

# What is Enzyme?



Safeguard operations and streamline the management of digital assets

Enzyme is an easy-to-use on-chain asset management system that enables access to digital assets and DeFi from one simple, unified app. It provides a front-to-back execution and order management system, which provides fully automated reporting, risk management, administration, governance and operations.

Managing crypto and DeFi assets without purpose-built smart-contract permissions and controls in place creates operational risks to a business. Enzyme comes with a robust suite of programmable risk management and governance tools to protect your assets.


- Full trade lifecycle support for crypto and DeFi
- Establish trading roles within your organisation and grant smart-contract enforced permissions
- Define individual trading or P&L stop-loss limits which are automatically enforced
- Configurable and automated KYC capability Verifiable NAV reporting in real-time

Moreover, Enzyme maintains sophisticated on-chain data pipelines that ensures data is auditable and trustworthy. This enables a radically new future based on the principles of transparency and auditability.

- A real-time reporting and performance dashboard with key performance and risk metrics
- Verifiable NAV reporting in real time
- Reports that provide easily readable and provable data on all transactions at any point in history

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# Use-Cases



Some example use-cases are;

- **Treasury Management:** Use Enzyme with Safe, Open Zeppelin governor or any other governance contracts to manage your organisation's treasury simply, securely and transparently.
- **Funds:** Use it to set up an on-chain DeFi fund. Enzyme takes care of all fund operations and administration using smart-contract automation.
- **Indexes:** Build your own indexes in minutes and have them rebalance automatically on-chain or off-chain.

# User Types



There are broadly four types of Enzyme users:

- DAOs
- Token holders in a DAO
- Vault Managers
- Depositors into Vaults

## DAOs

DAOs are struggling to find the time or the tools to manage their treasury efficiently and transparently. With Enzyme's programmable risk management policies, they can delegate trading to a team member with very specific permissions to ensure efficiency whilst guaranteeing safety of the funds. Via this vault, that team member can access DeFi protocols to lend, borrow, provide liquidity, stake, programmatically or opportunistically. All activity is transparent and accounted-for in real-time.

## Tokenholders in a DAO

Tokenholders often get little to no transparency on a DAOs treasury and how it is being managed. Enzyme provides them with a tool to propose and monitor the health of the DAO and it's treasury at all times. Furthermore, tokenholders can be assured that DAOs are managing treasury assets with efficient, programmable guards in place.

## Vault Managers

Enzyme allows anyone to build, scale and monetise investment strategies using the protocol's non-custodial Vaults. These strategies can span the spectrum from traditional discretionary allocators to DeFi-native combinations of any of the primitives with which Enzyme integrates. As a Vault creator, you can take advantage of the various building blocks offered by Enzyme without needing to have any software engineering background. You can benefit from the following tools;

- A large array of DeFi connections (eg. lending, borrowing, liquidity provision, derivatives, farming)
- A huge token asset universe (200+ tokens and growing rapidly)
- The options to charge fees to investors (eg. management fee, performance fee, entrance fee, etc)
- Rulesets dictating who can deposit to your strategy and on what terms (eg. minimum investment ticket, limited access to family and friends, etc)
- In-built accounting tools to report back to investors in real-time
- A suite of advanced risk management tools

Enzyme also enables depositors to connect to Smart Vaults too enabling them to be a part of your investment strategies whilst still keeping day-to-day control of their assets.

Importantly, a Vault Manager on Enzyme can be defined as either;

- an Ethereum wallet address (typically an individual)
- or an Ethereum multi-sig or a DAO (typically an organisation)

## Depositors

It's hard to keep up with the fast-changing investment opportunities in DeFi. Enzyme enables you to search for and deposit into Vault strategies in a completely non-custodial and transparent way. This enables you to capture the upside potential whilst freeing you from the day to day hassles of research and portfolio management. Critically, you can do this in a way where you are in **control** of your funds and able to exit any time you want.

# Strategies, Networks & Integrations

A vault on Enzyme can help you easily interact with some or all of the following activities to build investment strategies.

- Yield farming
- Staking
- Lending & Borrowing
- Synthetic assets & Derivatives
- Swapping assets on DEX's
- AMM pools
- Programmable risk management
- Governance
- Bots

A list of the integrations that we support today:

## **ETHEREUM:**

- AAVE (Lending & Borrowing, farming AAVE)
- Aura (staking)
- Balancer (Trading, LP pools, etc)
- Compound v2 & v3 (Borrowing, Lending, Farming COMP)
- Curve pools (Trading, LP pools, Staking, Farming CRV, etc)
- Convex Finance (Staking)
- Idle strategies (LP tokens, Farming IDLE)
- Maple Finance (Lending)
- Yearn Finance (Vaults)
- Uniswap v2 & v3 (Trading, Pools)
- Kyber Network (Trading)
- Paraswap (Trading)
- Staking ETH via Kiln
- Staking GRT directly
- 1inch (Trading)
- 0x project (Trading)
- Goldfinch (FIDU Custom Price Feed)
- Governance via Votium

## **Polygon:**

- AAVE (Lending & Borrowing, farming AAVE)
- Balancer
- Curve pools (Trading, LP pools, Staking, Farming CRV, etc)
- Idle strategies (LP tokens)
- Uniswap v3 (LP pools)
- Kyber Network (Trading)
- Paraswap (Trading)
- 0x project (Trading)
- Unslashed Finance (Insurance)

For a full list of the current and future integrations check out this [page](#).

# Background



## Brief History

Enzyme has [rebranded](#) from Melon Protocol. The protocol has been on mainnet since Feb 2019 and was the first DeFi protocol to decentralise its governance. Enzyme v2 was launched to mainnet in Jan 2021 and is a completely re-architected protocol with modularity and extensibility at the core of its design.

## Enzyme Token

Enzyme's token is [MLN](#) and has a dual use:

- 1) enables access the MLN network.
- 2) used to incentivise developers to build on Enzyme.

## Enzyme Protocol Fee

This release implements a protocol fee, which is charged by minting additional vault shares to an Enzyme Council owned contract.

Initially applied at 50 bps of AUM but can be bought back by the vault manager for 25 bps.

The Enzyme Council owned shares can be bought back in the equivalent value of \$MLN, either by the vault manager at 25 bps or by the Enzyme Council at 50 bps. The \$MLN is then burned. The "50% discount" encourages the vault manager to take care of this process rather than the Council having to.

The protocol fee is charged each time that a fund:

- receives a new deposit
- has shares redeemed
- migrates to a new release or reconfigures vault settings without migrating

A more detailed discussion of the mechanics of the protocol fee can be found [here](#).

## Governance

Enzyme is governed by a DAO known as the Enzyme Council which is made up of technical experts and user representatives. A complete discussion of the protocol's governance can be found [here](#).



# Security

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Enzyme's smart contracts have been on main-net since early 2019. The contract are fully tested and independently audited before any main-net deployments are made. The most recent [Sulu release \(v4\)](#) was audited by [ChainSecurity](#) and [OpenZeppelin](#) amongst others, with a [current bug bounty of \\$400'000](#). In addition to that, the [Enzyme App](#) has been fully audited and is on constant scrutiny.

# Set Up and Configure Your Vault



These settings are semi-permanent

Before we begin, it's important to highlight an important change with the Sulu release. Previously, most setting configurations in a vault were non-changeable once a vault was deployed on-chain. However, one of the newly introduced features in the Sulu release is that you can now flexibly reconfigure the following setting configurations on a vault at any time:

- Vault denomination asset
- Fees (Exit fee, Entrance fee, Performance Fee and Management Fee)
- Permitted recipients of secondary market shares transfers
- Shares lockup period
- Policies that impact the assets held and traded by the vault (Allowed Adapters, Allowed External Position Types, Cumulative Slippage Tolerance, External Position Removal, Asset Position Removal).
- Vault ownership


Changing your setting configurations frequently might compromise your relationship with your stakeholders so ideally there should be a justifiable reason to make changes. Any time you implement a change, they will take 7 days to take effect. This time period is a parameter which is changeable by the Enzyme Council. This gives your stakeholders substantial time to review any changes and opt-out if they do not want to subscribe to the new terms. In the near future, we will be launching a notification system to which stakeholders can subscribe in order to get real-time alerts whenever a change is proposed.

Modifying the following settings was possible before and will remain possible with Sulu:

- Modifying the list of permitted depositors
- Modifying deposit limits

Bear in mind that you will not be able to change the vault name or the vault share symbol, so spend some time on making sure you get these right the first time around.


With these changes in mind, we've prepared a detailed guide of how to get started. As we go through each step we'll define what each of these setting configurations does and remind you about which are changeable and which are not so don't worry about having to memorise this all. The following pages are laid out in order and correspond with the product setup process found on the app [here](#).


 You must be connected to your Ethereum or Polygon wallet and hold a small amount of ETH or MATIC to pay for the fund creation transaction. Click the `Connect Wallet` button in the top right corner of the screen to get started.

 **Vault Types**


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# Vault Types

In this release, we have introduced different vault types, with different preset policies to reflect the varying levels of trust that exist or are perceived between the manager and investors.

Different vaults are created for different purposes with different trust relationships, thus we have pre-configured policies to easily create vaults without going through each individual policy.

**Ready To Create Your Vault?**  
Create your vault with one of the templates below. Templates are pre-filled but completely editable.

	Public Vault	Hybrid Vault	Private Vault
<b>Public Vault</b>	<ul style="list-style-type: none"><li>✓ Anyone can deposit</li><li>✓ No prior relationship required between you and your depositors</li><li>✓ Settings prioritise depositor protection over access to DeFi features</li><li>✓ Example: A Yearn- or Ribbon-like strategy</li></ul>	<ul style="list-style-type: none"><li>✓ You can choose to approve depositors or not</li><li>✓ You are known by your depositors but not necessarily vice versa</li><li>✓ Settings protect you from malicious depositors</li><li>✓ Example: An investment club or a DeFi fund strategy run by a trusted manager</li></ul>	<ul style="list-style-type: none"><li>✓ You approve all depositors</li><li>✓ You know your depositors and vice versa, or you are the only depositor</li><li>✓ Settings prioritise access to DeFi features</li><li>✓ Example: DAOs managing their treasury, personal vaults, or vaults with legally binding contracts</li></ul>
<b>Fees</b>			
Management Fee	1.0 %	1.0 %	—
Performance Fee	10.0 %	10.0 %	—
Entrance Fee	—	—	—
Exit Fee	In kind 0.0 % Specific assets 1.0 % Paid to the vault	In kind 0.0 % Specific assets 1.0 % Paid to the vault	—
<b>Deposit Restrictions</b>			
Limit Wallets Permitted To Deposit	Not recommended	—	✓
Deposit Limits	—	—	—
<b>Shares Transferability Restrictions</b>			
Restrict Wallets Permitted To Receive A Share Transfer	Not recommended	—	✓
<b>Restrict Wallets Permitted To Receive A Share Transfer</b>			
Restrict Assets For Redemption	—	—	—
Specific Asset Redemption Threshold	—	—	—
Shares Lock-Up Period	✓	✓	—
<b>Asset Management Restrictions</b>			
Limit Adapters To A Specified List	—	—	—
Limit External Positions To A Specified List	✓	—	—
Set Cumulative Slippage Tolerance	10.0 %	—	—
Restrict External Position Removal	✓	—	—
Restrict Asset Position Removal	✓	—	—

## Public Vault

In this vault, trust does not necessarily need to exist between Depositors and the Vault Owner. You are known by your depositors but not necessarily vice versa.

## Private Vault

This is a vault with full trust, where Depositors trust the Vault Owner and vice versa. Typically there will be an "allowed depositor" list on this type of vault, possibly a KYC and likely some legal documents to define the relationship.

## Hybrid Vault

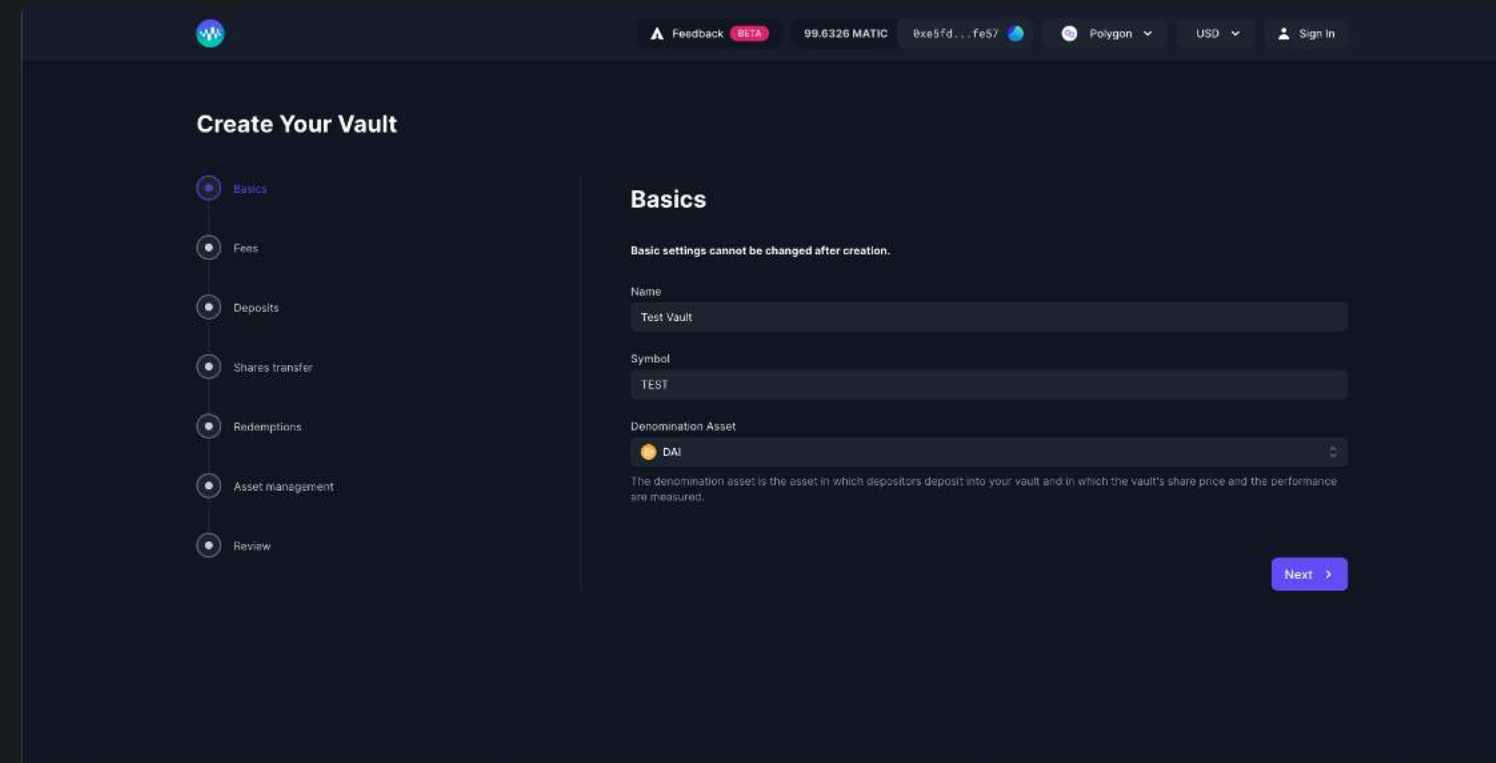
This vault requires Depositors to trust in the Vault Owner. Usually, this will be a known party and legal documents might be involved.

# Vault Basics



## Setup: Step 1

The first step of the setup process is simple.



## Name

Although each Vault on Enzyme is identified by its own unique Ethereum address, it is also possible to choose a name for it. It is possible for more than one product to have the same name so you might want to check that the name you have in mind hasn't been used before.

## Symbol

This is the symbol of your vault's shares (which are ERC-20 tokens). It defaults to ENZF, but you can change it to personalize as you see fit.

## Denomination Asset

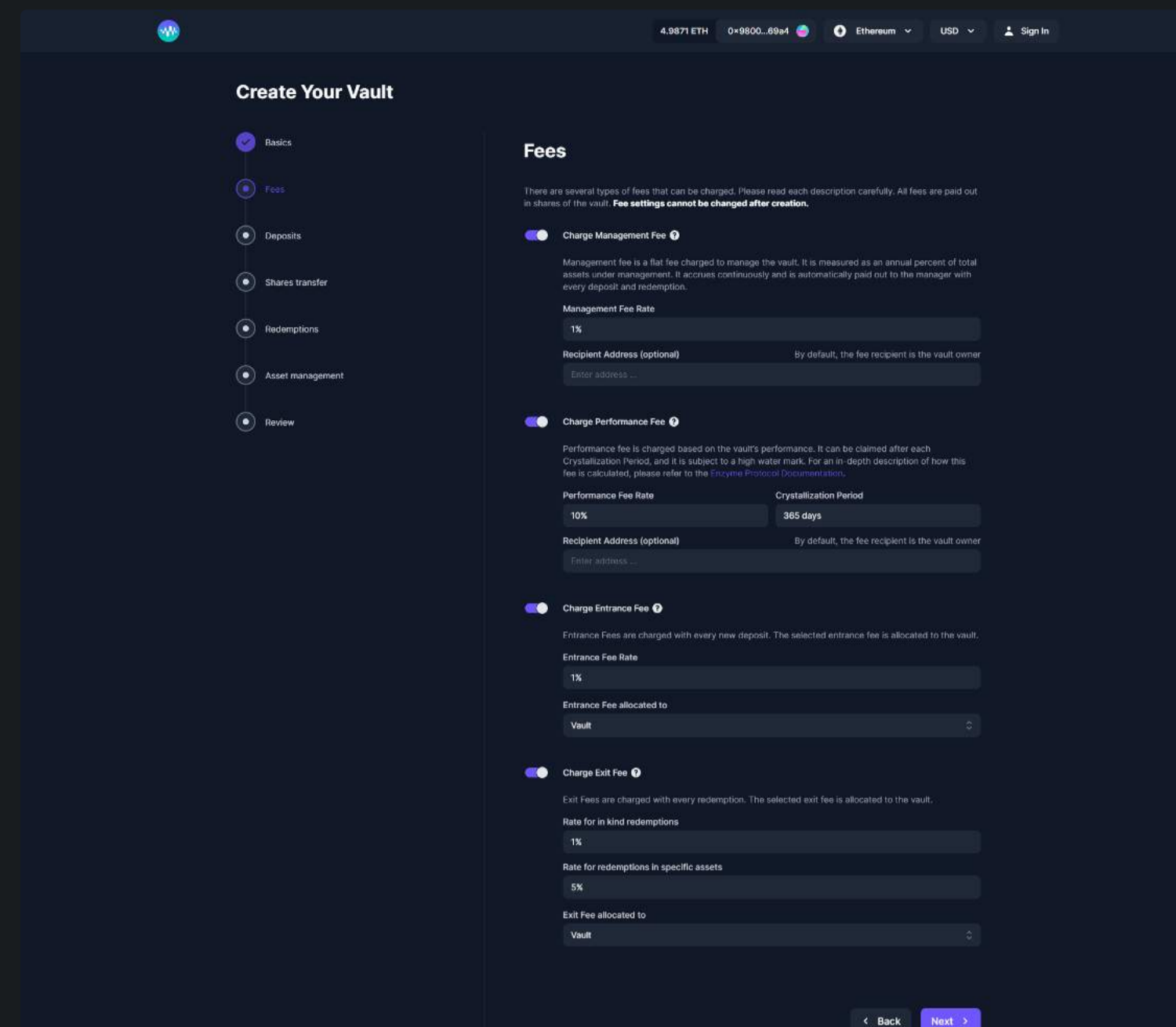
The denomination asset is the base asset of your Vault. There are several implications to think about when choosing a denomination asset.

