | State | Requestor |
|-------|---------|-----------------------|
| ETH | Pending | GBRIJ4O6KJH7E4U4RW... |
| TDT3 | Pending | GBZNAXDKJW6PFJLBXJ... |

- As an **administrator**, I want to be able to **view and process requests for pre-issuance**.

The screenshot shows the 'Preissuance Requests' section of the application. At the top, there are navigation tabs: 'Pre-issuance' (selected), 'Change asset issuer', and 'Pre-issuance requests'. In the top right corner, there is a user profile icon with the text 'admin_demo'. Below the tabs, the title 'Preissuance Requests' is displayed. A filter bar contains an 'Asset' dropdown menu showing 'All'. Below the filter bar, there is a table with two rows of data. The first row shows '100.000000' as the amount, 'PIA' as the asset, and 'Approved' as the status. To the right of the table, there are two buttons: 'Reject' (red) and 'Accept' (purple).

| Amount | Asset | Status |
|------------|-------|----------|
| 100.000000 | PIA | Approved |

- As an **administrator**, I want to be able to **sign and upload pre-issuance files** on the platform.



Upload preissuance

Select file(s) with preissued asset and click **Upload**.

Note: you cannot upload the same preissuance twice

[Learn more about pre-issuance](#) 

Select File(s)

Fees management requirements for administrator

- As an **administrator**, I want to be able to **view and manage fees** on the platform to fulfill regulatory and business requirements.
- As an **administrator**, I want to be able to **manage fees** for a **particular asset**.
- As an **administrator**, I want to be able to **manage fees** for a **particular account type**.
- As an **administrator**, I want to be able to **manage fees** for a **particular account**.
- As an **administrator**, I want to be able to **manage fees** for a **particular type of operation**.



Fee management

Scope

✓ Global

Account type

Account

USD

Type

Payment

Direction

outgoing

Limits management requirements for administrator

- As an **administrator**, I want to be able to **view and manage limits** on the platform to fulfill regulatory and business requirements.
- As an **administrator**, I want to be able to **manage limits** for a **particular account type**.
- As an **administrator**, I want to be able to **manage limits** for a **particular account**.



Limits management

Asset
Digital Gold (GLD) ▾

Scope
✓ Global
Account type
Account

| Payment limits | Withdrawal limits | Deposit limits |
|---|---|---|
| Daily 100.000000 | Daily Not set | Daily Not set |
| Weekly 1000.000000 | Weekly Not set | Weekly Not set |
| Monthly 10000.000000 | Monthly Not set | Monthly Not set |
| Annual 100000.000000 | Annual Not set | Annual Not set |
| <button>Update</button> <button>Remove</button> | <button>Update</button> <button>Remove</button> | <button>Update</button> <button>Remove</button> |

- As an **administrator**, I want to be able to **manage users' requests for changing limits**.
- As an **administrator**, I want to be able to **manage user requests for changing limits with documents uploaded**.
- As an **administrator**, I want to be able to **view details of verified users accounts**.
- As an **administrator**, I want to be able to **view details of corporate user accounts**.

[< Back](#)**Request information**

| | |
|-----------------------|---|
| Request date & time | 11 Mar 2019 at 06:58:40 |
| Account role | Corporate |
| Request type | Initial |
| Account email | corporate@mail.com |
| Account ID | GBZNAXDKJW6PFJLBXJUZLLVDF2GII2UCWWBW5FF33UBWBYZGZHNOXQC |
| Note | — |
| Limits for asset | USD |
| Operation type limits | deposit |

Current limits

| | |
|---------------|----------------------|
| daily limit | 9223372036854.775807 |
| weekly limit | 9223372036854.775807 |
| monthly limit | 9223372036854.775807 |
| annual limit | 9223372036854.775807 |

Desired limits

| | |
|---------------|-------|
| daily limit | 100 |
| weekly limit | 1000 |
| monthly limit | 10000 |
| annual limit | 10000 |

Approve

Request docs

Reject

Opportunity management requirements for administrator

- As an **administrator**, I want to be able to **view and process requests for creating opportunities**.
- As an **administrator**, I want to be able to **view the list of pending requests** to create opportunities.



Sale request list

State

✓ Pending

Cancelled

Approved

Rejected

Permanently rejected

Requestor

| Name | Hard cap | Requestor |
|------|----------------------|----------------------|
| DLPJ | Private Jet Campaign | 2,000,000.000000 USD |
| | | corporate@mail.com |

Manage sale request

Details Full description Corporate user

Request details

Requestor

Request state

Requested at

corporate@mail.com

Pending

06 Aug 2019 17:59:47

Asset details

Name

Code

Initial preissued amount

Max issuance amount

Preissuance signer

Policies

Terms

Distributed Lab Private Jet

DLPJ

10,000.000000

10,000.000000

GAAQ...AHV4

—

(No document)

Asset logo

(No logo yet)

Sale details

Name

Whitelisted

Start time

End time

Soft cap

Hard cap

Max DLPJ amount to be sold

Private Jet Campaign

No

06 Aug 2019 18:05:00


06 Sep 2019 12:00:00

1,000,000.000000 USD

2,000,000.000000 USD

2,000.000000 DLPJ

Sale logo



Short description

let's get a private jet!

Approve

Reject



- As an **administrator**, I want to be able to **view the list of approved requests** to create opportunities.
- As an **administrator**, I want to be able to **view the list of opportunities**.

