



Digitizing Real Estate Ownership

WHITEPAPER

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Abstract

REIDAO seeks to introduce crypto assets that are backed by a particular real estate in the real world. This will create an exposure towards the real estate market for the crypto assets holders, such as rental income generation and capital appreciation from the underlying property. These crypto assets will follow the ERC20 Token Standard, and will be able to be integrated with other services on the Ethereum blockchain.

Introduction

Real estate ownership is more than just acquiring a place to call home. It is one of the most desirable things for most people and have certainly propelled some well known men into the league of the richest men in the world.

Although the real estate market has plenty of opportunities for making big gains, buying and owning real estate is a lot more complicated than most people would have imagined.

Many reports have mentioned that real estate prices in many locations in the world have been breaking record high, but still this economic benefit have been enjoyed by those selected few who can afford to enter into real estate investments. Furthermore, there are more aspects to real estate ownership, beside just buying and owning a piece of land or building structure. There are other tangible benefits where the owner could purpose it for his/her own use, rent out to earn income, or selling it for profit, or simply as means of storing value.

Traditional real estate ownership has mostly been single ownership, and when joint ownership is concerned this is usually together with just a few people. While there are many use cases and benefit identified with partial ownership of a real estate, and pushing the boundary further to break up a property into thousands or even millions fractions with possibility of each distinct fraction ownership, this has been logistically and administratively very challenging and costly to manage, and when there are more than one owners involved, the problem associated with trust among the parties may arise.

In tune with the push for digital initiatives as the economy growth engine in many nations, and with the wealth advancements in technology, it is now possible to create digital assets backed by physical assets such as real estate, which can be broken up into fractional ownerships with the trust in its transparency.

This paper discusses the possibility in applying blockchain technology to digitize real estate ownerships and how REIDAO aims to change the industry landscape by doing this.

Problem Statements

Below are the problems and limitations identified in the current real estate ownerships preventing most people from realising the benefits, which REIDAO aim to solve:

Affordability - Owning a piece of real estate has a relatively high barrier of entry. Real estate ownership usually requires big financial commitments, which are out of reach for many people. Likewise for real estate developers, their market is limited.

Wealth Diversification - Given that real estate ownership usually involved big amount of money, an individual with limited fund will have limited ability to diversify his/her wealth allocation if a big proportion is allocated to real estate.

Liquidity - Buying and selling physical real estate have not been very liquid.

Global Reach - Many of the real estate opportunities are currently contained within the home jurisdictions, and overseas property ownerships have been limited to simple aspirations.

Simplicity and Convenience - The paperwork and administration involved in a single real estate ownership may not be straightforward. There is added complexity of co-ownerships hence prohibiting collaboration in mass co-ownership in real estate. A simpler and convenient way to participate in the property co-ownership is required.

Trust - When two or more people are involved in the real estate co-ownership, trust would always be a concern, and may lead to potential conflicts.

Solution: Real Estate Tokenization on the Blockchain

With the advancement of the blockchain technology and the rapid adoption rate, REIDAO aims to provide solutions to the current problems faced by many and create new opportunities in real estate ownerships by employing smart contracts capabilities on the Ethereum blockchain.

The blockchain allows for the 'tokenization' of the real estate into tokens, which can be distributed to practically anyone and anywhere in the world to participate in the ownership of the real estate. The tokens are backed with the physical real estate, hence the values are maintained by the underlying asset. It also involves the process of securely storing pertinent asset information onto an immutable distributed ledger. These tokens can then be traded in a trustless peer-to-peer (P2P) markets.

These tokens are crypto assets which follow the ERC 20 tokens standard and will be compatible with the standard Ethereum wallet.

REIDAO platform will be built to scale to handle real estate tokenization at various level:

- **Currently: Tokenization of a single unit of property.**

See: <http://www.reidao.io/malaysiapoc.pdf>

REIDAO is tokenizing property at the smallest level - one single unit (apartment, office space, industrial space, etc). i.e. tokens that are backed by a single property.

At this point we are imposing some arbitrary conditions:

- Maximum property value of **USD 15,000,000**.
- Property to be tokenized is not currently under mortgage.
- Each property will be broken up to **1,000,000** tokens.

- **Soon after: Tokenization of a portfolio of properties.**

See: <http://www.reidao.io/crowdvilla.pdf>

The platform is scalable to include tokenization of many properties into one type of REIDAO property token. i.e. a token that is backed by a portfolio of properties.

We are creating an airbnb-like application for shared holiday homes with one main difference - the owner of the properties are token holders held under a structure similar to REIT. This will protect token holders and assures the token is backed by actual assets.

Potential Use Cases

With the property broken into fractional ownerships, represented by tokens on the platform, this in turn opens up other possibilities and uses cases of the property tokens, some of which are:

- **Store of wealth and inheritance**, where a property can be converted and broken into multiple fractional digital assets on the blockchain, and can be transferred as inheritance to multiple parties in the form of tokens, where each owner has the liberty over the tokens independent from one another such as the ability to dispose or transfer the ownerships on the blockchain. This solves real world problem whereby a legal ownership of a single property is very fragmented (usually caused by inheritance scenario) so much so that it creates a deadlock situation among the owners.
- **Collateral services**, where the tokens representing fractional ownership of a physical property can be efficiently used as collaterals with other services on the blockchain.
- **Secondary transactions**, where the physical property appreciate in value, which in turn make the tokens more valuable and can be sold for a profit. REIDAO will develop an exchange platform on Ethereum where token buyers and sellers can meet and transact their property tokens.