- **Performance Fees\***: It is the asset that your Vault's **performance fee** will be benchmarked and calculated against.
- **Deploying capital**: It is the asset that will be received from subscribers to your Vault and therefore the asset that will be held by the product's portfolio before you deploy it.

# Fees

Setup: Step 2 (Fees settings can be changed after creation)

Fees are optional and can be charged to anyone depositing into your Vault. All fees detailed in this section are paid out in newly created shares. There are four types of fees you can select as a Vault Manager, detailed below.



Note that in the screenshot, all fees are toggled on for display purposes. If you do not plan to charge a fee, make sure it is toggled off.

## Management Fees

A management fee is a periodic payment that is paid by product subscribers to the Vault Manager. The fee is calculated as a percentage of assets under management and is independent of Vault returns. More detailed information on how this is calculated at a protocol level can be found [here](#).

## Performance Fees

Performance Fees for pre-Sulu releases include the concept of a "crystallisation period". While this concept is important in traditional finance, it is also complicated and gas-expensive to properly implement on-chain. By removing the concept of "crystallisation period", we can greatly simplify the implementation of the performance fee in the protocol.

Without a "crystallisation period" the manager can potentially earn more performance fees through continuous accrual instead of quarterly or yearly accrual. Managers should therefore set the rate for the new simplified performance fee lower than the rate of the previously used performance fee.

This also implies that performance fee can be claimed at any time.

Vault returns are initially benchmarked against 1. For every period thereafter, the benchmark is reset to what is known as a High Water Mark (HWM). The HWM is the product GAV at the time the performance fees are paid out.

If you receive subscribers when GAV is below HWM, they will pay zero performance fees until GAV is back above the HWM.

Subscribers who enter when the product is above HWM will pay no fees if the fund ends the period below HWM.

More detailed information on performance fees can be found [here](#).

You can find below a visual representation of how and when fees are accrued and paid out.



## Entrance Fee

An additional entrance fee can be charged to subscribers by the Vault Manager. This can be defined as a percentage of the total investment and can be configured to be paid to the Vault itself or directly to the Vault Manager.

## Exit Fee

In this release, we introduced the option to set up an exit fee, which is charged with every redemption. The fee can be set up to be routed to either the Vault or to the Vault Manager.

Additionally, the exit fee can be tiered such that single-asset redemptions are charged a different rate than in-kind redemptions. This incentivizes in-kind redemptions and subsidizes the vault or manager for the extra effort required to manage single-asset redemptions. More discussion around redemption settings can be found at the link above.

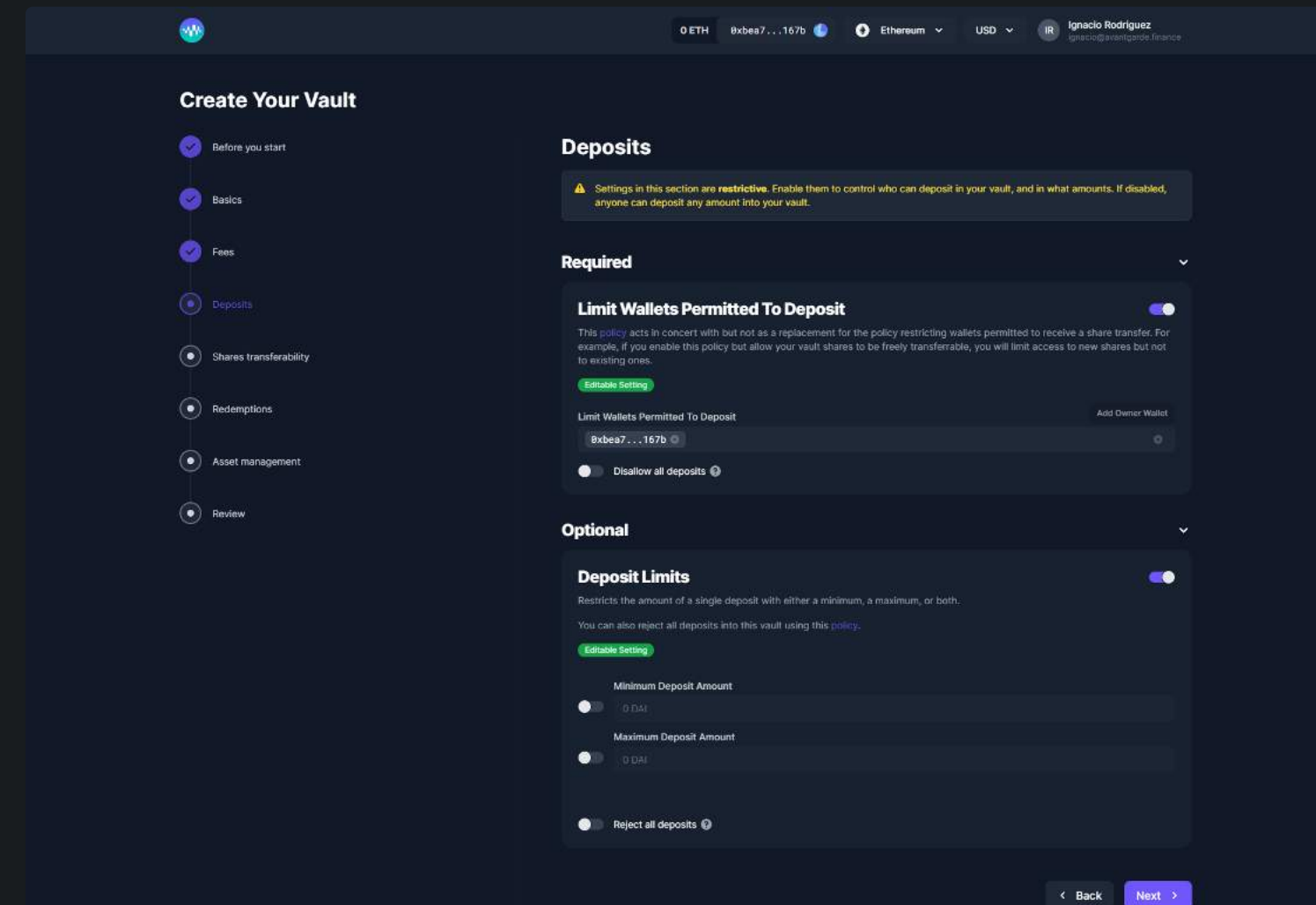
**Why have an entrance or exit fee?** Such a fee could deter traders from subscribing and then redeeming in the same transaction to capture possible arbitrage opportunities which may arise. Such an attack would come at the expense of long-term depositors.


# Deposits



Setup: Step 3 (Deposits settings can be changed after creation)

The configurations listed below are **optional** depending on the vault type you have previously selected. They limit who can deposit into your Vault, and how much they can deposit.



 Note that in the screenshot, all deposit configurations are toggled on for display purposes. If you do not plan to restrict investments using these configurations, make sure they are toggled off.

## Limit Wallets Permitted To Deposit

Limits new deposits to a list of addresses. Please note that once a list has been added, will only be able to add or remove new addresses to/from that list. You will not be able to delete the list.

It is also worth noting that limiting the wallets that are permitted to make deposits does not automatically limit the wallets that can receive shares via transactions in secondary markets as discussed in the [next section](#). To fully control the ownership of your vault's shares, you need to configure both settings.

## Deposit Limits

You can set Minimum or Maximum deposit limits for your subscribers.

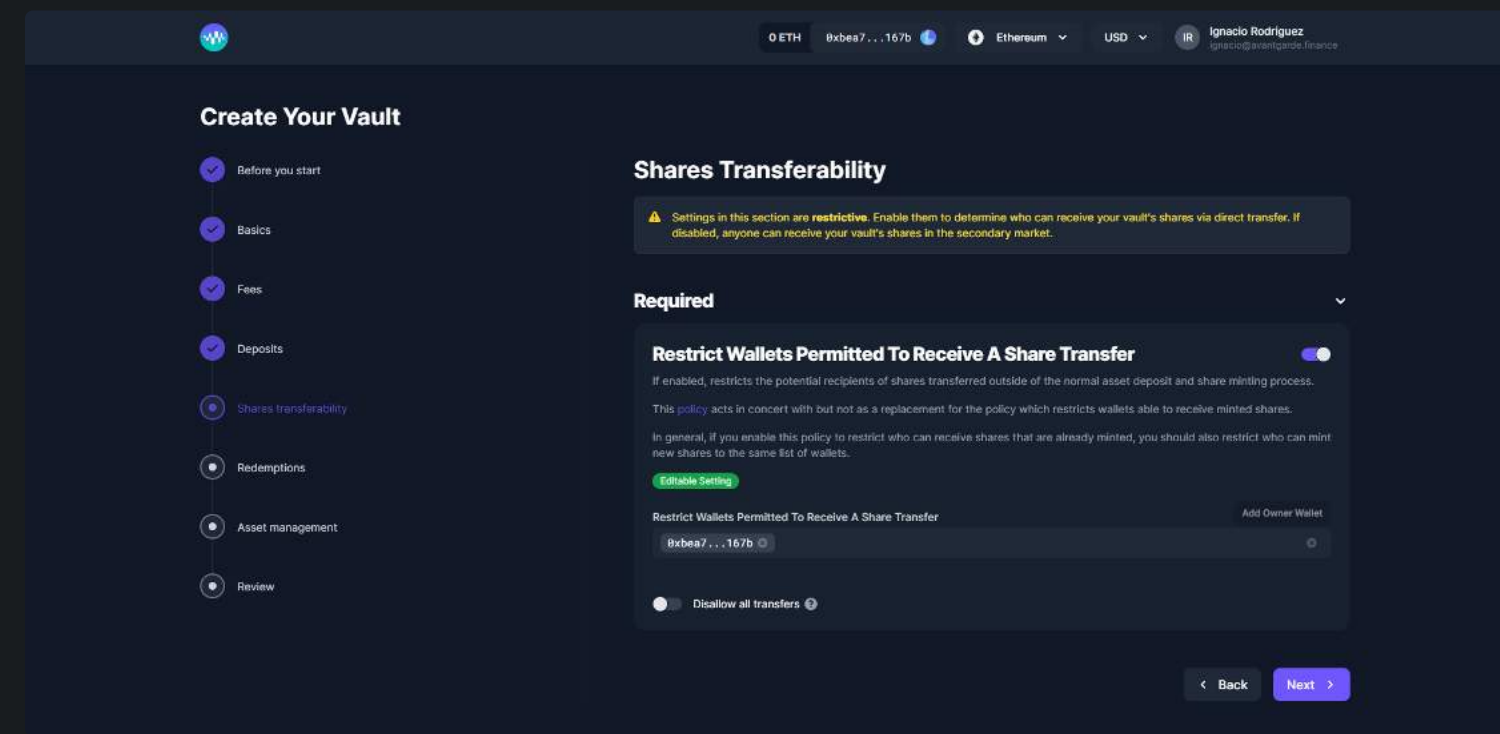
Also in this section you can choose to reject all deposits. If you chose to reject all deposits, please bear in mind that as vault manager you will also be prevented from depositing into the vault until you disable this option.

# Share Transfers



Setup: Step 4 (Share Transfers settings can be changed after creation)

Share Transfers can be subject to restrictions, such as limiting which wallets can receive transferred shares.



## Restrict Wallets Permitted To Receive A Share Transfer

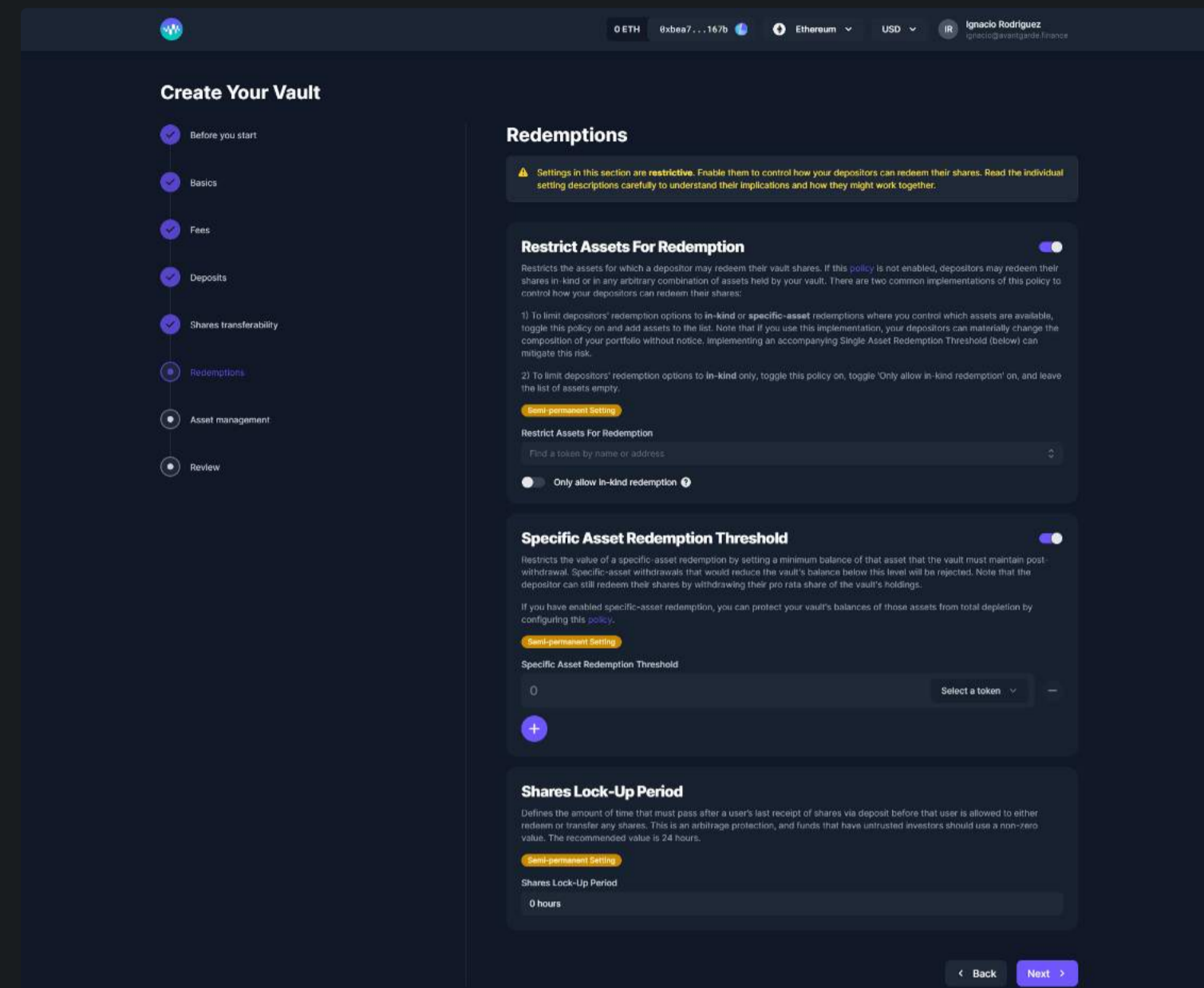
Here you can specify addresses to which your vault's shares can be transferred. By default, if this setting is enabled the owner address is always listed. If this setting is toggled off, shares can be transferred freely and used throughout the DeFi ecosystem.

# Redemptions



Setup: Step 5 (Redemptions settings can be changed after creation)

Generally speaking, deposits to and redemptions from your Vault are possible 24/7 unless you add a policy that dictates otherwise. **Caveat:** Trading heavily on Synthetix or other similarly designed exchanges, and the use of external positions may occasionally make redemptions not possible because of their delayed settlement design. The Guaranteed Redemption Policy ensures that your Vault has a policy that restricts you from trading during a specific time period each day so that depositors know with certainty that they can redeem within this window. This is a recommended policy to have if you will be trading with Synthetix. If you have any questions about using this policy, come and [discuss](#) them with us.



## Restrict Assets For Redemption

Restricts the assets for which a depositor may redeem their vault shares. If this [policy](#) is not enabled, depositors may redeem their shares in-kind or in any arbitrary combination of assets held by your vault. There are two common implementations of this policy to control how your depositors can redeem their shares:

1. To limit depositors' redemption options to **in-kind** or **specific-asset** redemptions where you control which assets are available, toggle this policy on and add assets to the list. Note that if you use this implementation, your depositors can materially change the composition of your portfolio without notice. Implementing an accompanying Single Asset Redemption Threshold (below) can mitigate this risk.
2. To limit depositors' redemption options to **in-kind** only, toggle this policy on, toggle 'Only allow in-kind redemption' on, and leave the list of assets empty.

## Specific Asset Redemption Threshold

Restricts the value of a single-asset redemption by setting a minimum balance of that asset that the vault must maintain post-withdrawal. Single-asset withdrawals that would reduce the vault's balance below this level will be rejected. Note that the depositor can still redeem their shares by withdrawing their pro rata share of the vault's holdings.

## Shares Lockup-Up Period

Defines the amount of time that must pass from the time a user deposits until they're allowed to either redeem or transfer any shares. This is arbitrage protection, and funds that have untrusted depositors should use a non-zero value. Depending on the trust level between the Depositors and the vault Manager, we recommend at least a 24 hours lock-up period.

# Asset Management

Setup: Step 6 (Asset Management settings can be changed after creation)

Vault Managers can specify policies that restrict the behaviour in a vault to reassure stakeholders.

## Limit Adapters To A Specific List

Adapters connect your vault to DeFi protocols that allow you to trade, lend, borrow, supply liquidity, Stake, etcetera. Enabling this policy means that your vault will only be able to interact with adapters on this list.

## Limit External Positions To A Specified List

An external position type is a new type of position which has been introduced with Sulu. They are similar to adapters in that they allow you to interact with external DeFi protocols. However, they differ in that they are not represented by a liquid, divisible, fungible token (eg. Compound CDPs or Uniswap v3 LP positions, Maple Lending, Aave Borrowing and Convex Voting). This policy defines which external position “types” can the vault interact with. [See risks & nuances section](#). Enabling this policy means that your vault will only be able to interact with external positions on this list.

## Set Cumulative Slippage Tolerance

This policy is designed to limit any maliciously deliberate attempts or accidental actions which could drain a vault causing a large loss.

It does this by limiting the value loss (i.e. slippage) that can occur via adapter actions over a “tolerance period” (rolling 7 day period).

