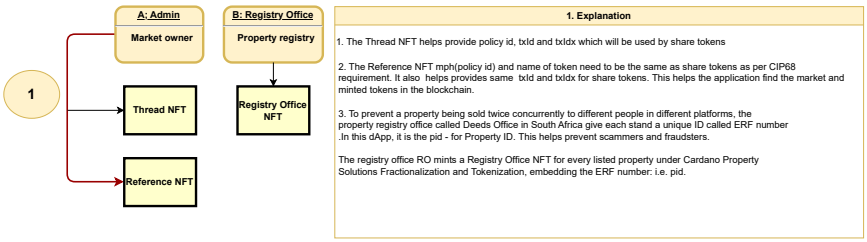
Cardano Property Solutions - Fractionalization and Tokenization



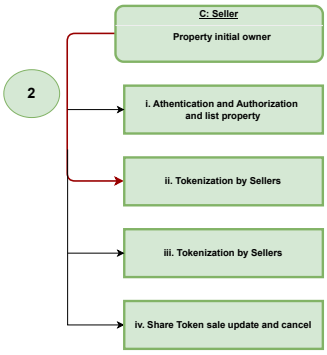
1. Explanation

1. The Thread NFT helps provide policy id, txId and txIdx which will be used by share tokens

2. The Reference NFT mph(policy id) and name of token need to be the same as share tokens as per CIP68 requirement. It also helps provides same txId and txIdx for share tokens. This helps the application find the market and minted tokens in the blockchain.

3. To prevent a property being sold twice concurrently to different people in different platforms, the property registry office called Deeds Office in South Africa give each stand a unique ID called ERF number .In this dApp, it is the pid - for Property ID. This helps prevent scammers and fraudsters.

The registry office RO mints a Registry Office NFT for every listed property under Cardano Property Solutions Fractionalization and Tokenization, embedding the ERF number: i.e. pid.



2. Explanation

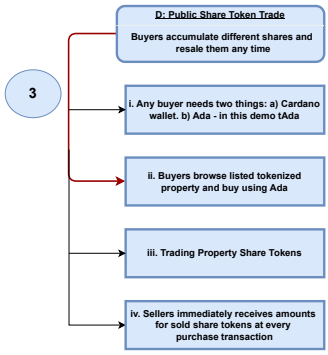
This section explains steps taken by property sellers in fractionalization and tokenization of their properties

i. A property seller needs to register, login and list property on the platform

ii. Seller mints Share Tokens for each property listed for tokenization

iii. Sellers have the flexibility to sell Shares on the platform in batches

iv. Share Tokens on sale can be updated price and can also be removed from market by Sellers



2. Explanation

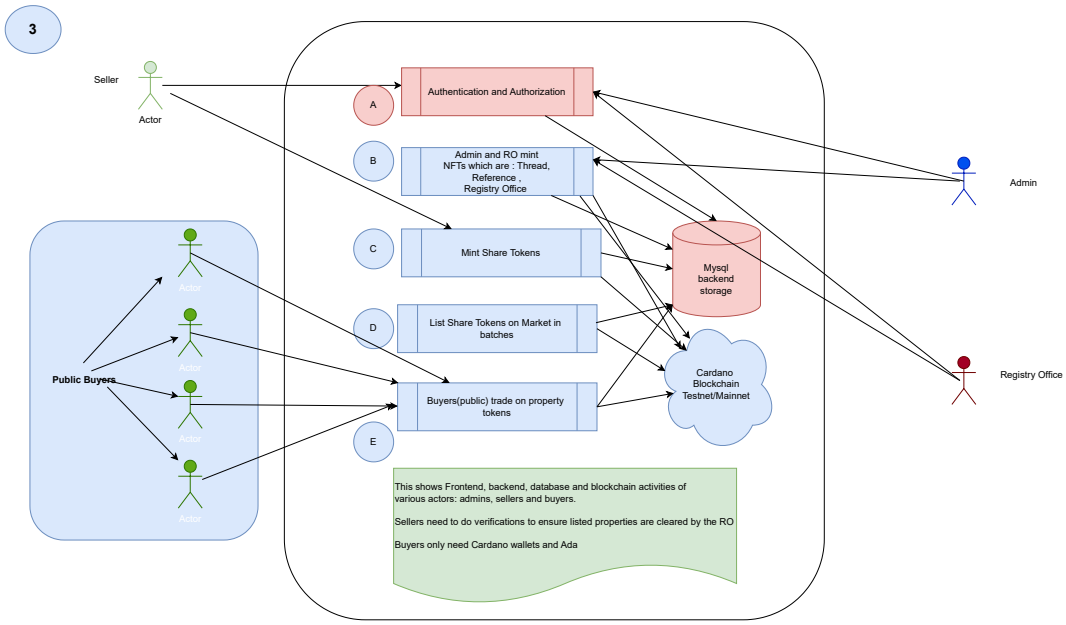
This explains how the public buy and resale Property Share Tokens without KYC, using only Cardano wallet

i. Anyone who wants to invest in property that is tokenized, needs to install a browser Cardano wallet and have Ada. There is no need for buyer KYC because share ownership by buyers is tracked via wallet addresses

ii. Buyers invests in different properties listed and can verify ownership via metadata attached on Share Tokens on Cardano blockchain

iii. Buyers can resale the share tokens, view the lis to bought tokens at anytime and anywhere there are. This is decentralized and data on chain is immutable but transparent and traceable

iv. Rather than allowing sales to accumulate amounts on a public smart contract, inviting problems, the application allows the bought tokens to move from smart contract on condition the price amount goes to seller.



Terms and explanations:

1. mph - minting policy hash is a token identifier
2. txId - transaction identity
3. txIdx - transaction identity index
4. fractionalization - dividing property value into fractions in order to sell these as share tokens
5. tokenization - creating blockchain fungible(same) representations of value
6 ERF - a property unique stand number in South Africa
7. RO - registry office
8. Blockchain - technologies that store information permanently and publicly in chains of blocks
9 Cardano - a community with a third form of blockchain founded by Charles Hoskinson
10. Testnet - a blockchain environment for testing decentralized applications
11. Mainnet - a blockchain environment for production as opposed to development
12. Token - a symbol which represents a value in real world e.g. rose flower is a token of love
13. NFT - Non Fungile Tokens are blockchain symbols of quantity 1 representing unique value
14. PID - property identity and is same as ERF number issued for each property stand by registry office
15. ADA - monetary representation of value on Cardano blockchain
16. tAda - this is ada but only used for test purposes
17. KYC - Know Your Customer - is a financial process of verifying customers to prevent money laundering nomarly abbreviated as AML