REIDAO Key Business Processes

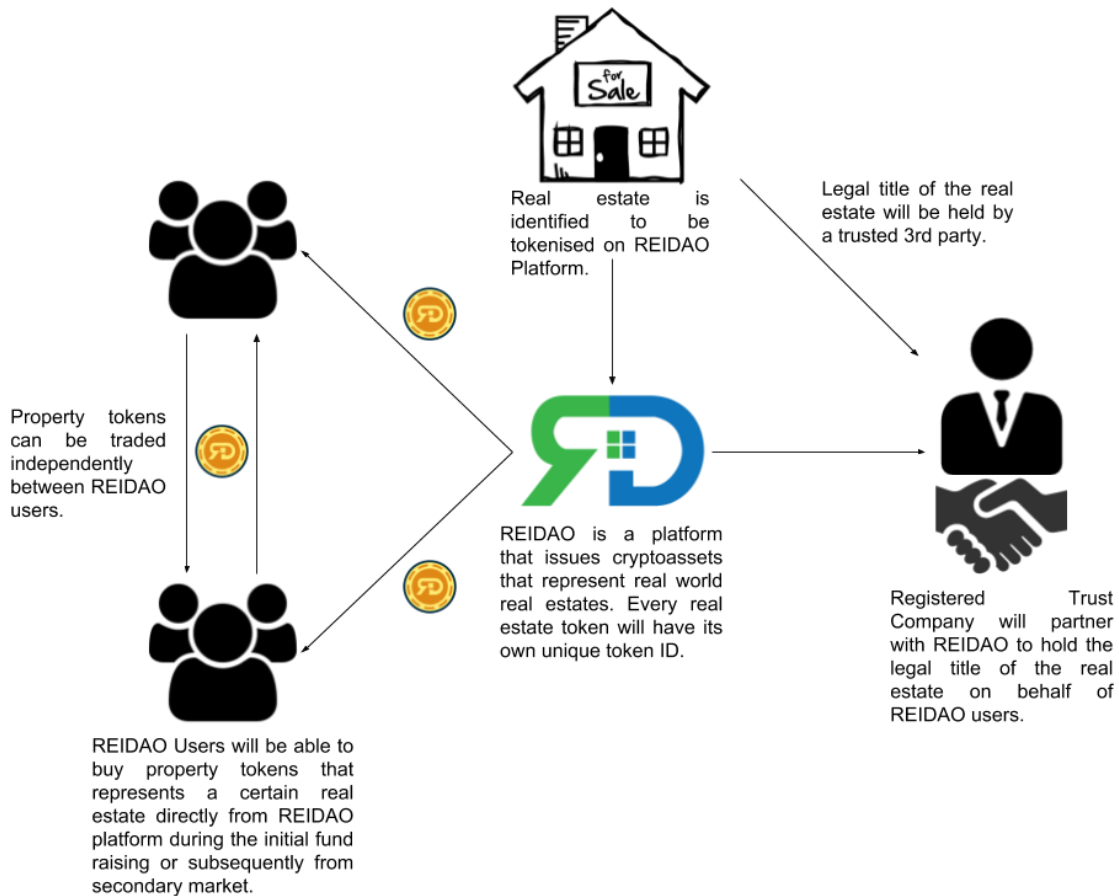
REIDAO as a platform allows real estate developers and other real estate suppliers in general to list their properties on the platform to be converted to digital assets, where the property will be broken down into many tokens on the blockchain representing the fractional ownerships of the physical property. REIDAO is a platform consisting both on and off the chain business processes that will allow this.

REIDAO platform is built on the Ethereum blockchain and employ smart contracts to tokenize listed property into small ownership fractions for group ownerships. REIDAO platform facilitates such groups to form but not directly involved in the creation of such groups. Through the blockchain such groups will be given the ability to self govern as a Decentralised Autonomous Organisation (DAO).

Off the chain, REIDAO collaborates with a third party registered trust company as well as property management agency/person to hold and manage the property. The registered trust company will provide escrow services to hold the legal title of the property on behalf of REIDAO users, while the property management agent will handle the day-to-day operations and maintenance of the property. Note: REIDAO works only with licensed public trust company to reduce the risk of trust company insolvency.

Any nett income arising from the property will be distributed back to the token holders as the rightful owner of the benefits from the property ownership, while any cost borned to maintain the property will be shared proportionately by all the token holders.

REIDAO Structure Overview



1. Property Digital Asset Creation

Converting property into digital asset on blockchain involves processes such as a). Sourcing inventory of properties, b). User subscriptions to property token ownerships (initial sale period), c). The acquisition of the physical property, and d). Tokenization of the property.

a. Inventory of Properties: Real Estate Listing

REIDAO allows real estate developers, owners, or sellers to sell their properties on the platform digitally. REIDAO will work with partnered real estate owners, developers, and agencies, to identify the potential real estate to be digitized on the platform. The sourcing of

the prospective property and the relevant due diligence to confirm the listing on the platform will happen off the chain.

b. Subscriptions to Property Tokens Offering

Once the property to be listed has been identified, the subscriptions process will then be started to participate in the initial sale period for the tokens that is backed by the identified property.

REIDAO will prepare a fact sheet documentation for each property to be listed containing information such as the details of the property, the trust company handling the legal title ownership, and the pricing of the tokens. This documentation should be used by the users in making a decision relating to the initial tokens offering.

Subscription will be done through a dedicated smart contract for the specified property. The smart contract will hold the pooled fund for the real estate until the tokens are fully subscribed for or until the subscription expiry time in which case the subscription is considered unsuccessful and the pooled fund refunded to the participants. Ethereum gas fees applies to claim the refund. **Important note:** REIDAO will NOT have access to the pooled fund.

Once the subscription is completed, the fund (as programmed) will only be accessible by the authorised registered trust company (REIDAO's partner) for the specified property, to be used to purchase the physical real estate and to pay any cost associated to the purchase.

Depending on the jurisdiction, the property transaction off chain may take some time to be finalised, where upon receiving confirmation of transaction completion, REIDAO will distribute the associated property tokens to the subscribers.

Listing/Tokens Price Determination

To arrive at the pricing of a particular property listing, and consequently the price of the property tokens, the following components are considered:

I. **Actual Property Value**

This is the price of the property based on the 1) valuation report, 2) the listing price from the developer in the case of primary sale, 3) the price that a seller is willing to sell in the case of secondary sale, or 4) the average transacted price for similar properties for the past 12 months, whichever is higher.

II. **Acquisition Cost**

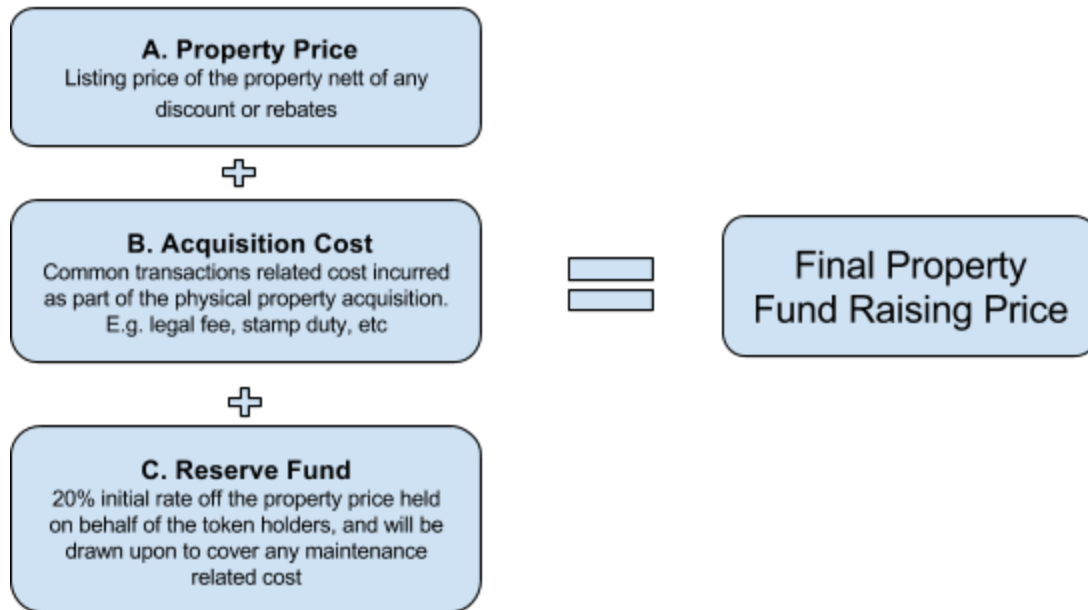
The listing price of a property on the platform will be inclusive of any relevant stamp duty and transactions related cost (lawyer fees, valuation cost, broker/agent fee, etc) as per traditional real estate transactions. Note that transaction cost, tax, and other related cost in acquiring property will vary by jurisdictions. These acquisition costs are internalised and will be part of the total value that will be tokenized in REIDAO.