Vaults define a tolerance threshold (e.g., 5%, 10%, etc). Whenever an adapter action results in slippage, that slippage amount is added to a cumulative slippage total. The accumulated slippage then diminishes over the “tolerance period duration” at a constant rate based on the fund’s chosen tolerance. This policy allows bypassing the slippage checks entirely if the adapter being called is in a Council-maintained list on the AddressListRegistry (adapters that cannot be manipulated by asset managers to steal fund value).

## Restrict External Position Removal

Prevents the removal of an external position from the vault’s accounting unless its value can be considered negligible (i.e. dust). The dust threshold is maintained by the Enzyme Council.

## Restrict Asset Position Removal

Prevents the removal of an external position from the vault’s accounting unless a) it does not have a valid price, or b) its value can be considered negligible (i.e. dust). The dust threshold is maintained by the Enzyme Council.

# Review



## Setup: Step 7

Once you've configured your Vault settings, you'll be presented with a summary of the choices you've made. Take a careful look through and when you are satisfied, accept the [Terms and Conditions](#) and click on the Create button to start the transaction signing process. After the transaction has been mined, you will see a buy shares button on the top right of the screen. From here, you will be able to invest in your vault with the denomination asset or [seed](#) it with a pre-existing portfolio.



Important. If you already have a portfolio of assets that you want to migrate over to an Enzyme Vault, see next section on how you can potentially do this in a more cost effective way.



## What is Seeding?

Seed funding corresponds to the first official funding stage. The purpose of seeding a vault is essentially to get your vault up and running and ready for business.

Let's say you would like to start your vault with a perfectly balanced portfolio of 25% ZRX, 25% WETH, 25% WBTC and 25% USDC and you already hold those assets. Without seeding, you would have to trade those positions into your denomination asset, deposit into the vault, then trade back into your desired allocations, spending gas on every transaction.

Seeding the Vault with different assets can be more efficient than converting the assets into the denomination asset and back.

**Disclaimer:** we have taken great care to make sure that the procedure described below is accurate. However, we are not responsible for any loss of assets that might occur if you do not follow the procedure as described.

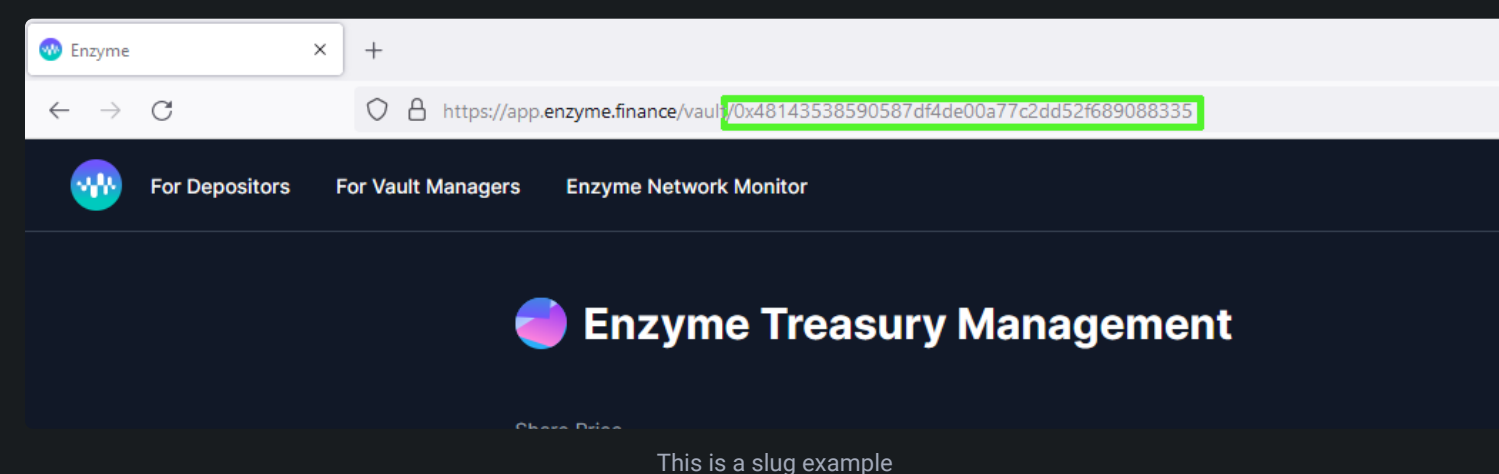


Pre-requisites:

- To start with, the Vault has to be empty, i.e. it cannot contain any assets or investments.
- The steps below make use of certain security precautions. It is absolutely vital to follow those precautions as the Vault Manager, otherwise you risk losing all the assets.
- Always double-check all addresses.

## Steps:

1. Start with a new, empty Enzyme Vault (no assets, no investments).
2. Set up an **Allowed Deposit Recipients** list with only the Vault Manager (or any other wallet address over which you have control) on the it. This is a crucial security precaution because it prevents a 3rd party from depositing during the seeding phase and claiming ownership of the assets before you do.
3. Confirm that the Enzyme asset universe contains the assets with which you are planning to seed your vault. **IMPORTANT: You can only seed your vault with assets that are already in the Enzyme asset universe. Following the instructions below with assets that are outside the universe may result in permanent loss. A full list of the asset universe can be found here.**
4. Find the vault's address. It appears in the URL slug on the Enzyme app, e.g. <https://app.enzyme.finance/vault/{vault-address}/overview>. It will begin with `0x`. Make sure that you have the correct address by entering it into Etherscan and confirming that the vault's name appears in the token tracker line of the **More Info** section.
5. Transfer the assets you are using to seed one by one. You can transfer assets directly from your MetaMask or WalletConnect wallet. Keep a portion of the denomination asset in your wallet, you will need to invest this amount into the fund later on.
6. Go back to your vault's **Etherscan** page and check the **Token** dropdown in the **Contract Overview** section. The assets you have transferred will show up.
7. Add the newly-received assets to your Vault's **tracked assets** list. On your vault page within the Enzyme web app, go to "Settings" => "Assets" => "Add Tracked Assets" and add all the assets that you have transferred, except for the denomination asset (which is always tracked by default).
8. Check that all the assets that you have transferred are correctly shown on the "Overview" page. Please note that it may take several minutes for the asset list to update with the correct amounts.
9. Deposit any amount you like into your Vault (in the denomination asset of your vault). Depositing is a two-step process (approve, deposit). You can deposit using the wallet that you permissioned in step 2.
10. Verify that you have received the shares for the Vault (displayed in the wallet as ENZF, or whatever you have chosen as a token symbol). If you have not received the shares of the Vault, then you might not have completed both steps above. You should now own all the shares of the Vault, and consequently all the assets in the fund.
11. Since fees have been accrued triggered by the first deposit, to start up with a clean vault please make sure to claim all available fees the vault has accrued before proceeding.
12. In order to allow investments by other investors you should add them to the **Limit Wallets Permitted To Deposit** Policy, and with this final step this concludes the fund seeding process.



# Customise Vault Settings



Once you've deployed your Vault, you can personalize it via your settings. Settings are much more flexible than configurations and you can change them at any time. To find your settings, you will have to go to the left navigation panel and click on 'Settings'.

# Profile



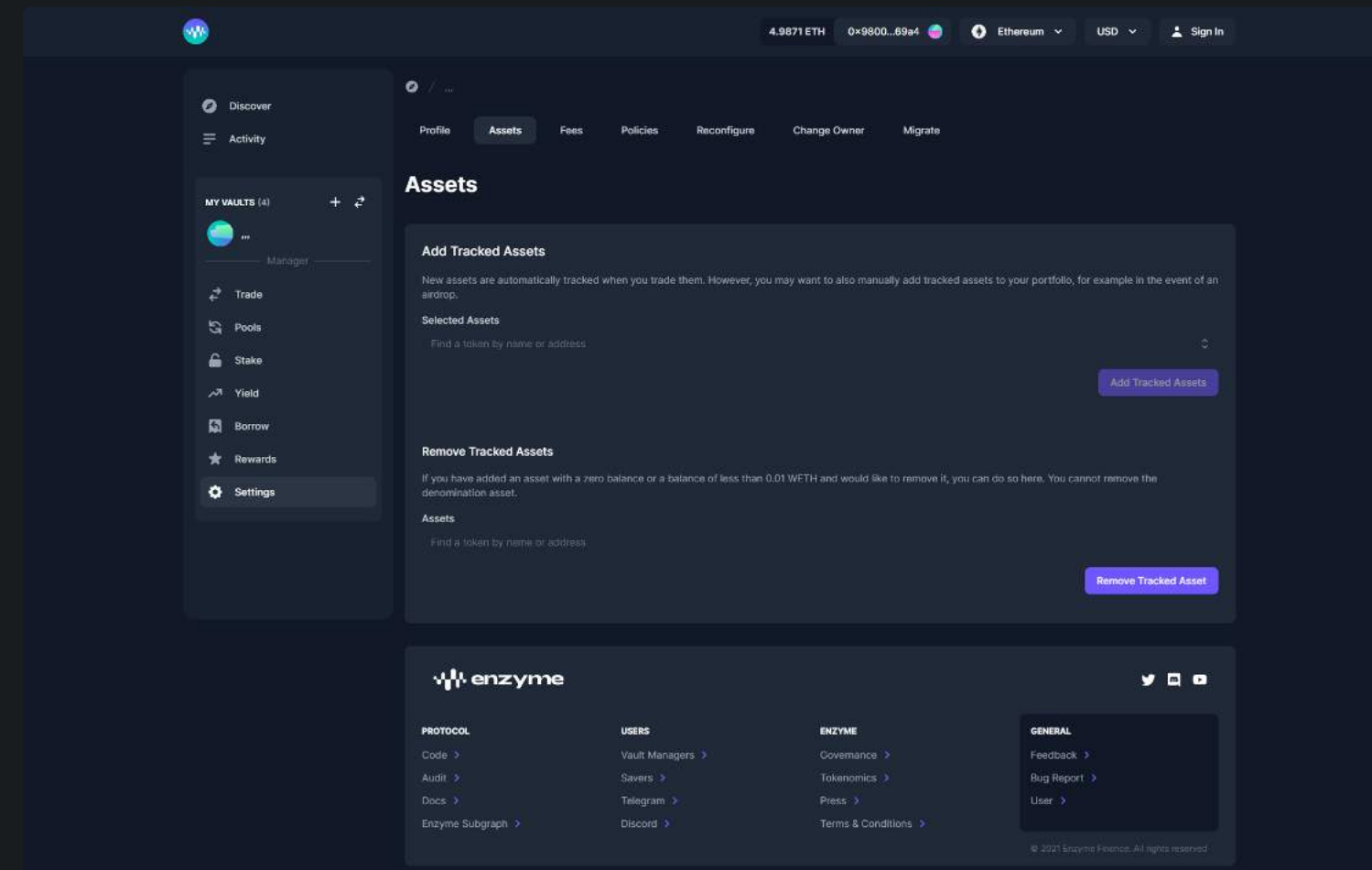
You have no obligation to share any information about yourself if you don't want to. However, the option is available to you in this section if you'd like to.

The screenshot displays the 'Profile' settings page in a dark-themed interface. At the top, a navigation bar shows the user's wallet balance (4.9871 ETH) and other account details. The left sidebar contains a 'MY VAULTS (4)' section with a 'Manager' entry and a list of vault types: Trade, Pools, Stake, Yield, Borrow, Rewards, and Settings. The main content area is titled 'Profile' and includes several sections with text input fields and buttons:

- Tagline:** A short tagline about this vault.
- Vault Description:** Describe your vault.
- Manager Description:** Describe the manager of this vault.
- Vault Strategy:** Select the strategy that best describes this vault.
- Contact Email:** Input field for contact email.
- Contact Info:** Provide a general contact email for your vault.
- Website:** Input field starting with 'https://'.
- Twitter:** Input field starting with '@'.
- Telegram:** Input field starting with '@'.

At the bottom right of the main content area, there are 'Reset' and 'Save' buttons. The footer features the Enzyme logo and social media icons, along with navigation links for Protocol, Users, Enzyme, and General.

# Assets



## Add Tracked Assets

Adding tracked assets is a way of telling the protocol to track assets that it doesn't already know about. By default, new assets are automatically tracked when you trade. However, you may want to add tracked assets to your Vaults which are obtained through other methods such as an airdrop or yield farm. This drop-down allows you to do that.

## Remove Tracked As

If you have added an asset with a zero balance or a balance of less than 0.01 WETH and would like to remove it, you can do so here. However, you cannot remove the denomination asset.



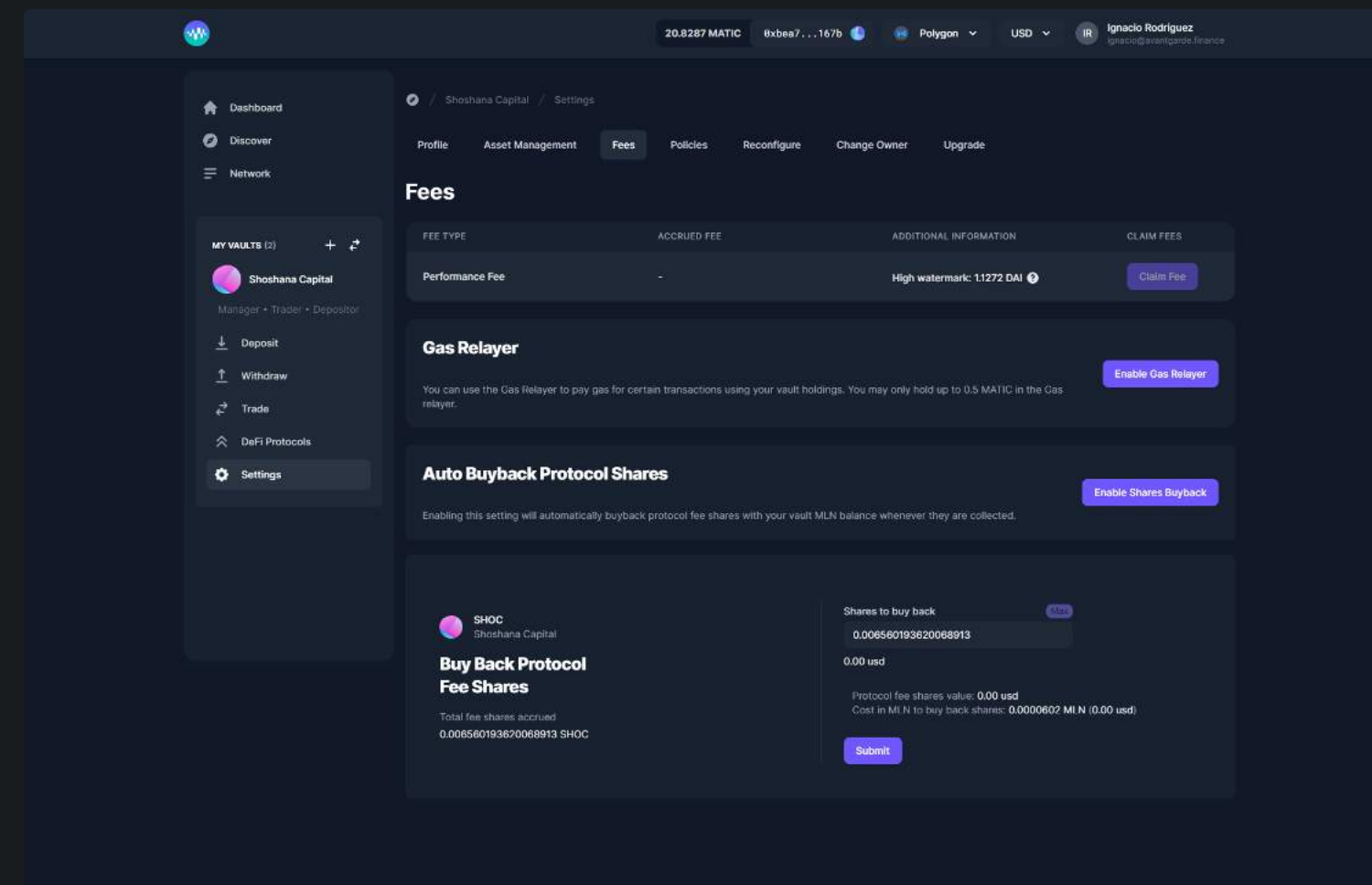
It is important to note that if you are not tracking assets, they will not be reflected in the GAV which may create an arbitrage opportunity for some investors.

As a Vault Manager, it is your responsibility to manage these nuances.

## Delegate Trading / Asset Managers

You may authorize additional addresses to trade on the vault's behalf. Note that addresses permissioned in this way will have the authority to manage your positions. You can add these permissions and revoke them at a later date.

# Fees



## Gas Relay

Enabling the gas relay allows your vault to pay for the gas of certain transactions. You may only hold up to 0.2 ETH in the Gas relay.

When disabling the gas relay, the funds held by the gas relay will return to the vault.

## Auto Buyback Protocol Shares

This option enables you to claim your protocol fee discount in an automated fashion. See [# Enzyme Protocol Fee](#) section for more details about how the fee is applied.

Obtaining access to the protocol requires MLN vouchers to be submitted to the value of 25bps of your AUM usage. If MLN token is not used to access the protocol, a penalty is applied and a total of 50bps will be applied by inflating your vault shares.

