

Decentralized Lending & Borrowing protocol to offer lending against NFT assets.

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Blockchain technology gave us a way to tokenize and represent value in a lot of new ways that were not possible before. One of them is non-fungible tokens, a unique and verifiable way to create unique signatures that could not be replicated and are represented on an immutable and incorruptible distributed database ledger known as Blockchain.

Non-fungible tokens opened a new paradigm for value and ownership but markets for them remain illiquid and owners can't access capital on that asset without selling it.

Here I introduce a novel design and architecture where lenders that believe in the value of these assets can invest capital and accrue value based on that belief while giving non-fungible tokens owners a way to access liquidity collateralizing their assets.

Use cases

We identified 3 use cases for the platform.

1. A **lender/investor** who is willing to either lend stable coins against an NFT from a particular collection or buy them at loan to value if the borrower defaults.
2. A **borrower** who needs Liquidity in exchange for their NFTs.
3. A **sniper** who is looking to collect NFTs at a better price than on the open market.

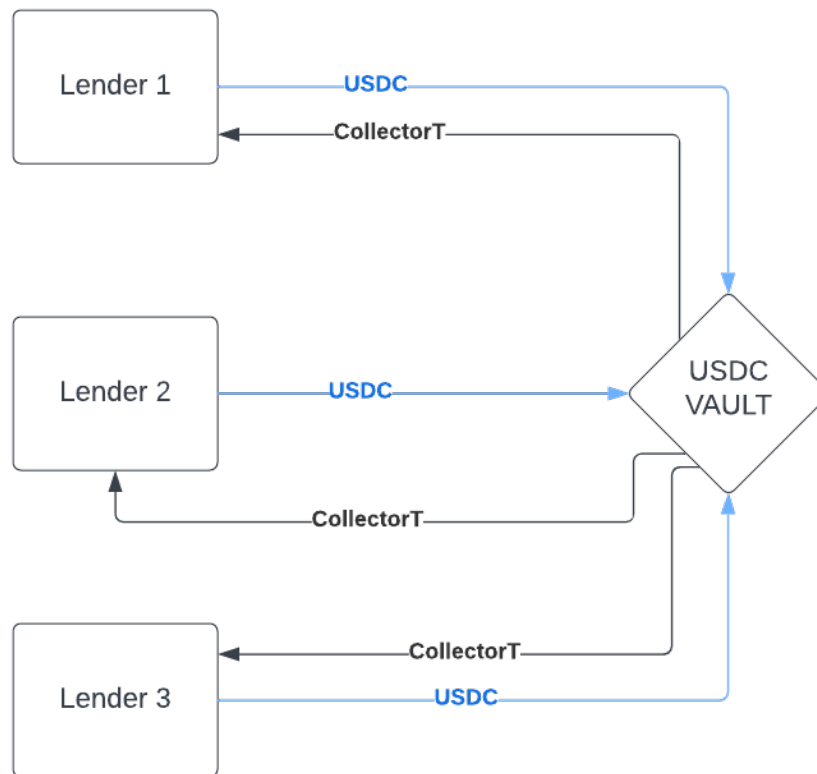
Lenders send USDC to one Vault and they get a token certificate (**CollectorT**) to redeem their value pro-rata of that vault.

Lenders will have their **USDC** being utilized by NFT owners that lock their NFT to get that liquidity (**Borrowers**).

They act as **Investors** when a borrower defaults because they are basically **buying the NFT at loan to value price**.