III. **Reserve Fund**

REIDAO will collect initial reserve fund of 20% of the property value to be added to make up the final price of the listing. The reserve fund will be a minimum amount set aside and will be used for:

- **Covering any incidental costs** and ensure the property management fees and maintenance can be serviced while/if the property has not generated any income.
- **Paying platform fees** including the fee from the trust company, REIDAO platform fee, etc. As these fees vary by jurisdictions, it will be detailed in the initial offerings documentation for each property to be assessed by interested participants.
- **Fluctuations of the crypto assets value used in the subscription.** During the subscription period, until such time that the offering is closed, there could be fluctuations in the value of the assets pooled in the smart contract against the currency of the physical property, which could result in the fiat values of the crypto assets collected to be below the amount required to complete the purchase of the physical property. This reserve fund will be used to ensure that during normal fluctuations the process to purchase the property would still be able to be completed.

Components of the Final Property Fund Raising Price



Example:

We want to tokenize a property located in Singapore (let us call it PropertySG) with a market price of **S\$ 1,000,000**. To execute the purchase in Singapore there will be fringe costs such as legal fees at about **1%** of the property value, and stamp duty at about **18%** (as of the time of this writing). So the total acquisition cost for this property is **S\$ 190,000**. We will also collect **20%** off the property price as a reserve fund which comes up to **S\$ 200,000**. Total fundraising target for PropertySG will be **S\$1,390,000**.

Consideration for Crypto Assets Used in Fund Raise

To minimise the risk of huge fluctuations in the asset value used in the fundraising process, the use of stablecoin is needed, specifically gold-backed crypto assets, or Gold Tokens.

All the necessary cost and fees to purchase the property will be converted from fiat currency (local currency where the property is located) to the Gold Tokens' worth equivalent, and will require participants to subscribe using Gold Tokens. Note: There might be extra fees relating to the usage of the Gold Tokens.

Example (continued):

*Our PropertySG fundraising target is at **S\$1,390,000**. Let us assume the Gold Token (GT) conversion price is at $1GT = S\$ 60$. Our fundraising target becomes **23,166.6667 GT**.*

Extreme Fluctuations of Asset Value Used in Fund Raise

In the scenario of extreme volatility of the Gold Tokens value such that the amounts collected - converted into the local fiat currency - is not enough to acquire the property and maintain sufficient reserves, the fundraising process will be considered unsuccessful and the pooled fund will be refunded to the participants.

Amount of Property Tokens

The number of tokens available for subscription for a particular property would be fixed at the beginning of the offerings: **1,000,000** tokens. This number might be adjusted in the future where enough data have been gathered to make an informed decision based on the market liquidity and price of the property.

Example (continued):

*Our PropertySG fundraising target is at **23,166.6667 GT**. With total amount of **1,000,000** available tokens, each token will be valued at **0.0231 GT**. We will set the subscription based on a lot size of 100 tokens (1 lot = 100 tokens, minimum subscription of 1 lot). The price per lot becomes **2.31 GT**. We will do a round up to the nearest 0.05 block to get a round number (note: the surpluses from the rounding goes to the reserve fund), so the final price per lot becomes **2.35 GT**, and the final fundraising target for PropertySG becomes **23,500 GT**.*

c. Acquisition of Physical Property

Once the offering period is completed and all the tokens have been subscribed to, the property acquisition will take place off the chain. The amounts collected in Gold Tokens will be transferred to an account controlled by the trust company and will be converted into the local currency of the physical asset to complete the real estate purchase. A single purpose

local bank account (reserve fund account) will be created specifically for the said property.

The sales and purchase agreement will be executed with all the necessary paperwork, as per traditional real estate transaction and the relevant acquisition costs will be paid through the reserve fund account, with the remaining amount collected kept in the reserve fund.

The reserve fund will also be used for drawdown to pay property management fees, trust fees, and any other relevant expenses incurred by the property. (e.g. regular maintenance fees and other incidental charges, etc). The amount of the expenses will vary depending on the jurisdiction of the property location as well as charges imposed by various trust company and property management company.

d. Tokenization of the Property

Every physical property will have a documentation of purchase such as title deed or similar agreements which is a legal proof of ownership of the physical property. This documentation, obtained as part of the property acquisition will be held by the trust company on behalf of REIDAO users.

Upon receiving this documentation, the trust company will upload the scanned copy to the PropertyCore Smart Contract (through IPFS) as a proof that the property has been acquired. The platform will then enable the redeem process of the property tokens for the said property.

Note: Property tokens are not divisible. It will always be a whole number.

Example (continued):

Once the PropertySG purchase process is completed, all the subscribers will be able to redeem "PropertySG Tokens" based on the amount of lot that they subscribed to. The tokens will be made available to the ethereum address that participated in the subscription process.

2. Property Tokens Lifecycle Events

Upon successful creation of the property digital assets, all the token holders are the rightful owners of the property and will be entitled to any income generated from the use of the property, while any cost incurred as part of the ownerships will also be borne by the token holders. On top of that, REIDAO also aims to create value for the token holders such as allowing secondary transactions to occur where the property tokens ownerships can be transferred to another person or any other potential usage of the property tokens, managed through the smart contracts.

a. Rental Income Distribution from the Physical Property

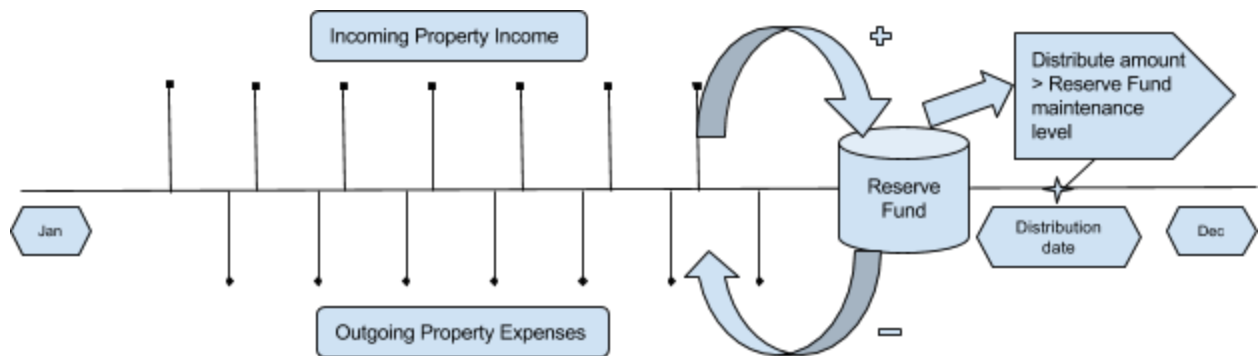
As the owners of the property through tokens holding, the token owners will be entitled to any revenue generated by the physical property, after deducting any applicable taxes, fees, and cost.