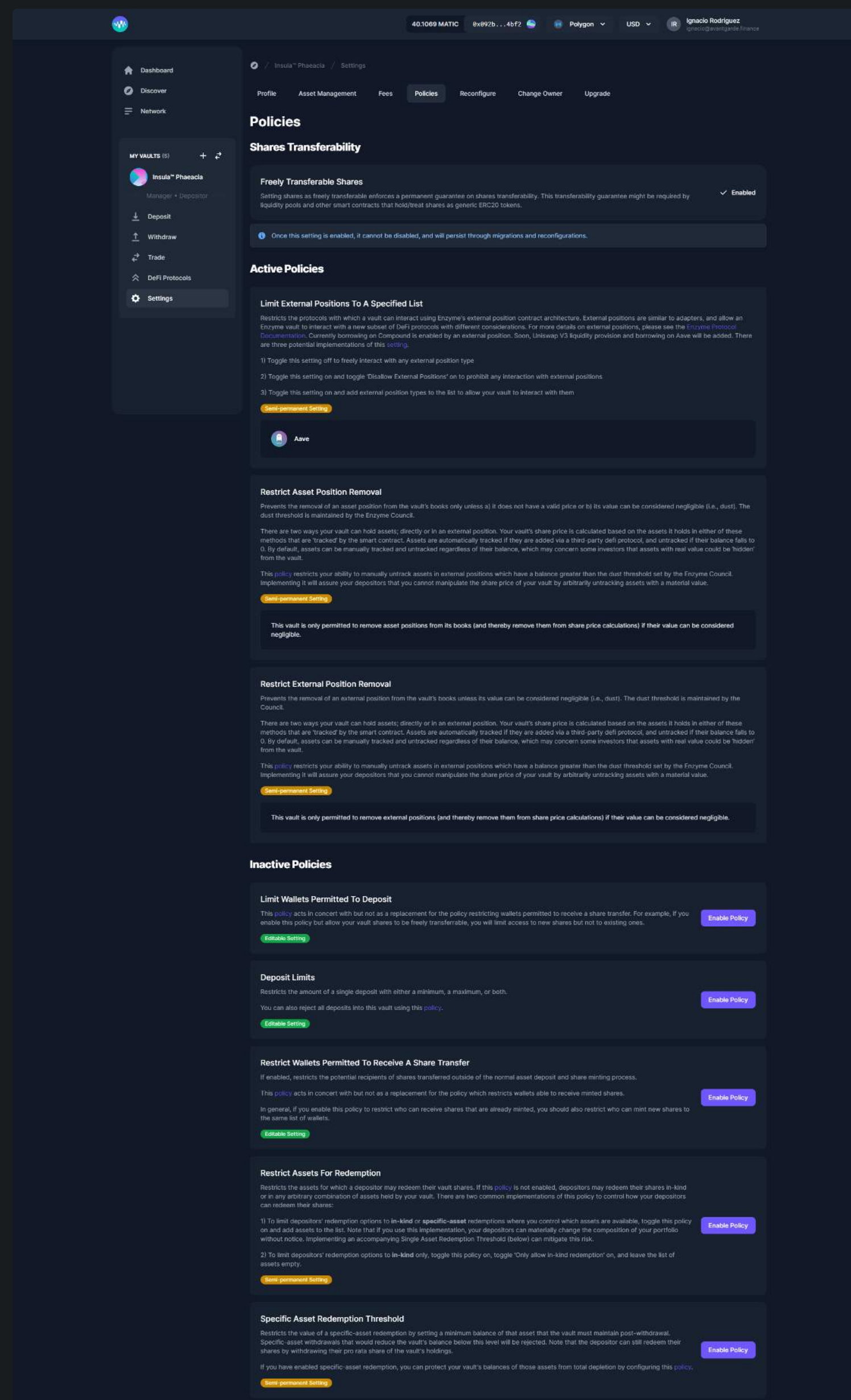
**i** Inflated vault shares and MLN collected are unlikely to offer any value to the MLN token given that inflation is likely to exceed the amount burnt for many years to come.

By enabling the Auto Buyback Protocol Shares option your vault can take advantage of paying the lower rate of 25 bps all in one transaction.

You'll need to have \$MLN available in your vault to atomically buy back the full amount of protocol fee shares collected during deposits and shares redemption actions.

# Policies

This section enables a Vault Manager to choose which policies (if any) to impose on deposits. In order to add or change any of these policies, go to the settings of your vault and then select the policies tab. These rules are the same as discussed in the setup section here.



Investor rules that have already been configured can always be edited in the same tab of the Vault Manager Launchpad as per the above screenshot.

## Shares Transferability

Setting shares as freely transferable enforces a permanent guarantee on shares transferability. This transferability guarantee might be required by liquidity pools and other smart contracts that hold/treat shares as generic ERC20 tokens.

Once this setting is enabled, it cannot be disabled, and will persist through migrations and reconfigurations.

## Limit Wallets Permitted To Deposit

Limits new deposits to a list of addresses. Please note that once a list has been added, will only be able to add or remove new addresses to/from that list. You will not be able to delete the list.

## Limit External Positions To A Specified List

Restricts the protocols with which a vault can interact using Enzyme's external position contract architecture.

## Restrict Assets For Redemption

Restricts the assets for which a depositor may redeem their vault shares.

## Specific Asset Redemption Threshold

Defines the assets that are allowed to be included in specific asset redemption

## Deposit Limits

You can set Minimum or Maximum deposit limits for your subscribers. Also in this section you can choose to reject all deposits. If you choose to reject all deposits, please bear in mind that you will also not be able to deposit into the vault until you change this option back.

## Restrict External Position Removal

Allows removing an external position from the vault's activeExternalPositions only if its value can be considered negligible (i.e., dust). The dust threshold is maintained by the Council. This policy allows properly-signalled underlying assets of the external position without a valid price to be valued as 0.

## Restrict Asset Position Removal

Allows removing an asset from the vault's tracked assets only if a) it does not have a valid price or b) its value can be considered negligible (i.e., dust). The dust threshold is maintained by the Council.

## Restrict Wallets Permitted To Receive A Share Transfer

If enabled, restricts the potential recipients of shares transferred outside of the normal asset deposit and share minting process. This policy acts in concert with but not as a replacement for the policy which restricts wallets able to receive minted shares.

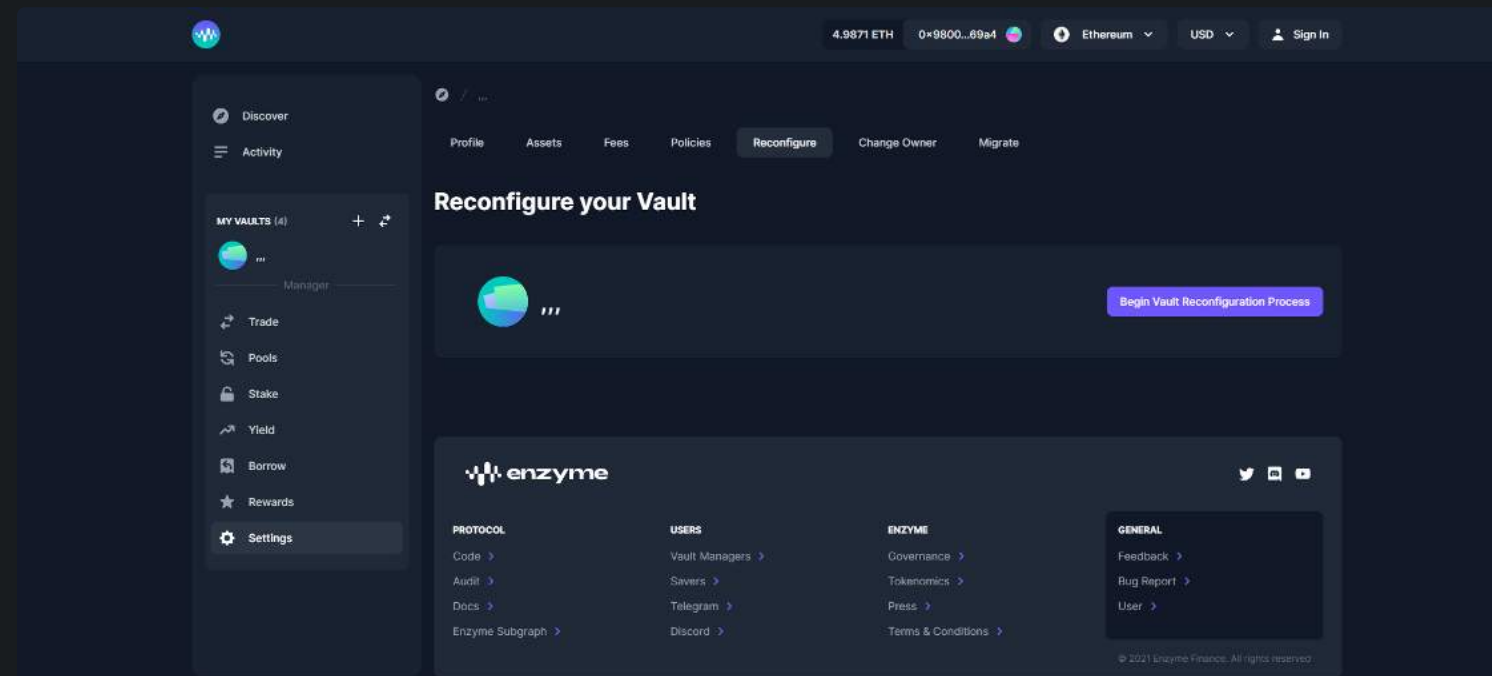
## Allowed adapters per manager

This policy specifies the list of adapters the delegated trader/assigned manager can interact with using vault funds.

## Allowed external position types per manager

This policy specifies the type of external positions the delegated trader/assigned manager can interact with using vault funds.

# Reconfigure your Vault

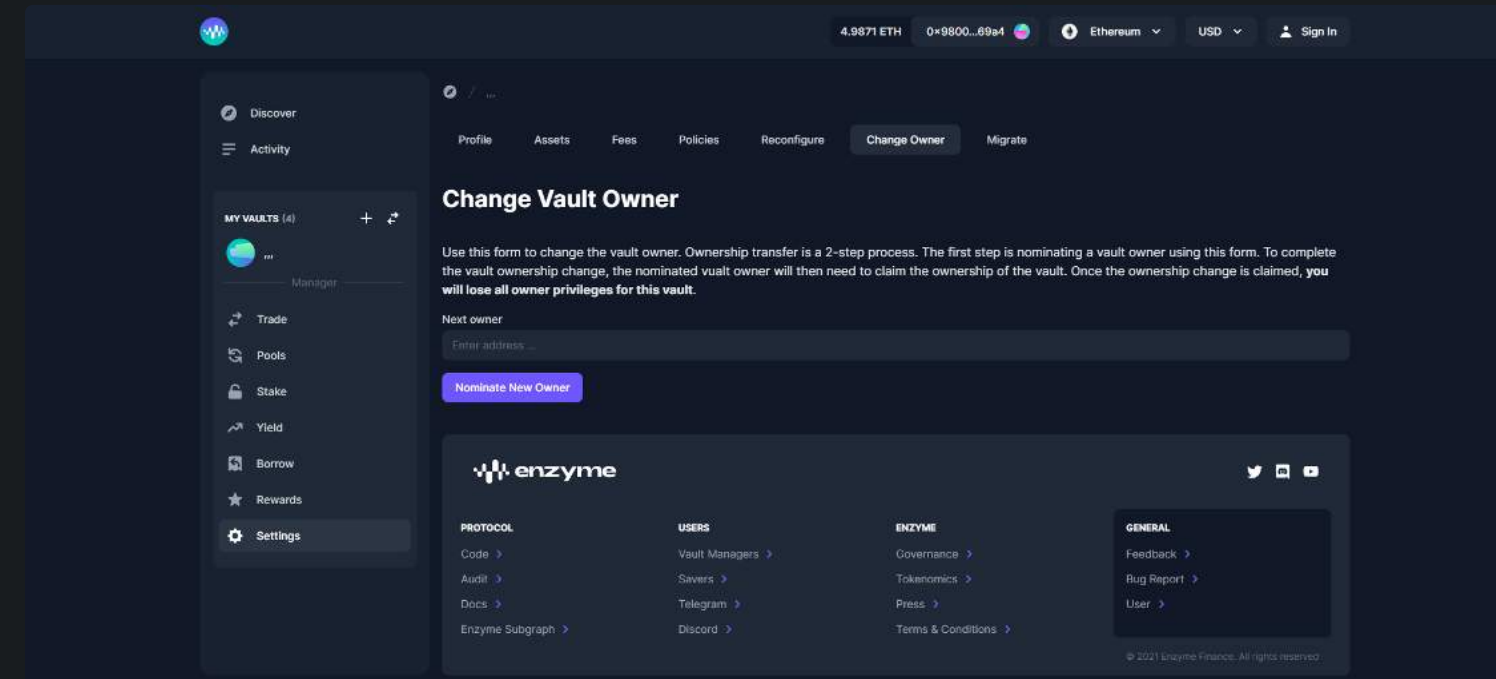


A vault reconfiguration is necessary if you want to modify one or more semi-permanent settings such as denomination asset, fees, lockup period, allowed integrations and external positions or slippage tolerance. Other settings can be edited under Settings > Policies > Edit. Keep in mind that you will incur gas fees in the process.

## How to reconfigure?

Click on the button “Reconfigure Vault” to start the process. Keep in mind that due to security reasons there is a 7-day cooldown period, i.e. your new settings will be enforced after the cooldown period ends.

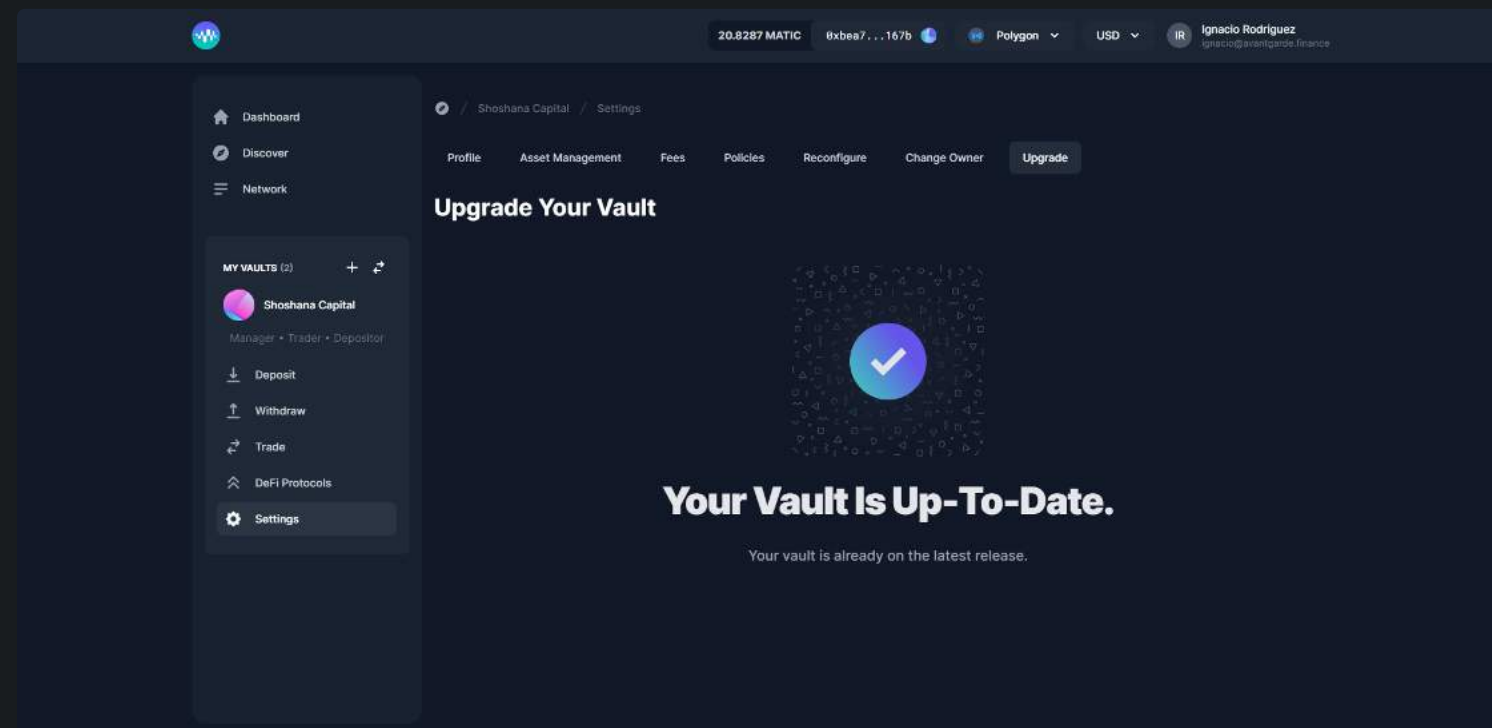
# Change Owner



There may be some use-cases where you'd want to change the vault owner (eg. moving it to a multi-sig, retiring with a succession plan, etc). In that case, you can use this form to change the vault owner. Ownership transfer is a 2-step process. First, nominate a vault owner using this form. To complete the vault ownership change, the nominated vault owner will need to claim the ownership of the vault. Once the ownership change is claimed, you will lose all owner privileges for this vault.



# Migrate your Vault



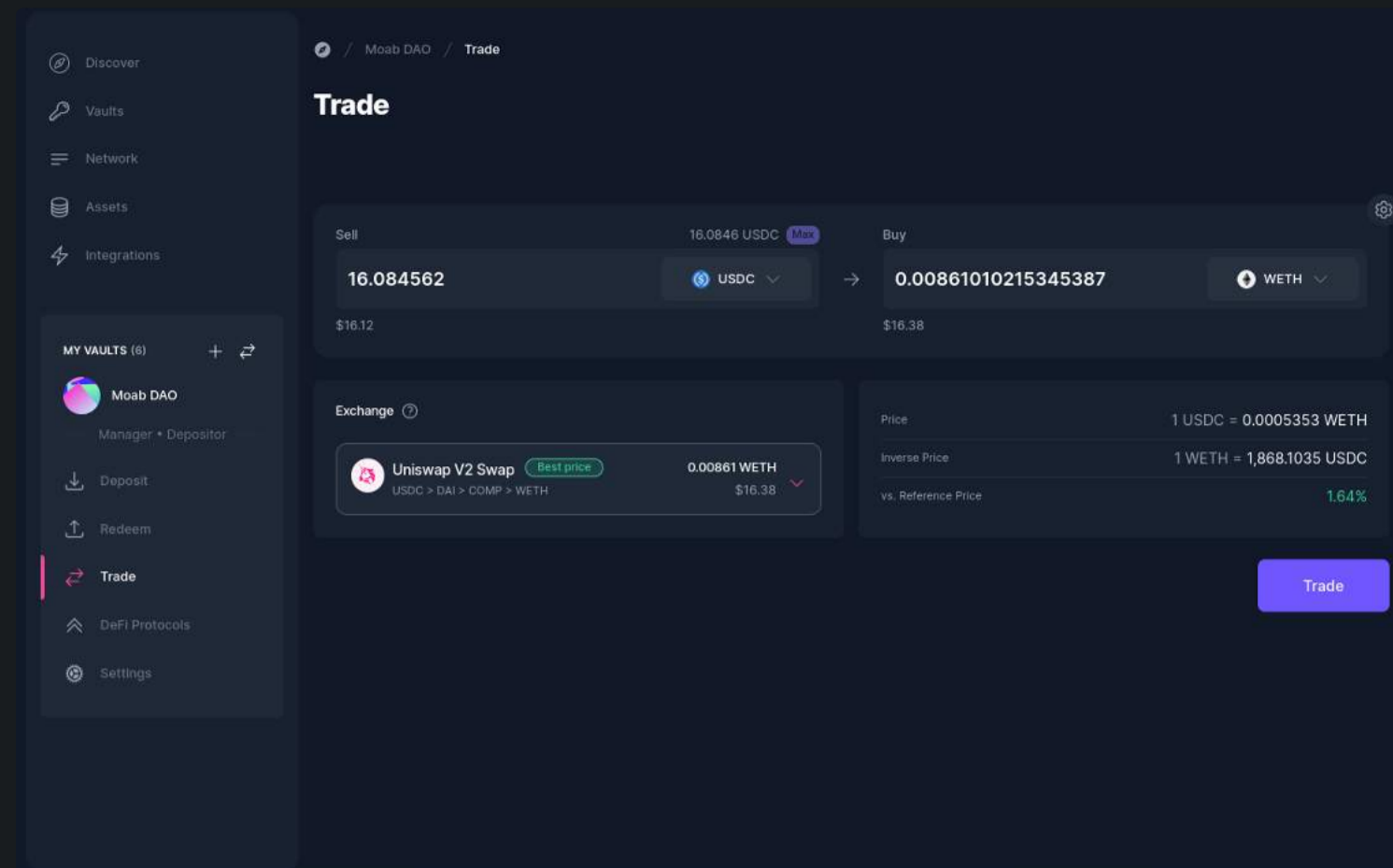
If you want to opt-in to a new release of Enzyme you can do so by migrating to the latest version. We will never force you to do this. However, we will not maintain old versions for longer than a fixed period which will be communicated through our official channels. From this drop-down, you will be able to accept and execute your vault migrations.