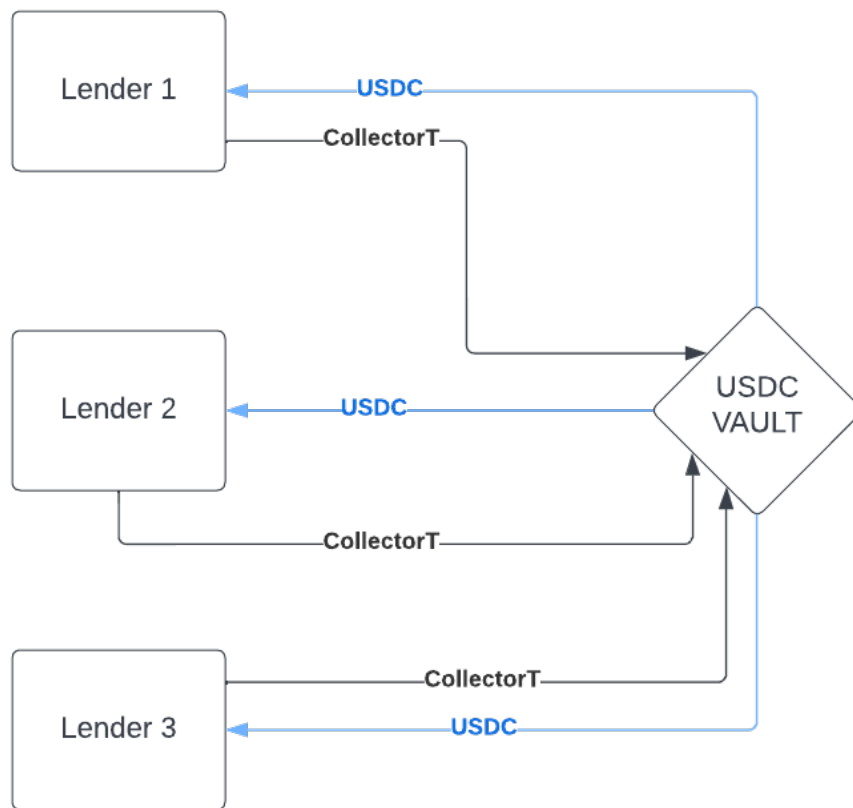
MINT Process

Mint Certificates (CollectorT) for Lenders to redeem their share of the lender's vault.



BURN Process

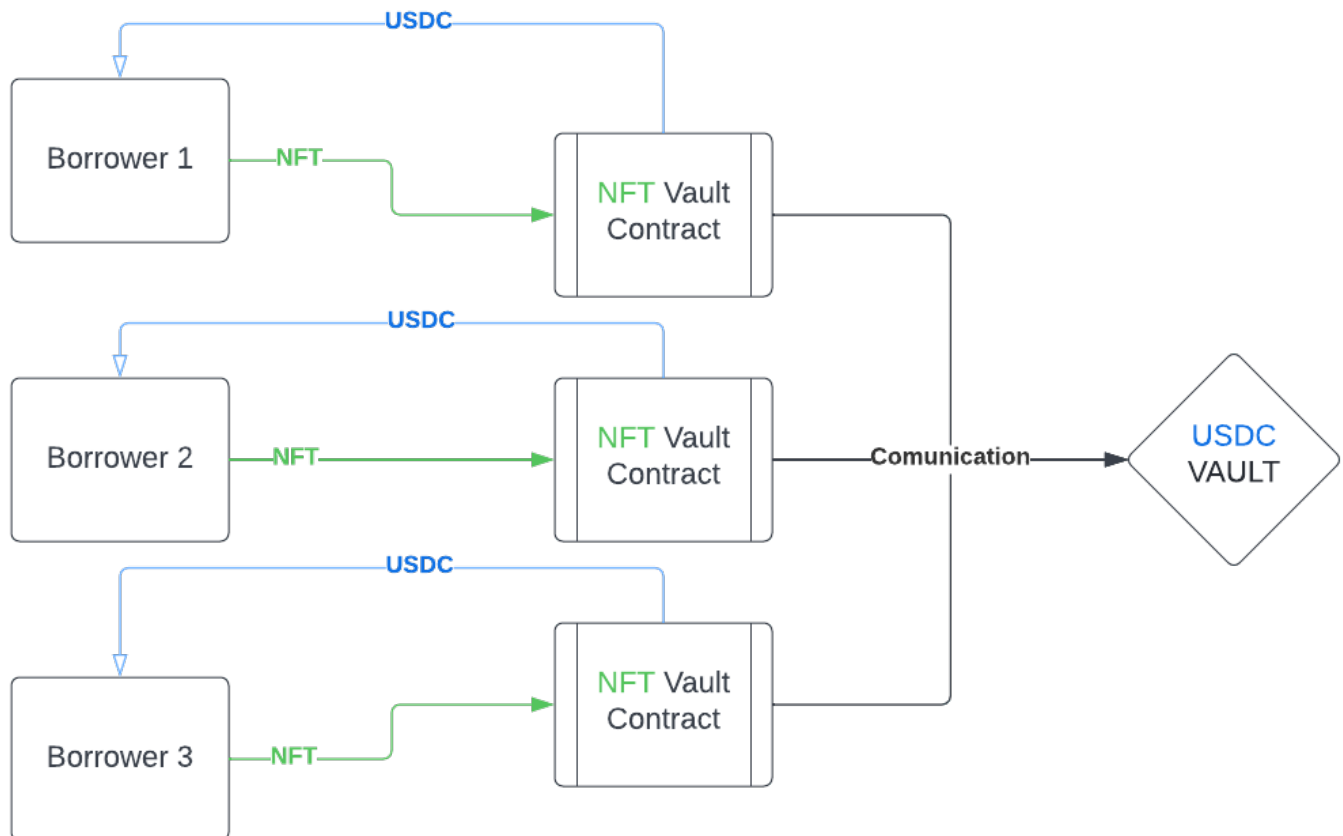
Let's lenders swap CollectorT for their share of the vault in USDC (Burn CollectorT).