The main recurring income source of the property will be through rental, where the property manager will secure tenants and collect the periodic rental incomes. The income received will be distributed on a yearly basis through the REIDAO platform via the smart contracts, where all the token holders recorded as at the payment date, will then be entitled to the income distribution, and will receive the amount of Gold Tokens according to their fractional ownerships.

The income received from the property will first be channeled to the reserve fund held by the trust company. Similarly any expense incurred will also be paid out from the reserve fund. This is done to ensure that the reserve fund stays above its maintenance level which is **15%** of the property annual value.

The applicable distribution will be the amount above the maintenance level as of the distribution declaration date. The balance of the reserve funds will be made transparent to the token holders on a regular basis, and this is one of the key elements to be considered

when tokens ownerships are being transferred prior to the income distribution.



Prior to the payment date, the property manager will perform all the necessary collection and administration to determine the amount to be distributed and the entitlement for each token holder, where the final detail will be made known on the distribution declaration date which is earlier than the payment date. The payment date will also be announced on the distribution declaration date.

The amount to be distributed will be transferred from the reserve fund account held by the trust company and converted into Gold Tokens to be distributed to all the token holders proportionately through the smart contract.

REIDAO will also build functionality within the platform to validate and perform customer due diligence (KYC) screening prior to the distribution.

Example (continued):

PropertySG initial reserve fund is at S\$ 200,000. Let us assume everything is normal and this reserve fund is not being tapped upon. After one year of income generation (through rentals) and paying off related expenses (trust fee, tax, etc), let us assume there is a nett positive of S\$ 30,000. This amount will be added to the reserve fund, totalling to S\$ 230,000. Let us assume there is not significant increase in the market value of PropertySG so it is still valued at S\$ 1,000,000. Our reserve fund maintenance level is set at 15% of the property market value which comes up to S\$ 150,000. There is an excess of S\$ 80,000 off the reserve fund maintenance level that will be distributed back to token holders. This amount will be converted to Gold Token (GT) and will be distributed back in the form of GT.

b. Circumstances Where No Income Distribution Apply

There will time periods where no income is generated from the physical property, or case where the income generated is less than or only cover the cost incurred for the property, which caused the reserve fund level to drop below the maintenance level.

Some of these scenarios could include but not limited to:

- Token holders subscribing to a new property launch, where the property is not ready to be rented out. In such case, the property will not generate rental income, but token holders will still be able to participate the potential capital gain of the property.
- For residential property, rental leases are normally signed for a short period of time, which is usually 1 year or 2 year, and tenant may also decide not to renew when the lease expire, or there could be cases that leases may be terminated before their expiry date. When this happens, there is a need to find a replacement tenant, and it could happen that this may not be immediate.

When those scenarios occur, the property will generate no income and there is a possibility that the reserve fund balance may fall below its maintenance level at the point of distribution, and hence no distribution will take place for that period.

c. Recurring Cost Incurred

Property token holders are the legitimate owners of the property in the physical world. Besides receiving any income generated by the physical property, the owners will also be responsible to settle any associated cost incurred by the property. Note that costs will vary depending on the jurisdiction's regulations and local laws where the property reside. Some of the standard costs will include:

- Periodic Trust/Escrow Fee

Payable to the registered trust company which provides the escrow service to hold the property and reserve fund account on the behalf of the REIDAO users.

- Property Management Fee

Payable to the property management agent/company which will oversee the day to day management of the company including the securing tenants, collecting rents, making payments to applicable expenses, etc.

- REIDAO Platform Fee

REIDAO will impose a platform service charge of **0.5%** from the annual property value (from 3rd party independent valuer) or the average transacted price for similar properties for the past 12 months, whichever is higher and will be used to cover the listing cost and any relevant administration the property maintenance. This fee will be waived for a property that is undergoing **forced disposal**¹ period.

- Property Maintenance Fee

Payable on monthly basis to the management company who maintain the estate where the property is located at. Payment of the maintenance fee will be handled by the property management agent.

- Applicable Property Tax and Rental Income Tax

Payable to the relevant tax authority of the property jurisdiction and will be handled by the property management agent.

- Transaction fees, duties, and agent/broker fees as necessary to acquire tenant.
- Relevant insurance cost as applicable.
- Property renovation cost as applicable.

¹ See “Delisting of Tokenized Property - Forced Disposal” section below.

For the settlement of all the recurring fees associated with the property, the amount will be deducted from the reserve fund account of the property.

d. Ownerships Transfer of REIDAO Property Tokens

Once issued, each REIDAO property token represents a fractional ownership of a physical property which open up many other possible use cases. Many other applications can be built on top of the property digitization service provided by REIDAO. These applications will likely to add value to the token holders and may involve transfer of ownerships from one holder to another.

Any transfer of property tokens from one owner to another will incur transfer fee of between **0%-3%** (depending on membership level, see www.reidao.io/reitoken.pdf) of the amount of the transferred property tokens (rounded down to a whole number, with a minimum fee of 2 property tokens), automatically deducted from the sender's property tokens balance. This is akin to the traditional way of property transactions where the property seller will need to pay commissions to the agents involved in the transaction.

Collected fees will be pooled and redistributed to REIDAO members through a public sale event.

Example (continued):

*Assume John owns **10,000** of PropertySG tokens, at a market value of **0.0231 GT** per token. John decided to sell **200** PropertySG tokens to Bob at a market price. Bob will pay John **4.62 GT** and will receive **200** PropertySG tokens. John will receive **4.62 GT** from Bob, and will be charged **6** PropertySG tokens (3% transaction fee) by the platform. John final PropertySG tokens balance out of this transaction will be **9,794** tokens.*

3. Delisting of Tokenized Property

The listing of properties under their tokenized forms on the platform has no time limit, where token holders will continue to receive applicable income distribution from the property and ownership transfers of the tokens can occur any time if the conditions are met.

There are however, a few other scenarios that may result in the delisting of the properties from the REIDAO platform, and REIDAO's smart contracts and business processes will provide the functionalities for the property tokens to be redeemed back into the physical property where certain conditions have been met, and will result in the property to be delisted from the REIDAO platform.

When this occurs, all the associated tokens of the redeemed property will be destroyed and the relationships with various parties involved in maintaining the property on the platform and related business processes will be terminated.