# Trade & Interact with DeFi



Now that you're all set up, you're ready to start investing! At this point, you will have 100% of your Vault's assets in the denomination currency unless you've [seeded your vault](#).

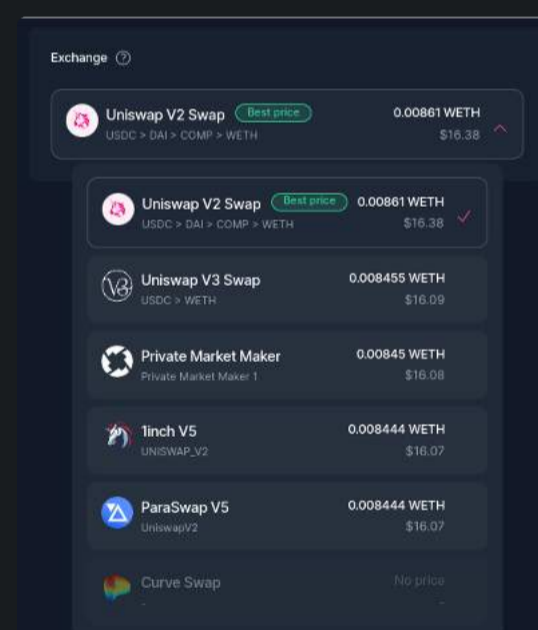
# Trade



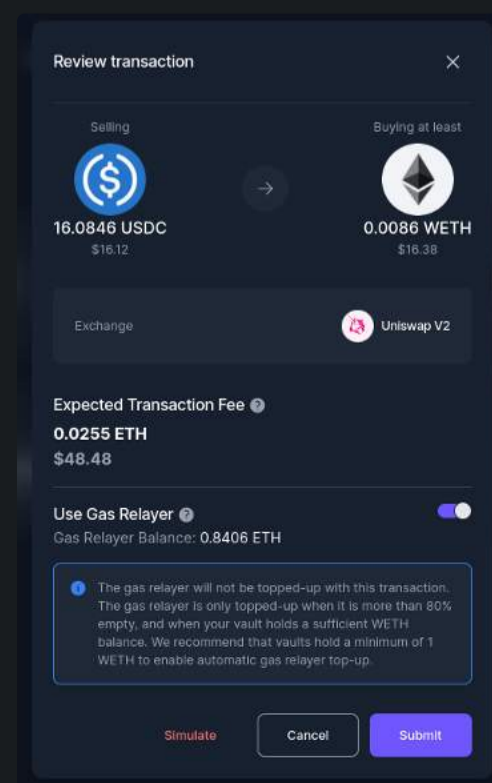
Do you want to start trading tokens? Simply click on the Token Swap tab and you'll be able to get the best quote from different DEX's and aggregators. We currently support [Uniswap](#), [Paraswap](#), [Kyber](#), [Synthetix](#), [Curve](#), [0x](#), [1inch](#) and soon more.

## How to Trade?

1. In your left-hand vault menu, go to "Trade".
2. Choose the asset you wish to sell and specify the amount.
3. Select the asset you want to purchase.
4. Initially, you will be presented with the best quote available. However, if you wish to explore quotes from other exchanges, you can click on the Exchange drop-down menu section.



5. Click on the "Trade" button and carefully review the transaction details.
6. Finally, click on the "Submit" button to confirm and execute the trade.



# DeFi Protocols



1.7438 ETH 0x7751...095b Ethereum USD Ignacio Rodriguez ignaciop@avantiq.de Finance


- Dashboard
- Discover
- Network

MY VAULTS (5)

- AGF Digital Dollar Yield Vault  
Manager + Depositor
- Deposit
- Withdraw
- Trade
- DeFi Protocols
- Settings


AGF Digital Dollar Yield Vault / DeFi Protocols

## DeFi Protocols




**Aave**

Aave is an open source and non-custodial liquidity protocol for earning interest on deposits and borrowing assets.




**Compound**

Compound is an algorithmic, autonomous interest rate protocol built for developers, to unlock a universe of open financial applications.




**Convex**

Convex Finance is a platform for CRV token holders and Curve liquidity providers to earn additional interest rewards and Curve trading fees on their tokens.




**Curve**

Curve is an exchange liquidity pool on Ethereum designed for extremely efficient stablecoin trading, low risk, supplemental fee income for liquidity providers, without an opportunity cost.




**Idle**

Idle is a decentralized rebalancing protocol that allows users to automatically and algorithmically manage their digital asset allocation among different third-party DeFi protocols.




**Maple Finance**

Maple is a capital-efficient corporate debt marketplace allowing institutions to borrow from Liquidity Pools funded by the DeFi ecosystem and managed by experienced investors.




**Uniswap v2**

Uniswap empowers developers, liquidity providers and traders to participate in a financial marketplace that is open and accessible to all.



**Uniswap v3**

Uniswap V3 is flexible and efficient, allowing liquidity providers to allocate capital in a much more granular manner than its predecessor AMMs.



**Yearn**

Yearn Finance is a suite of products in Decentralized Finance (DeFi) that provides lending aggregation, yield generation, and insurance on the Ethereum blockchain.

# Aave V2



The screenshot displays the Aave V2 interface for the 'AGF Digital Dollar Yield Vault'. The user is logged in as 'Ignacio Rodriguez'. The interface is divided into several sections:

- Current Markets:** A table showing the current market for aUSDC.
- Unclaimed Rewards:** A section showing unclaimed rewards for aUSDC.
- Available Markets:** A table listing various assets available for lending or borrowing.

NAME	BALANCE	CURRENT VALUE	TOTAL APY
aUSDC Aave USDC	0.0694 aUSDC	\$0.07	0.60% 0.38% + 0.22% rewards

NAME	RESERVE SIZE	BALANCE	TOTAL APY
USDT Tether USD	\$561,854,353.17	17,4344 USDT	1.72% 1.46% + 0.24% rewards
ZRX 0x Protocol Token	\$15,688,755.43	-	0.07%
YFI yfi.finance	\$9,316,370.92	-	1.29% 0.82% + 0.47% rewards
WETH Wrapped Ether	\$909,650,045.40	-	0.96% 0.77% + 0.20% rewards
WBTC Wrapped Bitcoin	\$732,667,056.85	-	0.08% 0.02% + 0.07% rewards
USDC USD Coin	\$1,678,092,737.23	-	0.60% 0.38% + 0.22% rewards
UNI Uniswap	\$10,763,865.84	-	0.29%
REN Republic Token	\$4,134,107.36	-	0.25%
RAI Rai Reflux Index	\$1,844,506.73	-	2.21% 1.18% + 1.02% rewards
MKR Maker	\$22,448,675.78	-	2.46% 1.52% + 0.94% rewards

Aave is an open source and non-custodial liquidity protocol for earning interest on deposits and borrowing digital assets. It enables users to deposit funds into liquidity pools and borrow assets by providing collateral. Aave also features flash loans and uses an algorithmic interest rate model.

With Aave v2, you can **Lend**, **Borrow** and **Claim Rewards**, with a variety of assets in **Ethereum** and **Polygon** networks.

## How to Lend on Aave v2?

1. Go to your vault menu on the left-hand side panel and click on "Defi Protocols".
2. Select "Aave v2" from the protocols list.
3. On the Lend tab, search for the asset you wish to lend and click on "Lend".
4. Enter the amount you want to lend and click on "Lend".
5. Review the details of your transaction.
6. Confirm the transaction and sign it with your connected wallet.

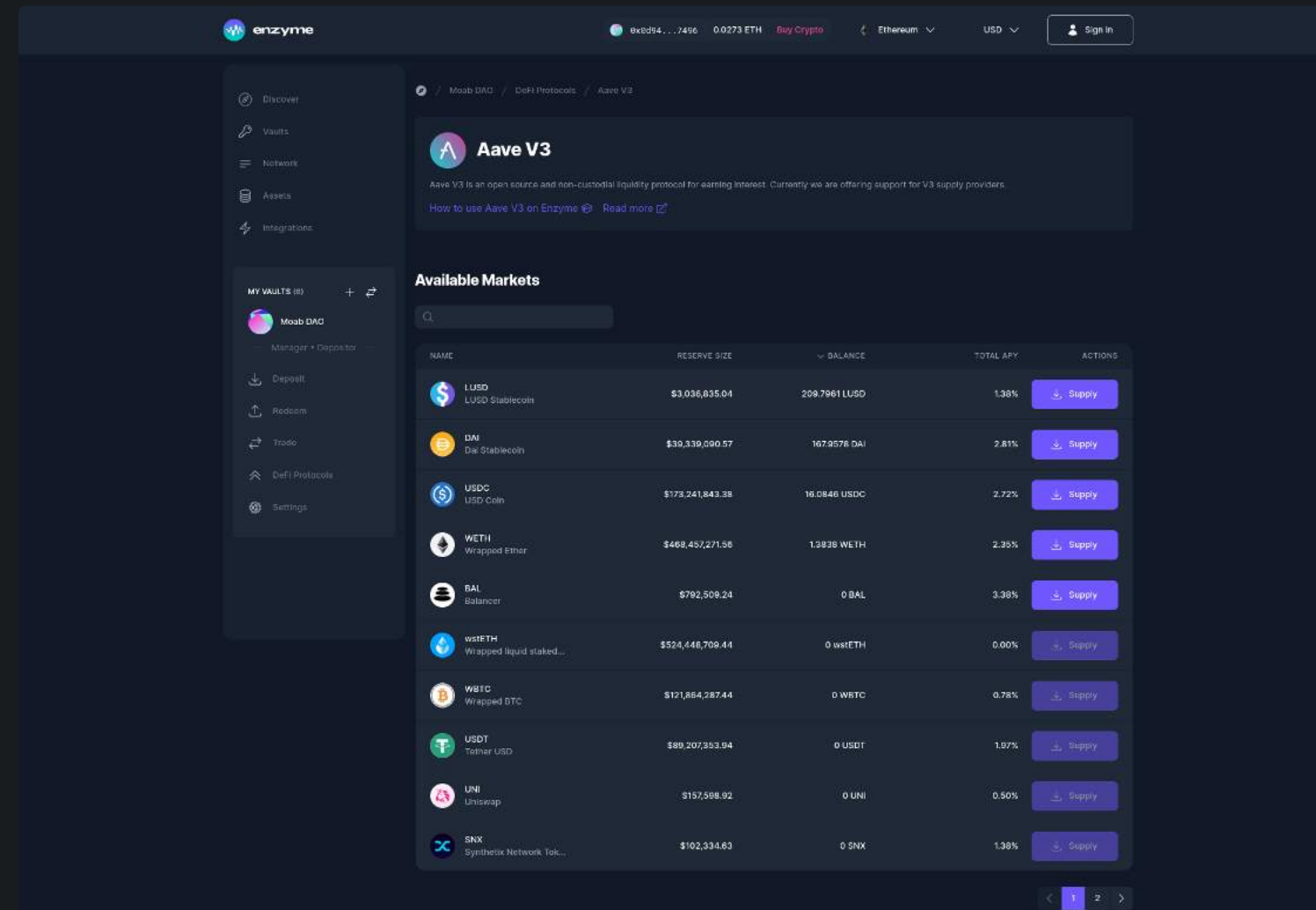
## How to Redeem on Aave v2?

1. Go to your vault menu on the left-hand side panel and click on "Defi Protocols".
2. Select "Aave v2" from the protocols list.
3. On the current markets, click on "Redeem" and enter the amount you want to redeem.
4. Review the details of your transaction.
5. Confirm the transaction and sign it with your connected wallet.

## How to Borrow on Aave v2?

1. To borrow on Aave v2, go to the vault menu located on the left-hand side panel and click on "Defi Protocols".
2. From the list of protocols, choose "Aave v2".
3. In the "Borrow" tab, navigate to the "Current Borrowing Positions" section and click on the three dots. Then, select "Add Collateral".
4. Review the transaction details.
5. Confirm the transaction and sign it using your connected wallet.
6. Once you have collateral, you can select any asset from the list and click on "Borrow".
7. Enter the desired borrowing amount and click on "Borrow".
8. Review the transaction details.
9. Confirm the transaction and sign it using your connected wallet.

# Aave V3



[Aave](#) is an open source and non-custodial liquidity protocol for earning interest on deposits and borrowing digital assets. It enables users to deposit funds into liquidity pools and borrow assets by providing collateral. Aave also features flash loans and uses an algorithmic interest rate model.

With Aave v3, you can **Supply**, and **Claim Rewards**, with a variety of assets in **Ethereum** and **Polygon** networks.

## How to Lend on Aave v3?

1. Go to your vault menu on the left-hand side panel and click on "Defi Protocols".
2. Select "Aave v3" from the protocols list.
3. Search for the asset you wish to supply and click on "Supply".
4. Enter the amount you want to supply and click on "Supply".
5. Review the details of your transaction.
6. Confirm the transaction and sign it with your connected wallet.

## How to Redeem on Aave v3?

1. Go to your vault menu on the left-hand side panel and click on "Defi Protocols".
2. Select "Aave v3" from the protocols list.
3. On the current markets, click on "Redeem" and enter the amount you want to redeem.
4. Review the details of your transaction.
5. Confirm the transaction and sign it with your connected wallet.

## Aura

Aura Finance is a protocol built on top of the Balancer system to provide maximum incentives to Balancer liquidity providers and BAL stakers (into veBAL) through social aggregation of BAL deposits and Aura's native token.

[Read more](#)

### Current Pools

TOKENS	BALANCE	ACTIONS
Balancer rETH Stable Pool	0.0005 B-rETH-STABLE \$0.92	⋮
Balancer rETH Stable Pool Aura Deposit	0.0019 stkauraB-rETH-STABLE \$3.57	⋮

### Unclaimed Pool Rewards

TOKENS	UNCLAIMED REWARDS	ACTIONS
Balancer rETH Stable Pool Aura Deposit	0.0004 BAL 0.0013 AURA \$0.00	<a href="#" style="background-color: #007bff; color: white; padding: 5px 10px; border-radius: 5px;">Claim</a>

### Available Pools Explore pools

TOKENS	POOL VALUE	ACTIONS
Balancer stETH Stable Pool	\$314,462,277.05	⋮
Balancer rETH Stable Pool	\$73,842,524.82	⋮
Balancer 50 USDC 50 WETH	\$1,368,139.49	⋮
Balancer 50wstETH-LDO	\$980,548.60	⋮
Balancer 80 LDO 20 WETH	\$106,559.11	⋮
Balancer 50 WBTC 50 WETH	\$0.00	⋮

Enzyme is delighted to present Aura Finance, an innovative platform designed to enhance the rewards experience for Balancer liquidity providers. By staking their BPT tokens on Aura, users can unlock additional yield opportunities, elevating their investment potential while engaging with a cutting-edge DeFi solution. Experience the transformative power of Aura Finance and propel your Balancer portfolio to new heights.

Aura Finance is a protocol built on the Balancer system, designed to maximize incentives for Balancer liquidity providers and BAL stakers (veBAL) through the social aggregation of BAL deposits and its native token, AURA.

#### How To Stake BPT?


You can either stake your BPT or directly deposit the underlying assets of the Balancer Pool.

#### How to Claim Rewards?

1. In your left-hand vault menu, go to "DeFi Protocols" and select Aura.
2. Click on the Claim button on the position you wish to claim rewards.

You must add BAL to your vault's tracked assets for performance attribution purposes. Aura can be claimed but can't be added to your vault's tracked assets. Once claimed, we recommend that you sell them for a tracked asset through the Swap interface.

# Balancer




## Balancer





Balancer is an automated portfolio manager and trading platform. It turns the concept of an index fund on its head: instead of paying fees to portfolio managers to rebalance your portfolio, you collect fees from traders who rebalance your portfolio by following arbitrage opportunities.

[Read more](#)

### Current Pools

TOKENS	BALANCE	TOTAL APR	ACTIONS
 Balancer Polygon Tricrypto: WBTC/US...	0.0027 BPTC \$0.99	2.28%	⋮

### Available Pools

TOKENS	POOL VALUE	TOTAL APR	ACTIONS
 Balancer Polygon Base Pool: WMATIC/USDC/WE...	\$2,963,288.16	8.18% 6.19% + 1.99% rewards	⋮
 20WETH-80BAL: WETH/BAL	\$1,602,962.58	1.48%	⋮
 Balancer Polygon Tricrypto: WBTC/USDC/WETH	\$1,254,736.90	4.16% 2.28% + 1.88% rewards	⋮
 Balancer Polygon DeFi Index: USDC/LINK/W...	\$454,264.79	3.66%	⋮


Balancer is a decentralized finance (DeFi) protocol that provides automated market making (AMM) services on the Ethereum blockchain and other Layer 2 networks. It allows users to create and manage custom pools of tokens, where they can earn fees by providing liquidity to the market. Balancer is designed to be a more flexible and customizable alternative to traditional AMM platforms like Uniswap.

Balancer Pools contain two or more tokens that traders can swap between. Liquidity Providers put their tokens in the pools in order to collect swap fees.

Now vaults can provide liquidity to Balancer Pools and stake their Balancer Pool Tokens with Balancer.

## How to Deposit into a Balancer Pool?

1. In your left-hand vault menu, go to "DeFi Protocols" and select Balancer.
2. Click on the three dots of the pool you would like to deposit assets.
3. From the drop-down actions menu, select deposit.
4. Enter the amount of the assets you wish to deposit.

 Adding single or unbalanced assets to the pool causes the price impact to rise.

### Manage Balancer Position

Amount 0 WMATIC **Max**

0 WMATIC

Amount 0 USDC **Max**

0 USDC

Amount 0.0006 WETH **Max**

0.000628739365431613 WETH

\$0.99

Amount 0 BAL **Max**

0 BAL

You will get a minimum of **0.0803 B-POLYBASE**.

Maximum Slippage 1%

Price impact 0.19%

**Deposit**


5. Review the details and amounts, then click Deposit, Submit and confirm the transaction.

## How to Stake BPT tokens?

1. In your left-hand vault menu, go to "DeFi Protocols" and select Balancer.
2. Click on the three dots of the BPT you would like to Stake.
3. From the drop-down actions menu, select Stake.
4. Enter the BPT amount you would like to stake, then click on stake and confirm the transaction.