Sale list

| | | | |
|------------|----------|---------------|---|
| Asset code | Owner | State Open | ▼ |
| Start date | End date | Type | ▼ |

| | Name | State | Owner |
|------|------------------------|-------|--------------------|
| REIT | Yutaka Mansions | Open | corporate@mail.com |
| OLG | Oleg's Second Offering | Open | corporate@mail.com |



Sale overview

Details Full description Participants Corporate user

Asset details

| | |
|------------------------|------------------------------|
| Name | Real Estate Investment Token |
| Code | REIT |
| Owner | corporate@mail.com |
| Preissued asset signer | GAAQ...AHV4 |
| Max issuance amount | 10,000.000000 |
| Pending issuance | 5,000.000000 |
| Issued | 0.000000 |
| Available for issuance | 5,000.000000 |
| Policies | Transferable |
| Terms | (No document) |

Asset logo

(No logo)

Sale details

| | |
|-------------|----------------------|
| Name | Yutaka Mansions |
| State | Open |
| Whitelisted | No |
| Owner | corporate@mail.com |
| Start time | 05 Aug 2019 18:45:00 |
| End time | 06 Sep 2019 12:00:00 |

Sale logo



BTC progress

| | |
|-------------------|-----------|
| Price (per REIT) | 1.000000 |
| Current cap | 0.000000 |
| Total current cap | 0.000000 |
| Hard cap | 20.000000 |

CHF progress

| | |
|-------------------|----------------|
| Price (per REIT) | 1.000000 |
| Current cap | 0.000000 |
| Total current cap | 0.000000 |
| Hard cap | 200,000.000000 |

GLD progress

| | |
|-------------------|---------------|
| Price (per REIT) | 1.000000 |
| Current cap | 0.000000 |
| Total current cap | 0.000000 |
| Hard cap | 61,919.504644 |

USD progress

| | |
|-------------------|----------------|
| Price (per REIT) | 1.000000 |
| Current cap | 0.000000 |
| Total current cap | 0.000000 |
| Hard cap | 200,000.000000 |

Total progress

| | |
|----------------------------|--------------------|
| Current cap | 0.000000 USD |
| Soft cap | 100,000.000000 USD |
| Hard cap | 200,000.000000 USD |
| Max REIT amount to be sold | 5,000.000000 REIT |

Short description

Most investors buy REITs for their rich dividends, although those dividends are usually fully taxable. Keep in mind, though, that each real estate sector is affected by different economic cycles. Larger, diversified, or geographically dispersed REITs are



Trade management requirements for administrator

- As an **administrator**, I want to be able to **add asset pair** to the list of those available for trading.
- As an **administrator**, I want to be able to **enable / disable asset pair** in the list of those available for trading.

| Asset pairs | | | + Create pair | |
|-------------|--------------|--------|-------------------------------|--|
| | Price | Policy | | |
| ARTD/USD | 1.000000 USD | 0 ? | | |
| BST/BTC | 1.000000 BTC | 0 ? | | |
| BST/CHF | 1.000000 CHF | 0 ? | | |
| BST/USD | 1.000000 USD | 0 ? | | |

Security management requirements for administrator

- As an **administrator**, I want to be able to **view the details of user accounts**.
- As an **administrator**, I want to be able to **monitor users actions** on the platform to detect security policy threats.
- As an **administrator**, I want to be able to **ban user accounts** to comply with the platform security policy.
- As an **administrator**, I want to be able to **unban user accounts** to restore user access to platform services.



User details

Account information

| | |
|---------------|---|
| Email | corporate@mail.com |
| Account ID | GBZNAXDKJW6PFJLBXJUZZLLVDF2GII2UCWWBW5FF33UBWBYZGZ... |
| Account role | Corporate |
| Account state | Active |

An error occurred. Please try again later.

Corporate user details

| | |
|--------------|-------------------|
| Name | TokenD |
| Headquarters | Kharkiv |
| Homepage | https://tokend.io |
| Industry | IT |
| Team size | 50 |
| Company | TokenD |

Block user

Reset to unverified

Operations

| Type | Date | Source | Counterparty |
|------------------|-------------------------|-----------------------------|--------------|
| Manage asset | 10 Jun 2019 at 06:15:33 | GBZNAXDKJW6PFJLBXJUZZLLV... | - |
| Check sale state | 20 May 2019 at 06:04:33 | Master | - |

Applications requirements

User (Unverified / Verified / Corporate)

- As a **user**, I want my wallet to **store all transactions associated with me**.
- As a **user**, I want to be able to **manage my account and assets via web application**.
- As a **user**, I want to be able to **manage my account and assets via mobile wallet**.



TOKEND

- As a **user**, I want to be able to **access my wallet from any device at any time** convenient for me.
- As a **user**, I want to be able to **restore access to my account** in the case my password is lost.
- As a **user**, I want to be able to log out of the platform.

Administrator

- As an **administrator**, I want to be able to **manage operations via web application**.
- As an **administrator**, I want to be able to **log out of the platform**.

Synchronization and auditing requirements

- As a **platform owner**, I want to be able to perform the **initial configuration of the platform** by changing the initialization scripts, namely to **configure the roles of users and administrators of the platform, system assets, trading pairs of assets**.
- As a **platform owner**, I want to be able to **distribute the maintaining of transactions history between several parties** with the possibility for them to **synchronize data in real time**.
- As a **platform administrator**, I want to be able to **provide auditors with the relevant reconciled registry state** to simplify the platform audit



Learn More

<https://tokend.io/>

<https://docs.tokend.io/>

sales@distributedlab.com

About TOKEND

TOKEND is a white label blockchain software platform that consolidates best practices of tokenization solutions. It allows you to issue, transfer and exchange your assets with a high level of privacy, security, and auditability while following regulations of your jurisdiction. TOKEND is designed for enterprises who are willing to take advantage of tokenization or experiment with blockchain technology without the need for maintaining the expensive team of blockchain experts and within the shortest time to market.

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