This section aims to describe the scenarios, while not exhaustive, they are generic and may occur during the life of the property.

a. Redeeming Property Tokens into Physical Property

This scenarios occur when all the property tokens are accumulated and redeemed into physical property. For example, one entity/person may be purchasing all tokens associated to a particular property, and decides to redeem all the tokens and delist the property from REIDAO platform.

The process starts by the redeemer invoking a process through the smart contract and transferring all the property tokens to the associated contract address. Once verified, the Property Title Smart Contract of the redeemed property will be updated with the redeemer's details, and all the property tokens for this property will be destroyed. Off the chain the

redeemer can claim the physical property from the registered trust company which will check the identity of the redeemer to match it with what is recorded on the smart contract.

REIDAO will charge platform exit fee of 0.5% of the property value, which is based on the latest independent 3rd party valuation taken or the average transacted price for similar properties for the past 12 months, whichever is higher, and the fee will be deducted from the reserve fund. The remaining outstanding balance of the fund will also be transferred to the redeemer and the reserve fund account will also be closed.

All the contractual agreements with the registered trust and property management company while the property is listed on the REIDAO platform will also be terminated.

The title deed transfer to the redeemer will also take place off the chain, and various administration cost and fees may apply as part of this transfer.

b. Sale of Physical Property Off The Chain

Where the whole physical property being sold to another owner, the property will then need to be delisted from the platform, and the tokens redeemed and destroyed.

The physical property could attract buyer and the sale could take place off the chain, in which case agreements among the token holders will be required for the sale.

In consideration that there will be multiple owners of the tokens on the platform for the property and not all token holders may agree to the sale decision, a governance will be required to manage a consensus of such decision. This decision will be required whenever there is a “ready” buyer with a concrete offer or when a consensus required to find the buyer of the property off the chain.

As a future functionality, REIDAO aims to introduce the governance functionality where token holders can reach consensus/vote on decisions involving the going concern of the property on the platform. A token holder can pass motion for the sale to be considered by all the token holders with minimum price defined, and a 75% quorum will be required to vote for the decision, where a vote tally of at least 75% from the quorum will be required to confirm

the sale decision. Minimum 10% ownership of the total tokens will be required to pass the motion.

The sale of the property will be managed by the property manager, who will be instructed to complete the transaction off the chain working with the other parties, such as property brokers. When there is no ready buyer, the property manager will work with the broker to identify. Off the chain fees and charges may apply to complete the transactions which will be deducted from the reserve fund.

Once the buyer identified and the price agreed, the transaction will be completed off the chain. The proceeds from the sale will be deposited to the reserve fund account held with the registered trust. Upon completion of the transaction, the title deed will also need to be transferred to the new owner, and when this happens the Property Title Smart Contract will be deregistered. REIDAO smart contract will be invoked to distribute the balance of the reserve fund to all the token holders according to their proportionate ownerships. The balance should then include the remaining balance of the reserve fund prior to the sale plus the nett proceeds from the sale. There will also be platform exit fee of 0.5% of the property value, which is based on the latest independent 3rd party valuation or the average transacted price for similar properties for the past 12 months, whichever is higher, and the fee will be deducted from the reserve fund.

Once distribution is completed, all tokens associated with the property will be destroyed and the property is delisted from the platform. All the contractual agreements with the registered trust and property management company while the property is listed on the REIDAO platform will also be terminated.

The title deed transfer to the new owner will also take place off the chain, and transfer fee may be applicable.

c. En-Bloc/Collective Sale

En-Bloc usually happen when the owners (majority) of properties in the same estate agree to sell all the units in the estate to a developer/consortium for re-developments. Usually this happens to old estate, and the old buildings will be torn down and re-developed. The owners

will be compensated based on the collective agreements with the purchasers, and majority agreements/votes will be required to arrive to the collective sale decision.

When a property listed in REIDAO platform is involved in collective sale/en-bloc, the agreement of the token holders for the property will be required to agree to the sale, and to reach this agreement, a motion will be passed to the token holders for voting.

The decision of the token holders to sell or not to sell the property as part of the en-bloc may not result in the final decision of the en-bloc/collective sale, but when the collective sale did not go through the property will continue to be listed on the REIDAO platform.

When the en-bloc is voted to proceed, the property will need to be delisted from the platform. As per above section, the property manager will manage the process of the en-bloc, where the proceeds will be deposited to the reserve fund account of the property, where once the property is delisted from the platform, the balance of the reserve fund accounts will then be distributed proportionately to all the token holders, after deducting all the necessary charges.

d. Expiration of Property Lease

Some properties have a limited lease period, besides those that are classified as freehold. The property approaching its lease period could either be sold, have the lease period being extended, or returned to the government when the lease period expired.

When a property listed on REIDAO platform has its lease period expired, the property will need to be delisted from the platform, and the balance of the reserve fund will then be distributed to all the token holders, where upon completion all the property tokens associated with the property will be destroyed.

e. Forced Disposal

The reserve fund account as described in the previous sections, will act as the current account for the property listed on the REIDAO platform. This is the main account maintained for the property in the currency of the jurisdiction of the property location, where any

expenses incurred for the physical property will be paid out of this account, while any revenue/income earned by the property such as rental income will be deposited to this account.

The reserve fund account is an important component for the property to be listed on REIDAO, as the off-the-chain expenses, such as property maintenance fees, trust fees, platform fees, and other relevant fees would need to be paid from this account. In the worst case scenario that the property ongoing expenses is depleting the reserve account, it may no longer be feasible to maintain the property on the platform, as all the relevant off the chain fees will continue to apply.

REIDAO will set the disposal trigger level of reserve fund account to be **4%** of the property value, to initiate the forced sale of the property. This is deemed to be adequate level to find buyer and conclude the disposal of the property before the reserve fund account dries up. When this occurs, the property will be delisted from the platform.

4. REIDAO Exchange

In order to ensure liquidity of REIDAO property tokens, REIDAO will also be building a property tokens exchange platform to facilitate the buying and selling of listed property tokens.

Token holders who wish to sell their property token, can indicate the type of the property token, the quantity, and the price on the platform, where any potential buyers can view and purchase. Similarly, any potential buyers, can also indicate the type of token, quantity, and price on the platforms. The platform will match buyers and sellers and facilitate the transaction. The standard transaction fee of **0%-3%** (depending on membership level, see www.reidao.io/reitoken.pdf) of the property tokens transacted will apply and will be deducted automatically from the seller's property tokens balance.