## How to Withdraw from a Balancer Pool?

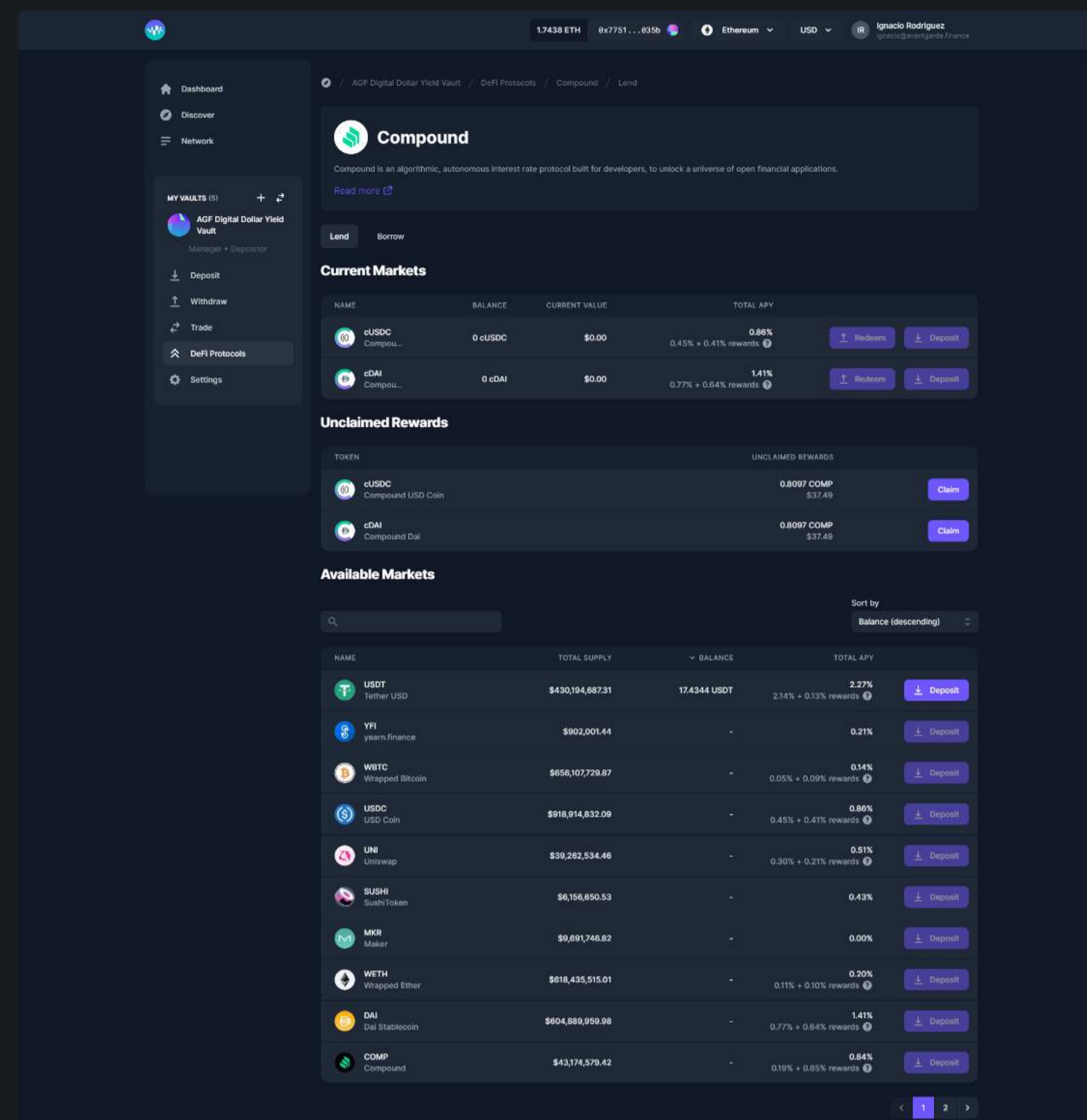
1. In your left-hand vault menu, go to "DeFi Protocols" and select Balancer.
2. Click on the three dots of the BPT you would like to Withdraw.
3. From the drop-down actions menu, select Withdraw.
4. Enter the BPT amount you would like to Withdraw, then click on Withdraw and confirm the transaction.

 Enzyme has combined a few transactions to simplify the manager flow:

- You can **Deposit and Stake**
- You can **Withdraw and Unstake**



# Compound V2



Compound is an algorithmic decentralized finance protocol built on the Ethereum blockchain that allows users to lend and borrow cryptocurrency assets. Enzyme enables its users to **lend and borrow** various assets on the **Ethereum** network using **Compound v2**.

## How to Lend on Compound v2?


1. Go to your vault menu on the left-hand side panel and click on "Defi Protocols".
2. Select "Compound v2" from the protocols list.
3. On the Lend tab, search for the asset you wish to lend and click on "Lend".
4. Enter the amount you want to lend and click on "Lend".
5. Review the details of your transaction.
6. Confirm the transaction and sign it with your connected wallet.

## How to Redeem on Compound v2?

1. Go to your vault menu on the left-hand side panel and click on "Defi Protocols".
2. Select "Compound v2" from the protocols list.
3. On the current tab "Lend", click on "Redeem" and enter the amount you want to redeem.
4. Review the details of your transaction.
5. Confirm the transaction and sign it with your connected wallet.

## How to Borrow on Compound v2?

1. To borrow on Compound v2, go to the vault menu located on the left-hand side panel and click on "Defi Protocols".
2. From the list of protocols, choose "Compound v2".
3. In the "Borrow" tab, navigate to the "Current Borrowing Positions" section and click on the three dots. Then, select "Add Collateral".
4. Review the transaction details.
5. Confirm the transaction and sign it using your connected wallet.
6. Once you have collateral, you can select any asset from the list and click on "Borrow".
7. Enter the desired borrowing amount and click on "Borrow".
8. Review the transaction details.
9. Confirm the transaction and sign it using your connected wallet.

 You must use [cTokens](#) as collateral to borrow on Compound. To convert regular tokens to cTokens, please lend them on [Lend](#) tab.

# Compound V3



The screenshot displays the Compound V3 interface. On the left is a navigation sidebar with options: Discover, Vaults, Network, Assets, Integrations, MY VAULTS (10), Jagodzianka (Manager + Depositor), Deposit, Redeem, Trade, DeFi Protocols, and Settings. The main content area shows the Compound V3 logo and a brief description. Below this are two tables: 'Current Markets' and 'Available Markets'. The 'Current Markets' table lists cUSDCv3 with a balance of 0.003 cUSDCv3 and a 2.31% APR, with buttons for Redeem and Lend. The 'Available Markets' table lists USDC with a total supply of \$7,635,711.61 and a balance of 0.002 USDC, with a 2.31% APR and a Lend button.

NAME	BALANCE	TOTAL APR	ACTIONS
cUSDCv3 Compound USDC	0.003 cUSDCv3 \$0.00	2.31%	<button>Redeem</button> <button>Lend</button>

NAME	TOTAL SUPPLY	BALANCE	TOTAL APR	ACTIONS
USDC USD Coin (PoS)	\$7,635,711.61	0.002 USDC \$0.00	2.31%	<button>Lend</button>

Compound is an algorithmic decentralized finance protocol built on the Ethereum blockchain that allows users to lend and borrow cryptocurrency assets. Compound operates autonomously through smart contracts and enables users to earn interest on their assets through a decentralized lending market.

With **Compound v3**, Enzyme extends this capability to enable **lending** on both **Ethereum** and **Polygon** networks.

## How to Lend on Compound v3?

1. Go to your vault menu on the left-hand side panel and click on "DeFi Protocols".
2. Select "Compound v3" from the protocols list.
3. On the Lend tab, search for the asset you wish to lend and click on "Lend".
4. Enter the amount you want to lend and click on "Lend".
5. Review the details of your transaction.
6. Confirm the transaction and sign it with your connected wallet.

## How to Redeem on Compound v3?

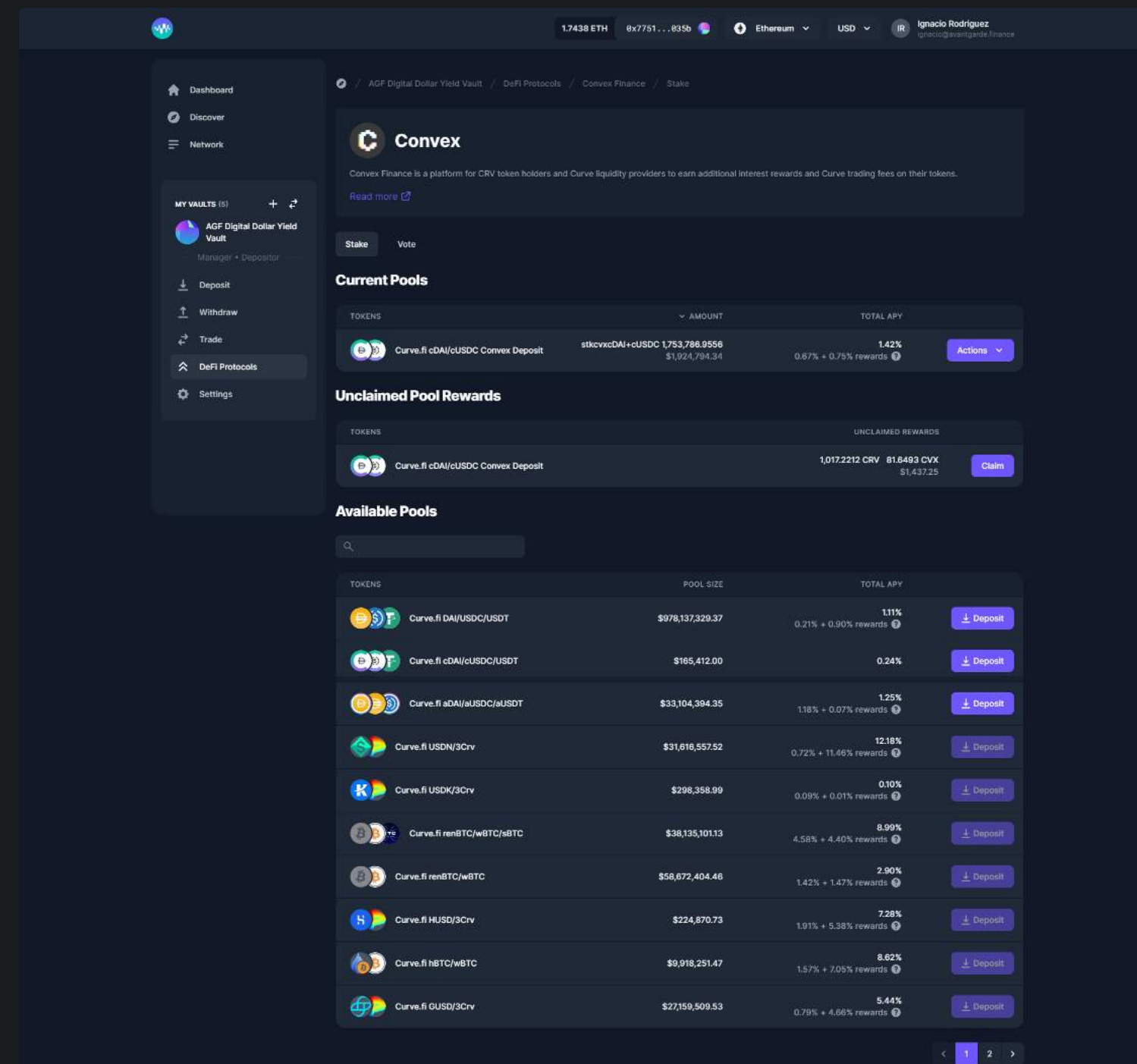
1. Go to your vault menu on the left-hand side panel and click on "DeFi Protocols".
2. Select "Compound v3" from the protocols list.
3. On the current markets, click on "Redeem" and enter the amount you want to redeem.
4. Review the details of your transaction.
5. Confirm the transaction and sign it with your connected wallet.

# Convex

Convex Finance is a platform for CRV token holders and Curve liquidity providers to earn additional interest rewards and Curve trading fees on their tokens.

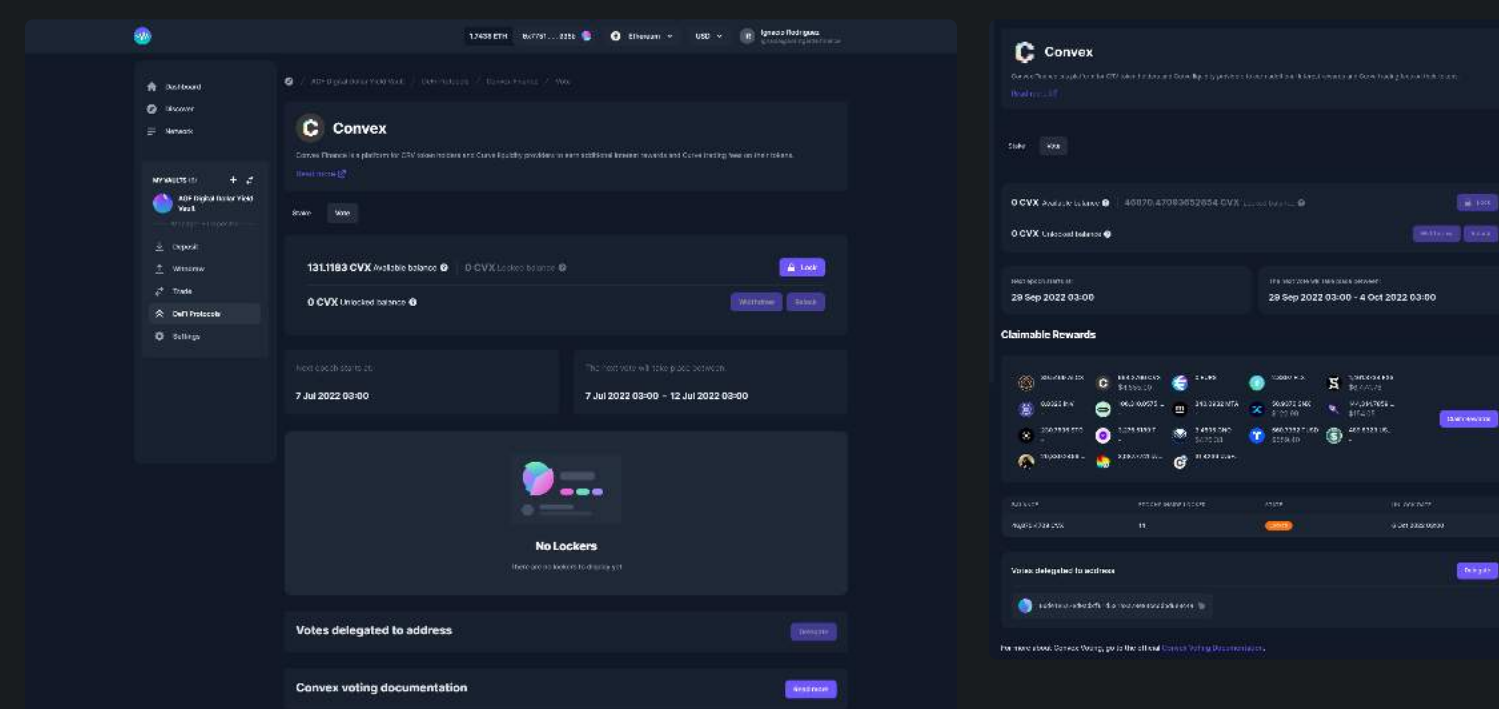
## Staking

With Convex, you can **Stake** and **provide Liquidity** to Pools.



## Lock/Delegate

CVX holders can **Lock** or **Delegate** their **CVX** via Enzyme. You can delegate your CVX to **Votium** or you can delegate it to a specific address.



Delegating is a separate action from locking: you don't need to delegate if you lock, nor do you need to lock if you delegate. However, if it is the first time you are Delegating, you will need to Lock your CVX first before delegating.

### How To Lock Your CVX?

1. In your left-hand vault menu, go to "DeFi Protocols" and select Convex.
2. Click on the 'Lock/Delegate' tab.
3. If you have CVX available balance, click on 'Lock'.
4. Input the amount of CVX you wish to lock and click on 'Lock'.

**ⓘ** Your CVX will be locked for 16 weeks + the time between when you lock your CVX and the next epoch start, which is every Thursday at 00:00.

### How To Delegate CVX?

1. In your left-hand vault menu, go to "DeFi Protocols" and select Convex.
2. Click on the 'Lock/Delegate' tab.
3. At the bottom of the screen click on 'Delegate'.
4. You may delegate to voting or to a particular address.

**ⓘ** You might receive many different tokens when delegating to **Votium**. In this case, the gas cost to claim rewards may be higher than the actual rewards. Considering this scenario, it might be better if you delegate votes to your own address and vote yourself.

### How To Relock CVX?

1. In your left-hand vault menu, go to "DeFi Protocols" and select Convex.
2. Click on the 'Lock/Delegate' tab.
3. On the right-hand side of your available unlocked CVX balance click on 'Relock'.
4. Input the amount of CVX you wish to relock and click on 'Relock'.

**ⓘ** After the 16 full weeks(epochs) have passed your CVX will be automatically unlocked, and you will need to relock or withdraw it. Otherwise, you may be subject to bounty from other users. Please check Convex documentation for more information about that [here](#).

### How To Claim Rewards?

1. In your left-hand vault menu, go to "DeFi Protocols" and select Convex.
2. Click on the 'Lock/Delegate' tab.
3. On the Claimable Rewards section, click on 'Claim Rewards'.
4. You will be prompted with the tokens and amounts you will claim, then click on 'Claim Rewards'.

### How to Withdraw?

1. In your left-hand vault menu, go to "DeFi Protocols" and select Convex.
2. Click on the 'Lock/Delegate' tab.
3. On the right-hand side of your available unlocked CVX balance click on 'Withdraw'.

### How to Redelegate?

1. In your left-hand vault menu, go to "DeFi Protocols" and select Convex.
2. Click on the 'Lock/Delegate' tab.
3. At the bottom of the screen, on the 'Votes delegated to address' section, click on 'Delegate'.
4. You can redelegate to **Votium** or any other address.

# Curve



The screenshot shows the Curve interface with a sidebar on the left containing navigation options: Dashboard, Discover, Network, MY VAULTS (1), AGF Digital Dollar Yield Vault, Deposit, Withdraw, Trades, DeFi Protocols, and Settings. The main content area displays the Curve logo and a description: "Curve is an exchange liquidity pool on Ethereum designed for extremely efficient stablecoin trading, low risk, supplemental fee income for liquidity providers, without an opportunity cost." Below this is a section titled "Available Pools" with a search bar and a table of pools.