If the **utilization rate is high lenders would need to wait for it to get lower to get their liquidity back.*

Borrowers lock a Non Fungible Token in a vault contract and can claim a max LTV (Loan to Value) from the Lenders USDC vault.

LOCK Process



**Platform committee will curate collections and will establish Loan to Value, Liquidation Price, and Time before liquidation. We plan to be permissionless in the future.*

NFT Contract Vault

The contract has 5 actions:

1. **Receive** a non-fungible token (acceptance).
 - A. Verify it's part of a permitted collection - Check token ID.
 - B. Checks LTV (Loan to value).
 - C. Checks LP (Liquidation Price).
 - D. Checks Time before liquidation.
 - E. Show terms to the Borrower.



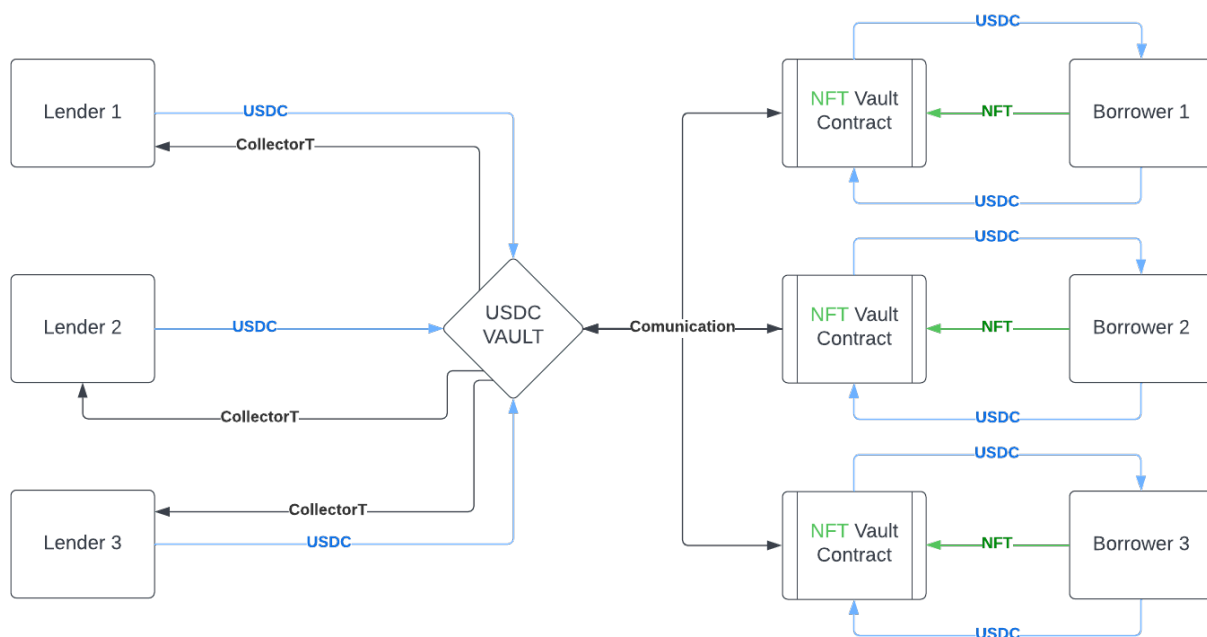
2. **Lock** the NFT in the vault with corresponding data.
 - A. Timestamp the non-fungible token was received.
 - B. Liquidation time.
 - C. Loan value + interest. - *What the user needs to provide in order to unlock the vault before Liquidation Time.*
 - D. Liquidation price.

3. **Send** a message to the USDC vault stating the vault is now locked and it's safe to send the loan to the borrower.

4. **Unlock** the NFT
 - A. After borrower repays debt + interest

5. **Liquidate** IF Borrowers default.
 - A. Price of the NFT hits Liquidation price
 - B. Timestamp hits liquidation time.