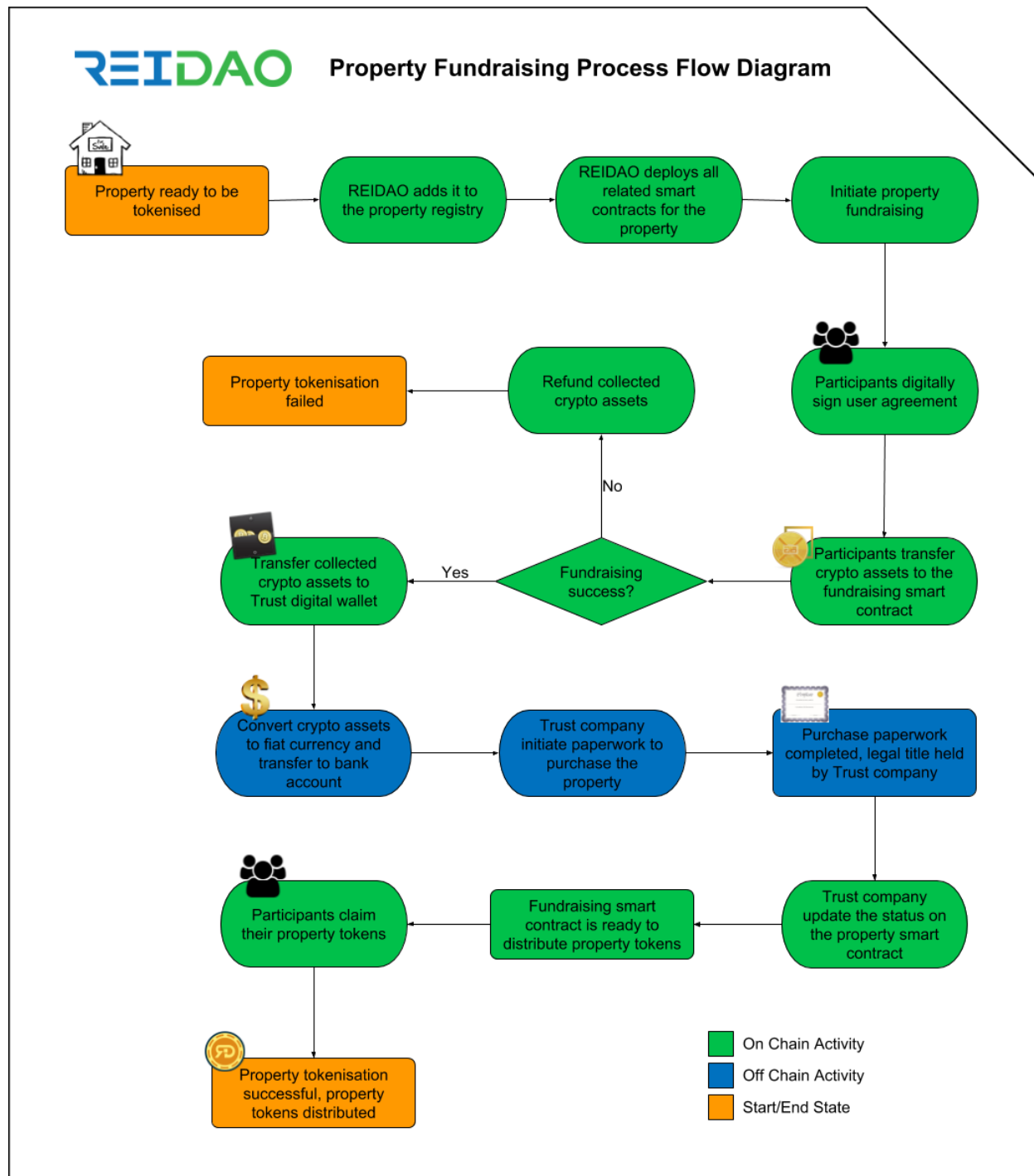
Token buyer and seller would need to exercise due diligence and own research to determine the real property value which in turn defines the property token value, such that the transaction to transfer the ownership of the token is fair and based on willing parties to transact. Some factors to consider include:

- The market value of the property, based on the available valuation report or the average transacted price for similar properties for the past 12 months, whichever is higher.
- The amount of the reserve fund available for the property. Note that, the property token represent an ownership fraction of the physical property as well as the associate reserve fund of the property, hence transfer of token ownership will result in ownership change for both the physical property and associated reserve fund ownership.
- Relevant duties as part of the property acquisition. For some jurisdiction, stamp duty apply and will already be part of the overall purchase price to acquire the property during the initial offering. The amount embedded will be passed on as part of the token ownership transfer.

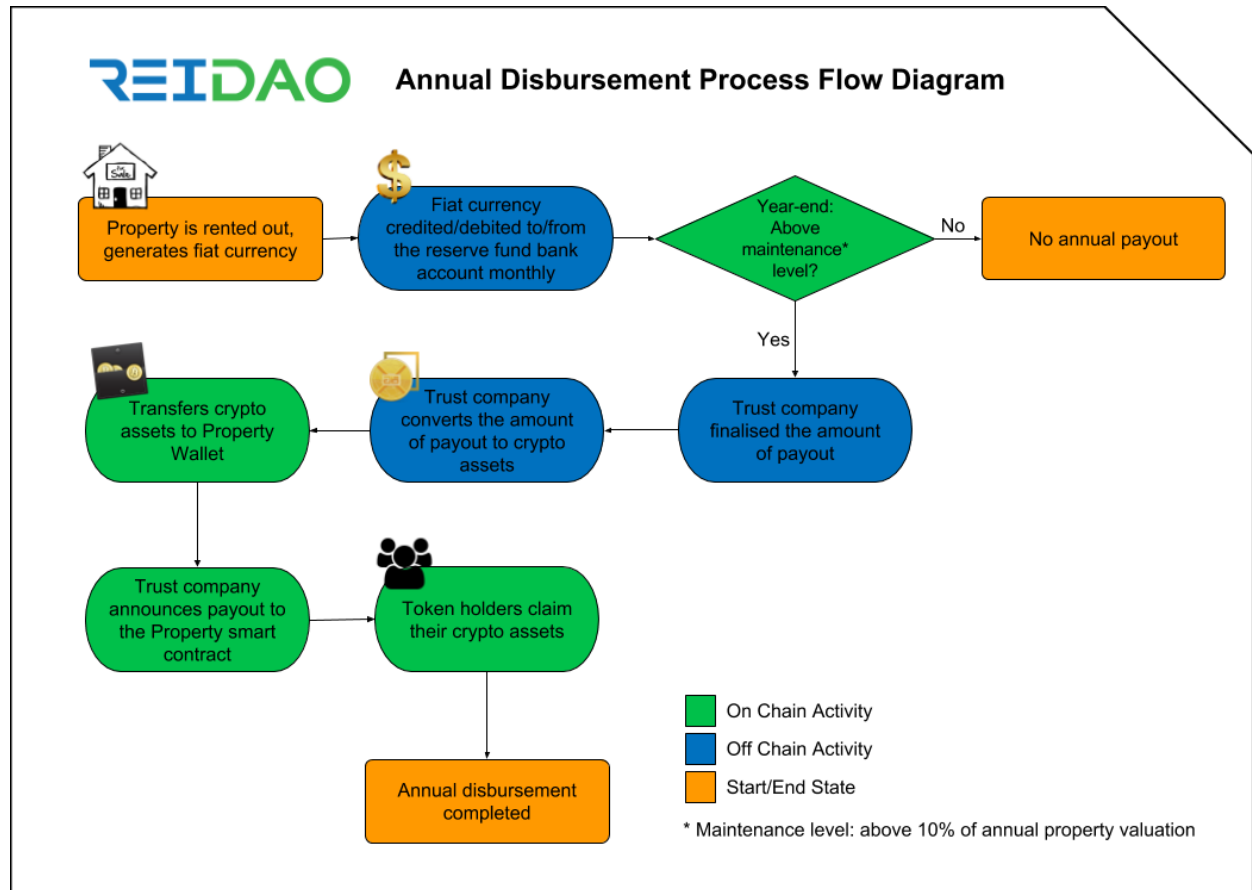
REIDAO will provide annual report and valuation of the property to help token holders assessed the real fair value of their tokens. Periodical report and update (for example on the amount currently in the reserve fund account) will also be provided whenever applicable.