TOKENS	POOL SIZE	TOTAL APY	Actions
Curve.fi DAI/USDC/USDT	\$978,147,282.52	0.21%	Actions
Curve.fi cDAI/cUSDC/USDT	\$165,412.01	0.24%	Actions
Curve.fi aDAI/aUSDC/aUSDT	\$33,104,408.12	1.20% 1.18% + 0.02% rewards	Actions
Curve.fi USDN/3Crv	\$31,702,761.37	0.72%	Actions
Curve.fi USDK/3Crv	\$298,358.99	0.09%	Actions
Curve.fi renBTC/wBTC/sBTC	\$37,977,612.16	4.58%	Actions
Curve.fi renBTC/wBTC	\$58,430,101.27	1.42%	Actions
Curve.fi HUSD/3Crv	\$224,870.73	1.91%	Actions
Curve.fi hBTC/wBTC	\$9,877,291.43	1.57%	Actions
Curve.fi GUSD/3Crv	\$27,151,578.42	0.78%	Actions

Curve is an exchange liquidity pool on Ethereum designed for extremely efficient stablecoin trading, low risk, supplemental fee income for liquidity providers, without an opportunity cost.

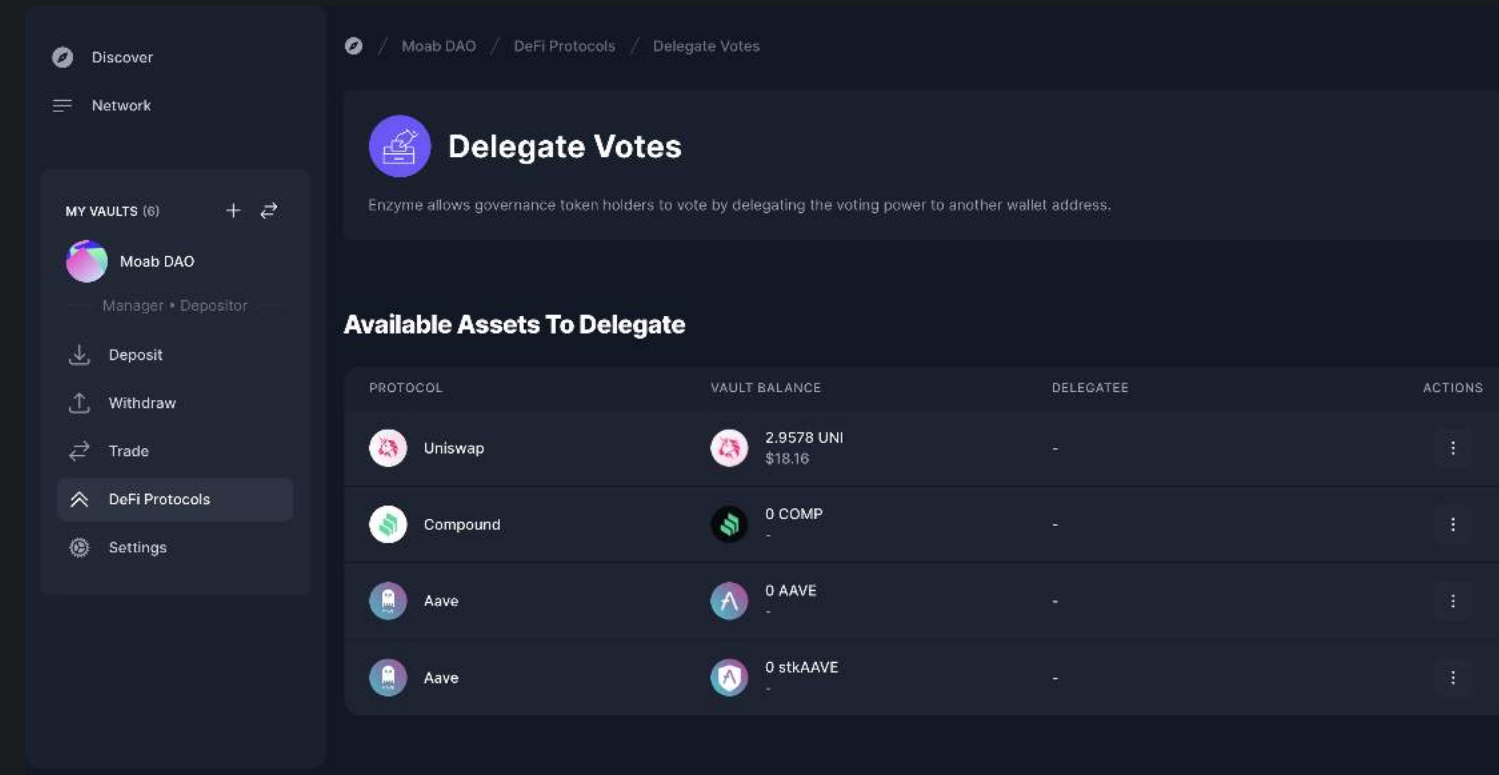
With Curve you can **provide Liquidity** to a wide range of **pools** in **Ethereum** and **Polygon** networks and get a boost by combining strategies with **Convex Staking pools**(only available in Ethereum).

Curve LP tokens are automatically staked on your behalf. Going forward, Sulu's architecture allows other types of staking to be possible (eg. governance participation).


# Delegated Voting



Enzyme allows governance token holders to be able to vote. This would be done by delegating the voting power to another wallet address.



Currently, you are allowed to delegate and undelegate **\$UNI**, **\$COMP**, **\$AAVE** and **\$stkAAVE**.


 By delegating **\$AAVE** or **\$stkAAVE**, you are delegating both Voting and Proposition.

## How To Delegate My Token?

1. In your left-hand vault menu, go to “DeFi Protocols” and select ‘Delegate Votes’.
2. Click on the three dots of the asset you want to delegate and click on ‘Delegate’.
3. Input the delegatee address and click on ‘Delegate’

## How To Undelegate My Token?

1. In your left-hand vault menu, go to “DeFi Protocols” and select ‘Delegate Votes’.
2. Click on the three dots of the asset you want to undelegate and click on ‘Undelegate’.
3. Input the delegatee address and click on ‘Undelegate’

 You will always be delegating and undelegating the full available amount of tokens.

# Idle

The screenshot displays the Idle Finance interface. At the top, the user's wallet balance is 1,7438 ETH. The main content area shows the 'AGF Digital Dollar Yield Vault' with a manager and depositor. Below this, a list of available strategies is shown with columns for Strategy, Asset Balance, Pool Size, and Total APY. Each strategy includes a 'Deposit' button.

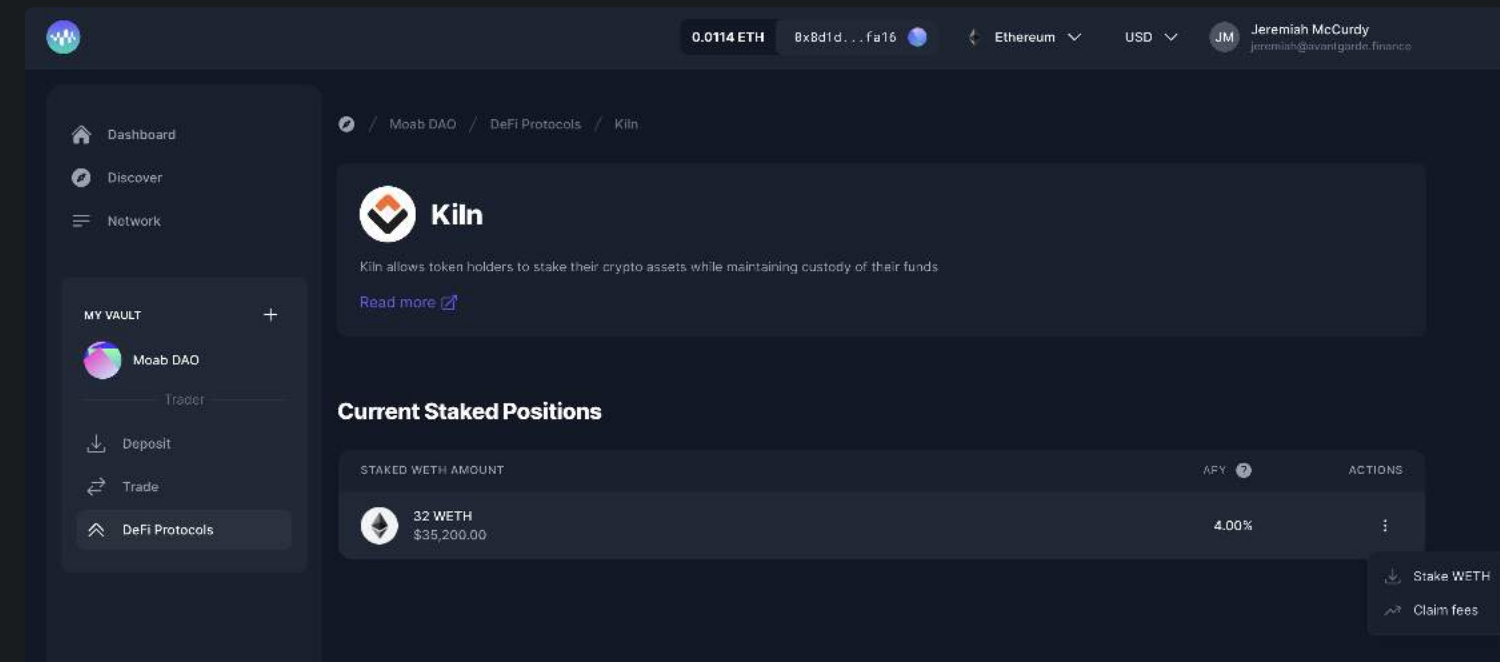
STRATEGY	ASSET BALANCE	POOL SIZE	TOTAL APY
IdleUSDTYield IdleUSDT v4 [Best yield]	17,4344 USDT	\$7,793,592	3.07% 2.18% + 0.89% rewards
IdleWETHYield IdleWETH v4 [Best yield]	-	\$408,767	1.03% 0.76% + 0.26% rewards
IdleWBTCYield IdleWBTC v4 [Best yield]	-	\$37,413	0.06% 0.02% + 0.04% rewards
IdleUSDCYield IdleUSDC v4 [Best yield]	-	\$13,567,442	1.24% 0.44% + 0.80% rewards
IdleRAIYield IdleRAI [Best yield]	-	\$406,910	2.77% 1.18% + 1.58% rewards
IdleDAIYield IdleDAI v4 [Best yield]	-	\$10,954,491	2.03% 0.75% + 1.29% rewards

Idle is a decentralized rebalancing protocol that allows users to automatically and algorithmically manage their digital asset allocation among different third-party DeFi protocols.

Idle allows you to **provide liquidity** to the best **yield generating strategies**, on **Ethereum** and soon in **Polygon** network.

Enzyme introduces a brand new Kiln integration, where vaults can stake their ETH to various Kiln-approved validators. Kiln is a project that allows you to stake your ETH directly, taking advantage of their enterprise-grade staking technology.

## Ready. Stake. Earn.



### Available Actions:

- **Stake** - You can stake multiples of 32 ETH
- **Claim Fees** - Currently the only available claimable fees are execution layer fees.

Consensus layer fees accrues until become available to be claimed, possibly estimated after the shanghai fork (depending on the Ethereum foundation developments).

- **Withdrawals** - Currently ethereum staking withdrawals are not available for the entire network.

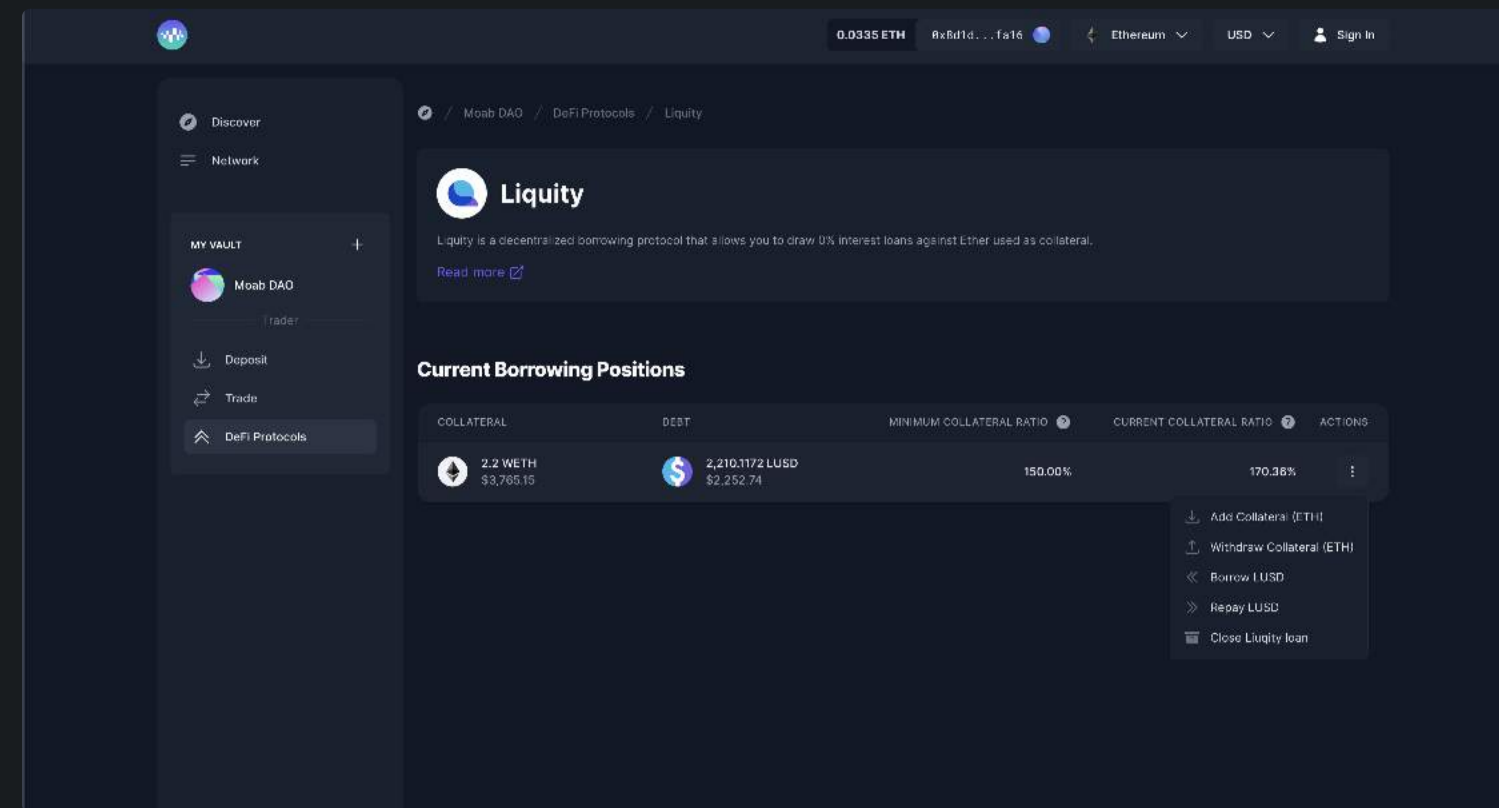
If you stake, you won't be able to withdraw your ETH until the ethereum network staking withdrawals become available.

### Staking Fee

An 8% fee on any staking rewards generated is collected by Kiln and partners.

## Zero-interest stablecoin loans with Liquity Troves

Thanks to the new integration with the Liquity protocol, you can now borrow stablecoins at zero interest using ETH as collateral. This is all possible within your Enzyme vault as you can create native Liquity troves directly through Enzyme.

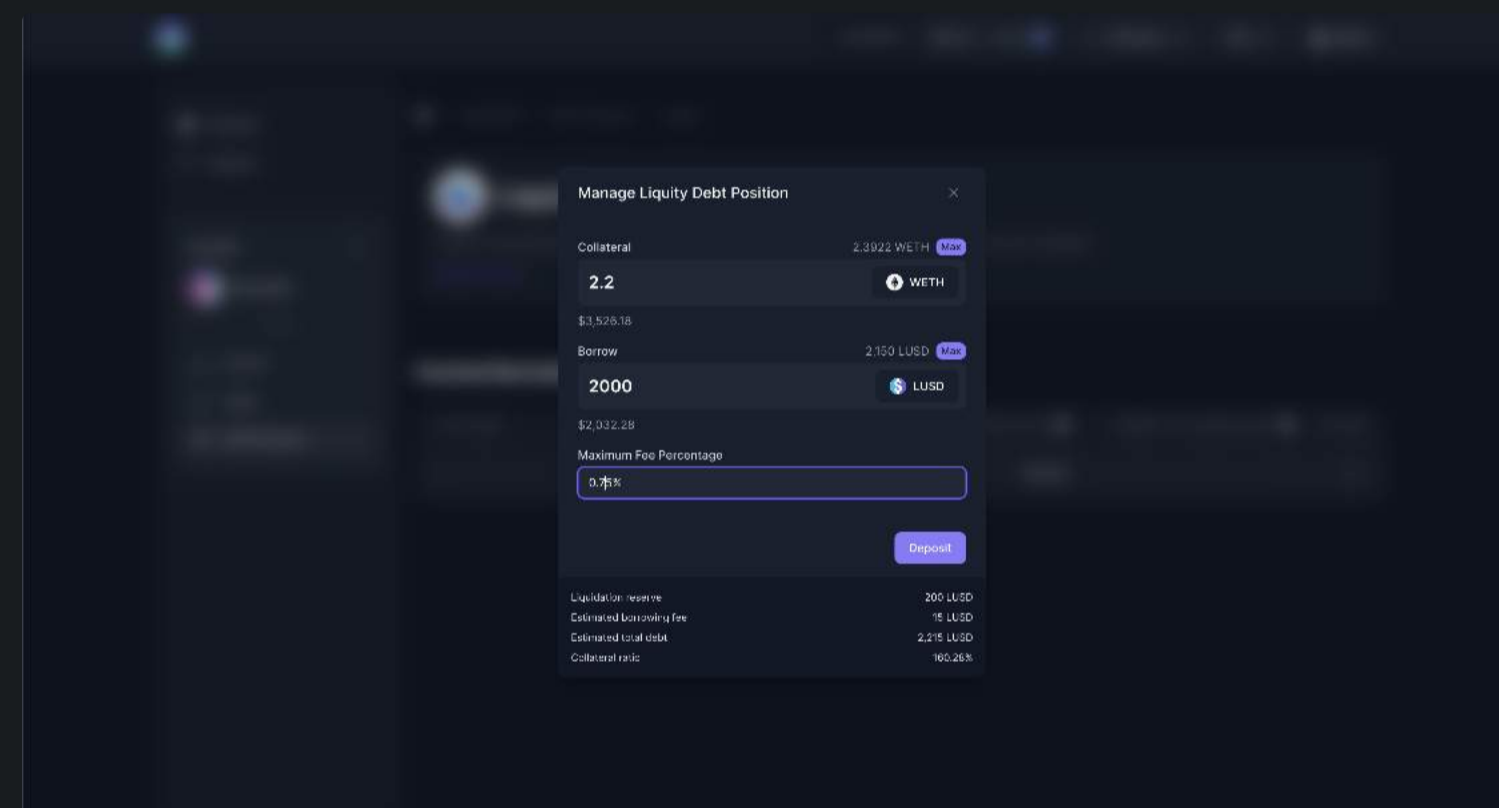


### Important aspects to consider

- You can only borrow LUSD and you can only use WETH as collateral.
- The maximum LTV (Loan to Value) on your ETH collateral is 90%. Beyond that point, the ETH collateral gets automatically liquidated by Liquity.
- Liquity has a built-in **recovery mode**. It is a protocol switch that is designed to prevent systemic risks. When the protocol's global collateral falls below 150% the recovery mode kicks in, and therefore every loan's minimum collateral Ratio (CR) jumps from 110% to 150% (or decreases from 90% LTV to 66% LTV respectively). In order to avoid liquidations (especially during Recovery Mode) it is recommended to keep the CR well above 150% / well below 66% LTV at all times.
- You can borrow any LUSD amount starting from a minimum of 2,000 LUSD
- When creating your trove, an additional 200 LUSD is added to your overall debt (borrowed amount + borrowing fees) as a liquidation reserve, to ensure you are able to pay the liquidation fee in case the collateral rate goes beyond the max collateral ratio (110%). The 200 LUSD liquidation reserve is returned once the loan is fully repaid.
- Liquity charges no interest but it does charge a one-time borrowing fee. Borrowers can define the max percentage fee they are willing to pay upfront during the creation of a new loan. It can be set between 0.5% and 5%. The actual fee is algorithmically calculated by Liquity based on redemption activity and time. If the fee is above your accepted fee percentage, the transaction will fail.