DIAGRAM LENDERS + BORROWERS

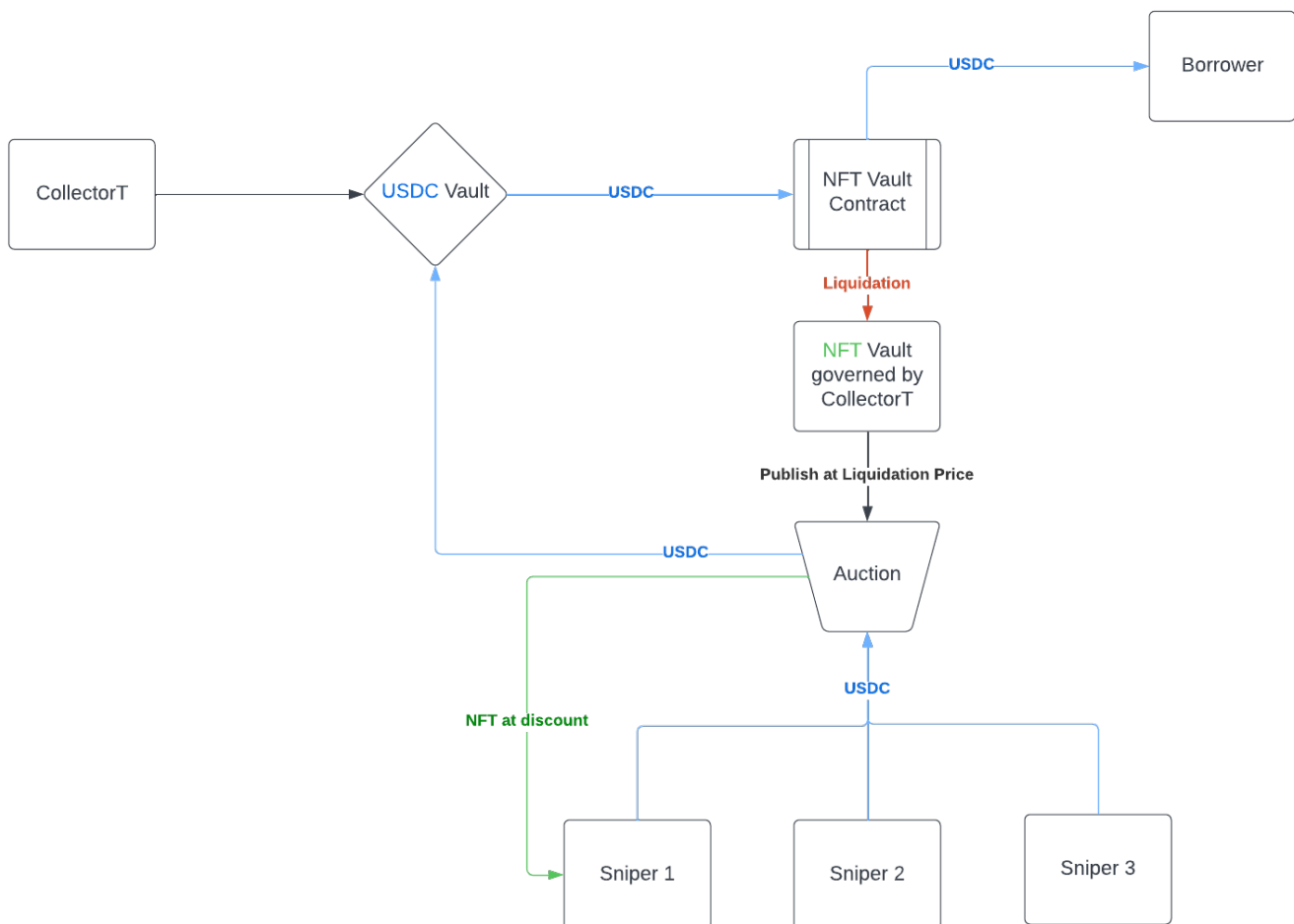


Liquidation & Defaults

The risk is entirely on **CollectorT** holders which are the lenders who deposited USDC. CollectorT represents their share of the USDC vault and it decreases the moment they unlocked USDC after locking the NFT in the **NFT vault contract**.