Process Flow Diagram

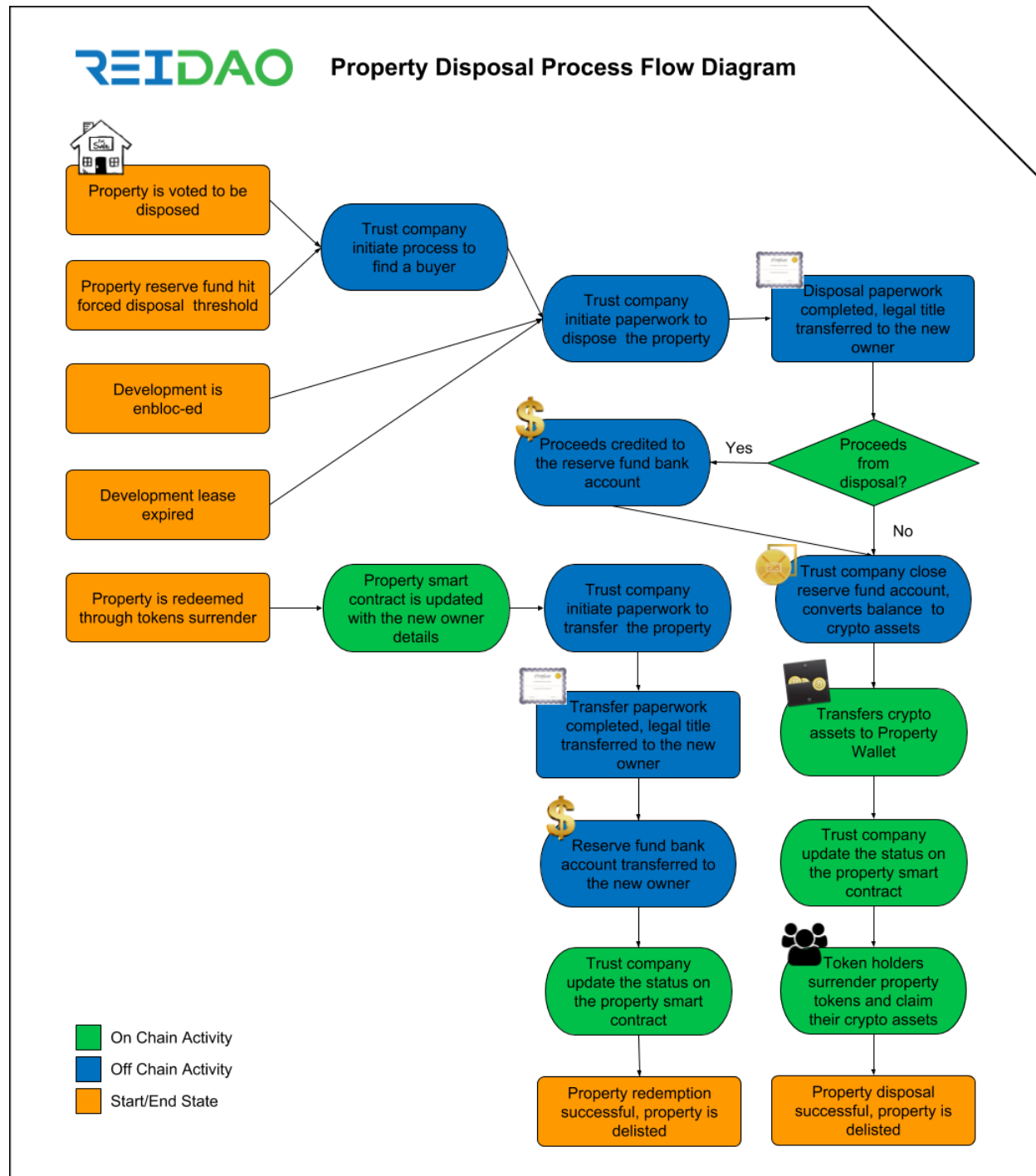
Property Fundraising



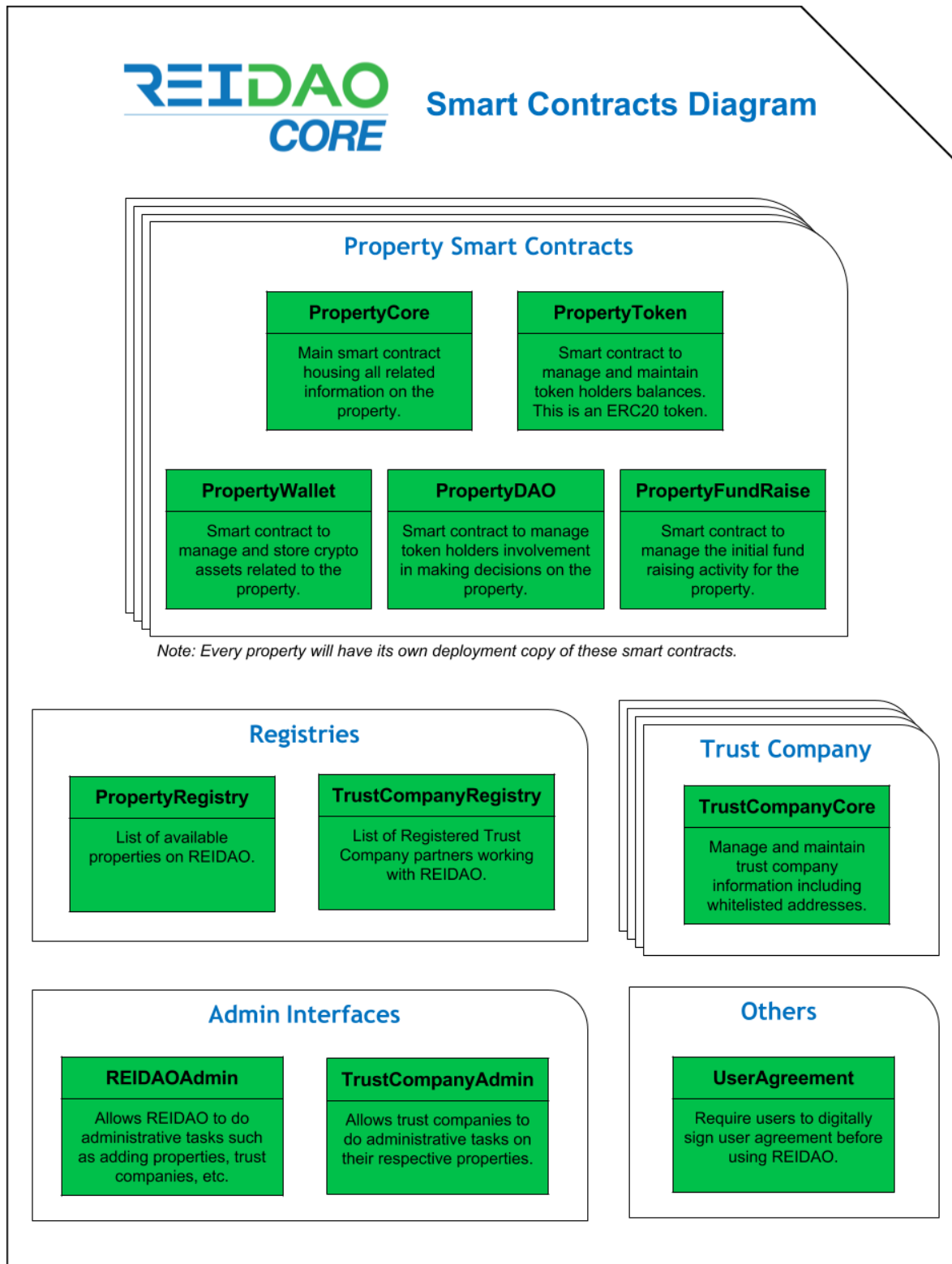
Annual Disbursement



Property Disposal



REIDAO Smart Contracts Stack



Appendix A. Property Fact Sheet Example



Property Fund Raise Fact Sheet

Document Creation Date: June 26th, 2017

Country	State/City	Local Currency
Malaysia	Kuala Lumpur	Ringgit Malaysia (RM)

Oriental Residences

Development Type: Residential



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Appendix A. Property Fact Sheet Example



Property Fund Raise Fact Sheet

Project Details

Address	KLCC, Kuala Lumpur
Developer	KLCC Development Sdn Bhd
Architect	SC Architects
Completion Date	2015
Tenure	Freehold
Land Area	5.04 acre
Apartment Details	Three 30-storey towers, comprising of 700 residential units.

Location & Vicinity



Situated at the heart of Kuala Lumpur's Golden Triangle, the Central Business District (CBD) of the capital city's landmark KLCC area, Oriental Residences offers its residents luxury lifestyle with impressive views of world renowned Petronas Twin Towers and CBD Skyline.

The apartment is within walking distance to the capital's best shopping belt (Suria KLCC, Pavilion) and famous landmarks (Petronas Twin Towers, Royal Selangor Golf Club), 5-star hotels as well as the corporate offices of MNC giants.

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Appendix A. Property Fact Sheet Example



Property Fund Raise Fact Sheet

Fund Raise Details

Apartment Details	Oriental Residences Tower A, Unit A2-28
Apartment Type	Two bedroom + study fully fitted unit
Size	1604 square feet
Trust Partner	Legacy Trustee Bhd

Property Fund Raise Target

Property Price			RM 2,000,000
Acquisition Cost			
Legal Fee		RM 13,450	
Stamp Duty		RM 54,000	
Miscellaneous Fees		RM 4,000	
Total Acquisition Cost			RM 71,450
Reserve Fund (20% of Property Price)			RM 400,000
Total Fund Raise Target			RM 2,471,450

Property Token Pricing

Property Token Code	REMYKL1701
Subscription Launch Date	July 1st, 2017
Subscription Period	30 days (or until all tokens are subscribed to)
Fund Raise Target *	RM 2,471,450 / USD 592,863
Converted to Gold Token (GT) *	14,821.5625 GT
Subscription Lot Size	100 Tokens per Lot
Number of Available Tokens / Total Lots	1,000,000 Tokens / 10,000 Lots
Minimum Participation	1 Lot
Original Price per Property Token	0.0149 GT
Original Price per Lot	1.49 GT
Final Price per Lot **	1.50 GT
Final Fund Raise Target	15,000 GT

* Rate as of document creation date: 1 GT = USD 40 = RM 160

** Rounded up towards the nearest 0.05 GT block to get round numbers and facilitate GT transaction fees

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Appendix A. Property Fact Sheet Example



Property Fund Raise Fact Sheet

Malaysian Properties Applicable Fees

The following is the breakdown of property acquisition, holding, as well as selling cost.

The figures and percentages are approximation. The exact figure may vary slightly depending on the state where the property is located, the type of the property as well as the property price itself.

The stated rates here are also subject to change due to government policy or market situation.

Acquisition Cost	Amount	Details
Legal Fee (Sales & Purchase Agreement)	0.6-1% of purchase price	First RM\$150k = 1% (or min RM\$300, whichever higher) Subsequent up to RM\$1M = 0.7% Subsequent up to RM\$3M = 0.6% Subsequent up to RM\$5M = 0.5% Subsequent up to RM\$7.5M = 0.4% Above RM\$7.5 million = negotiable
Stamp Duty (Upon Issuance of Strata Title)	3% of purchase price	First RM\$100k = 1% Subsequent up to RM\$500k = 2% Remaining = 3% Registration Fee First RM\$1M = RM\$3k Subsequent every RM\$50k = RM\$100
Miscellaneous document processing fee	RM 4000-8,000	Cost varies depending on the type and location of the property.

Holding Cost	Amount	Details
Property Tax	6% of Gross Rental Income	Paid half yearly.
Trustee Fee	RM 8,000-10,000	Paid annually. Exact amount varies depend on the property value and rental income.
Brokerage Fee	5% of Gross Rental Income	Paid to marketing agents for the purpose of securing tenants and renewal of lease
Income Tax	25% of Net Rental Income	Paid annually at flat 25% of net rental income after deductible expenses
Fire Insurance	0.15% of Property Price Valuation	Paid annually.
REIDAO Platform Fee	0.5% of Property Price Valuation	Paid annually.

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Appendix A. Property Fact Sheet Example



Selling Cost	Amount	Details
Real Property Gain Tax	5-30% of net gain	Tax Rate based on duration of property holding period: Up to 5 years = 30% More than 5 years = 5%
Brokerage Fee	2-3% of selling price	Seller brokerage fee paid to marketing agents
Legal Fee	0.6-1% of selling price	First RM\$150k = 1% (or min RM\$300, whichever higher) Subsequent up to RM\$1M = 0.7% Subsequent up to RM\$3M = 0.6% Subsequent up to RM\$5M = 0.5% Subsequent up to RM\$7.5M = 0.4% Above RM\$7.5 million = negotiable

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