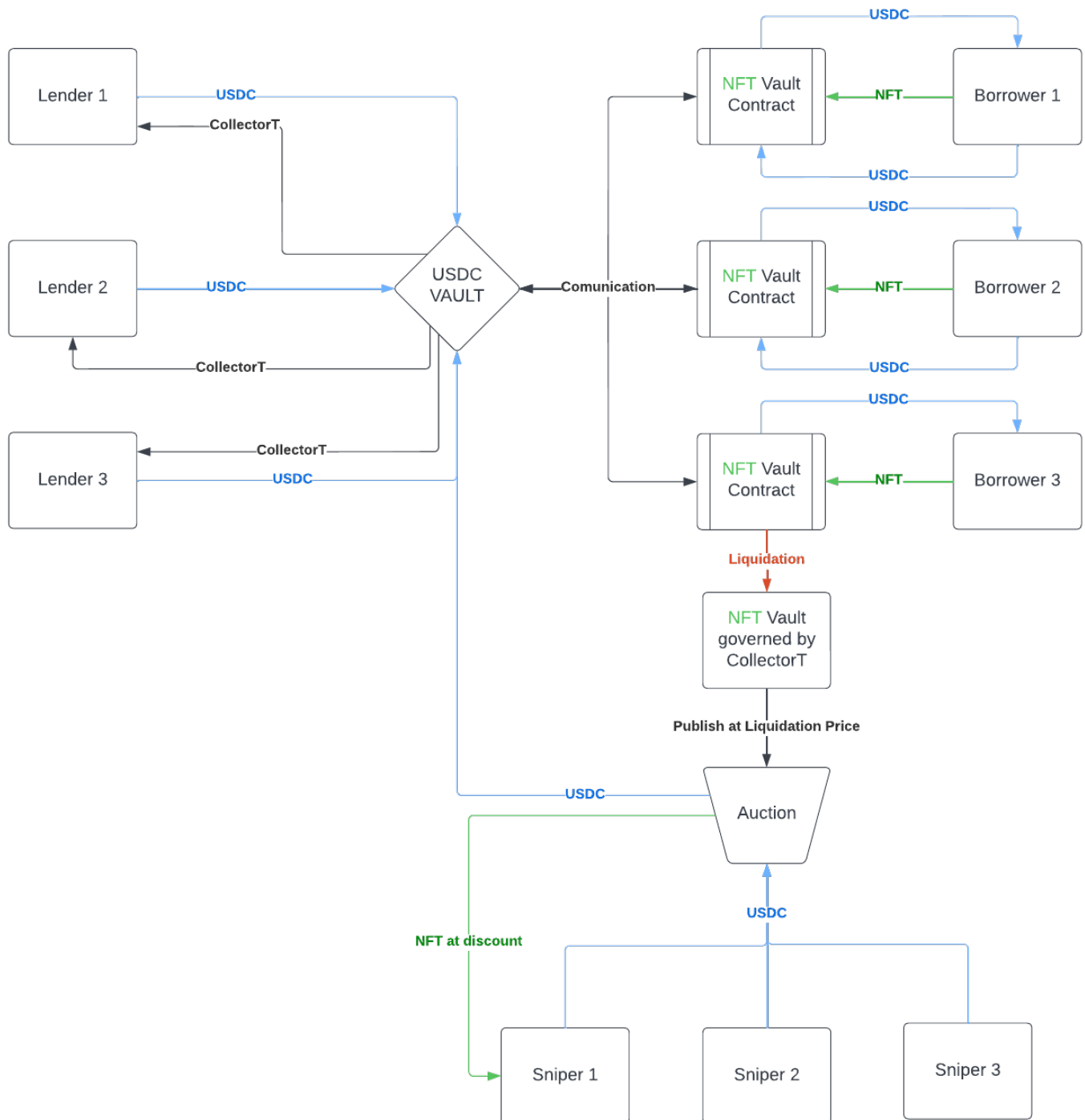
At **liquidation** the NFT unlocks and goes into a vault governed by **CollectorT** holders. **CollectorT treasury has basically bought the defaulted NFT for a LTV price** as the borrower now didn't return the USDC.

The **liquidated NFT** will be auctioned in our auction marketplace at **Liquidation price**. **Margin profit** between **LTV** and **price at the end of the auction** will go to **CollectorT USDC vault**.



1. There are 2 events that could trigger a **liquidation** on the NFT Vault Contract:
 - C. The oracle (data provider) sends a price for a collateralized NFT and this one is equal or below liquidation price.
 - D. Timestamps hits liquidation time.
2. When an NFT is liquidated it transfers ownership to CollectorT NFT vault.
3. The NFT now owned by the Collective NFT vault and governed by Collectortoken holders publishes the NFT for auction at a starting **Liquidation price**.
4. Liquidation price should be higher than max permitted LTV and **CollectorT** treasury should always be bigger than Loans from borrowers + interest so the platform stays solvent.

Protocol Diagram - Lenders, Borrowers, Investors, and Snipers



NFT collections and communities could use their treasuries to bootstrap liquidity in the lending/investor pool in order to give their Holders a way to access liquidity without selling.