### How To Borrow LUSD?

- In your left-hand vault menu, go to "DeFi Protocols" and select Liquity.
- Click on the three dots and select "Deposit WETH and Borrow".
- Enter the Amount of ETH you would add as collateral (minimum borrow amount is 2000 LUSD and 200 LUSD will be added as a liquidation reserve upon creation), the amount of LUSD you wish to borrow, and the maximum fee you would like to negotiate.
- Then click on "Deposit & Borrow".



### How To Repay Your Liquity Loan?

If you want to repay part of your loan, without closing your Trove, you can.

- In your left-hand vault menu, go to "DeFi Protocols" and select Liquity.
- Click on the three dots and "Repay LUSD".
- Enter the Amount of LUSD you would like to repay.
- Then click on "Repay".

**i** You need a minimum borrow amount of 2000 LUSD + 200 LUSD as liquidation reserve.

### How To Borrow More LUSD?

- In your left-hand vault menu, go to "DeFi Protocols" and select Liquity.
- Click on the three dots and "Borrow LUSD".
- Enter the Amount of LUSD you would like to Borrow.
- Then click on "Borrow".

**i** Currently, you cannot borrow an amount that would adjust your collateral ratio below 150%.

### How To Add More Collateral(WETH)?

- In your left-hand vault menu, go to "DeFi Protocols" and select Liquity.
- Click on the three dots and "Add Collateral (WETH)"
- Enter the Amount of WETH you would like to Add.
- Then click on "Add Collateral".

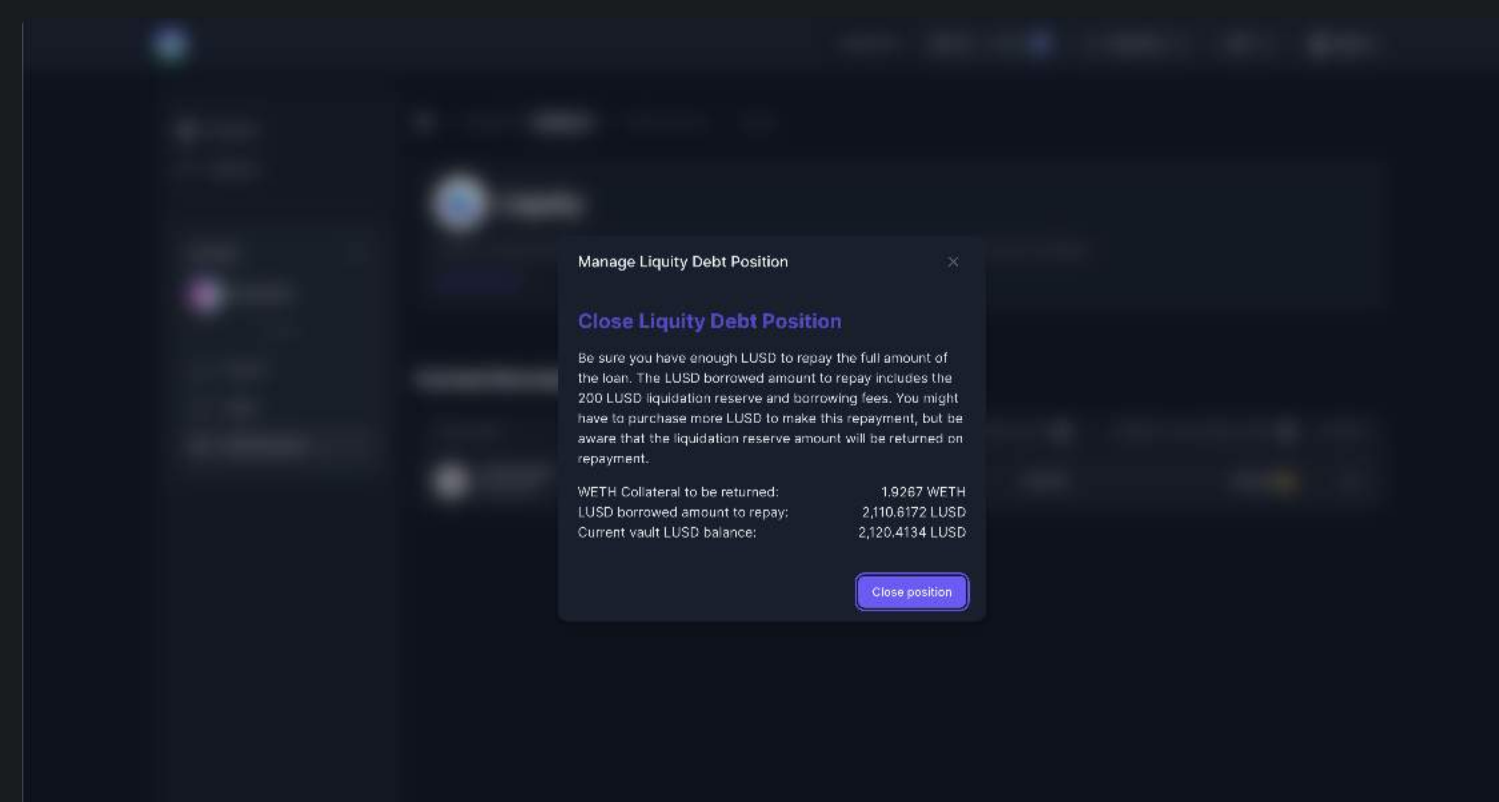
### How To Withdraw Collateral(WETH)?

- In your left-hand vault menu, go to "DeFi Protocols" and select Liquity.
- Click on the three dots and "Withdraw Collateral (WETH)".
- Enter the Amount of WETH you would like to Withdraw.
- Then click on "Withdraw Collateral".

**i** Currently, you cannot withdraw an amount that would drop your collateral ratio below 150%.

### How To Close Your Liquity Debt Position?

- In your left-hand vault menu, go to "DeFi Protocols" and select Liquity.
- Click on the three dots and "Close Liquity Loan".

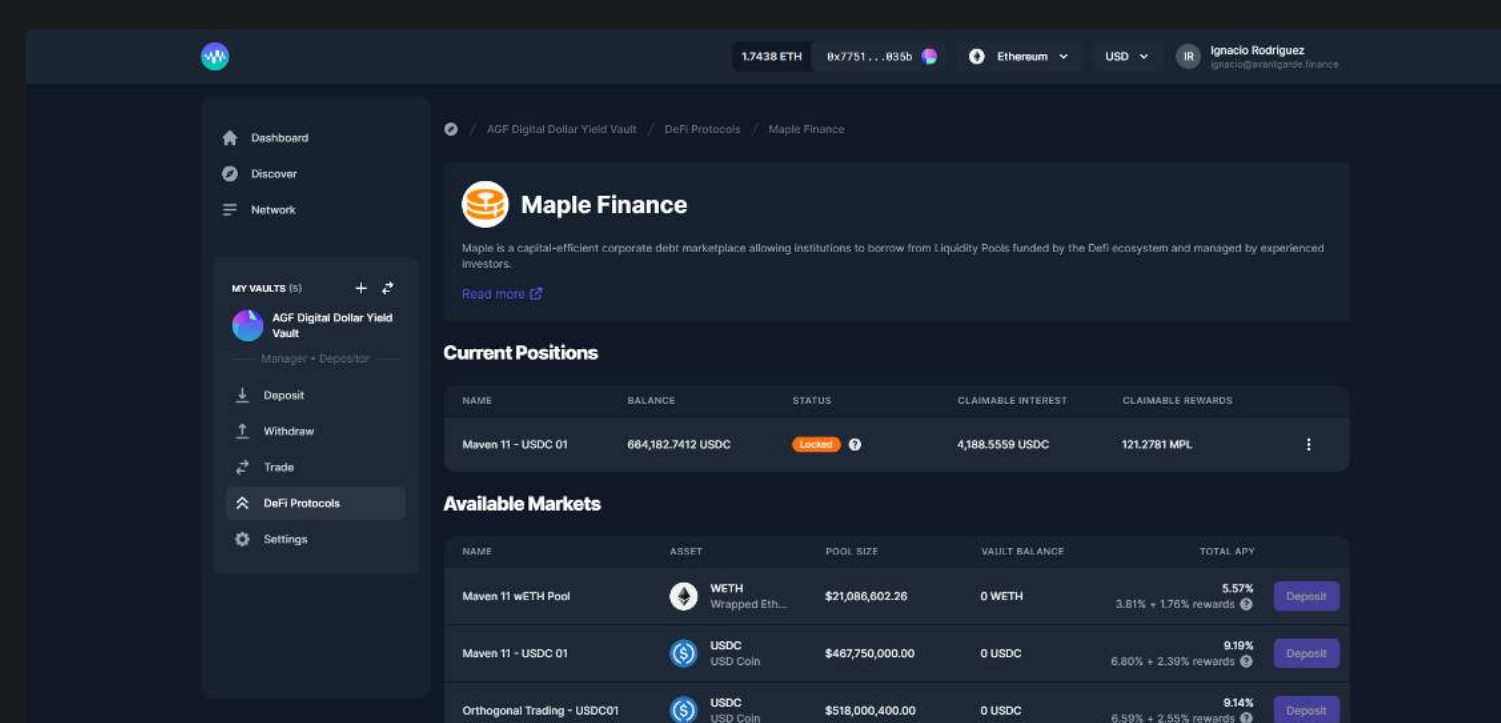


- Confirm the details on the image click on "Close Position".

**i** You need to have the necessary amount of LUSD in your vault to repay the loan including the liquidation reserve and fees. Once the loan has been paid the 200 LUSD set apart for the liquidation fee will be returned to the vault.



# Maple Finance



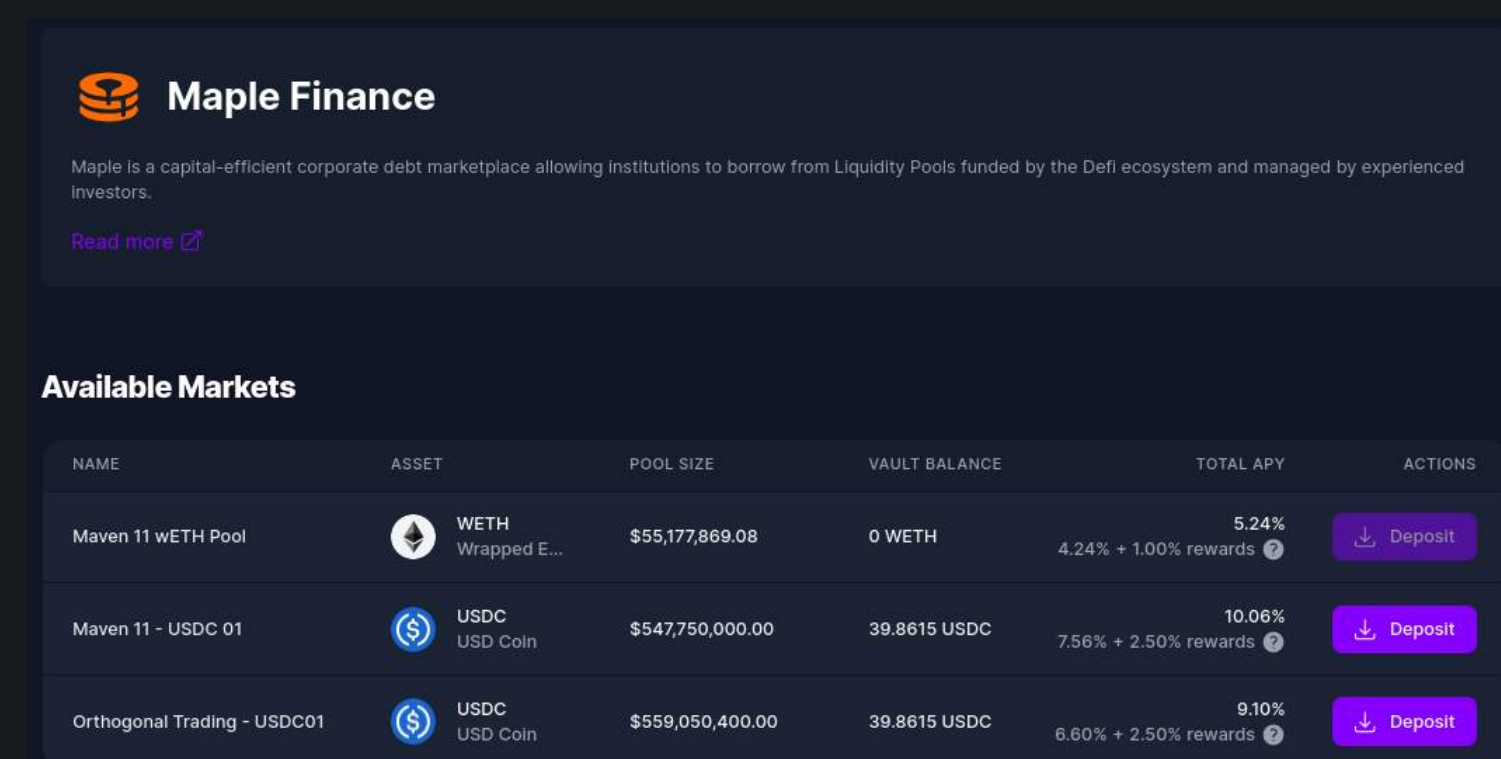
Maple is a capital-efficient corporate debt marketplace allowing institutions to borrow from Liquidity Pools funded by the DeFi ecosystem and managed by experienced investors.

With Maple, you can **Lend** to capital markets, available on **Ethereum**.

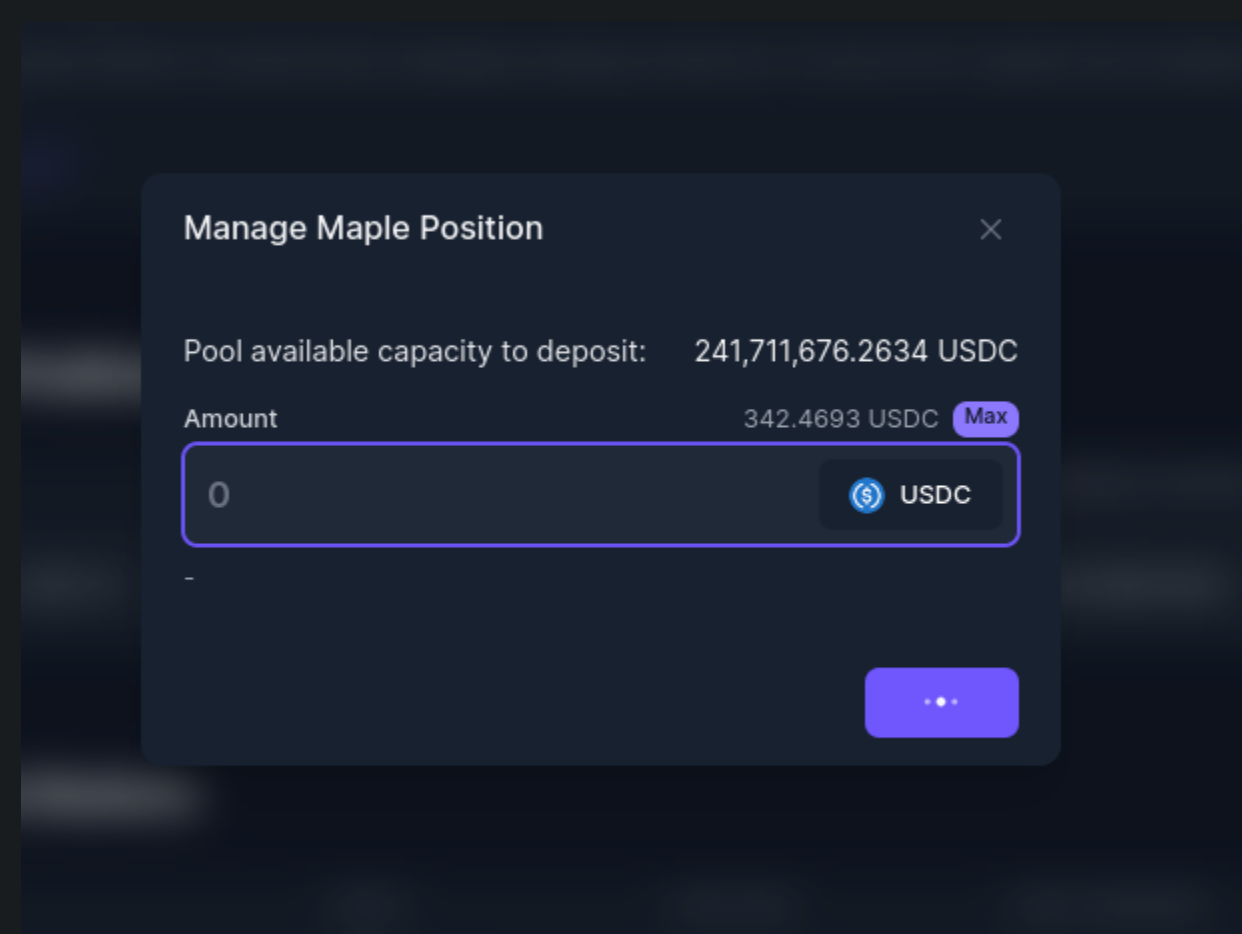
If you have opened a Maple lending position, there may be restrictions on when and how much of your liquidity you can withdraw. For a full description of the withdrawal process, please see their documentation [here](#).

## How To Lend in Maple?

1. In your left-hand vault menu, go to "DeFi Protocols" and select Maple.
2. On the Available Markets, select the Name of the pool you would like to deposit and click on 'Deposit'.

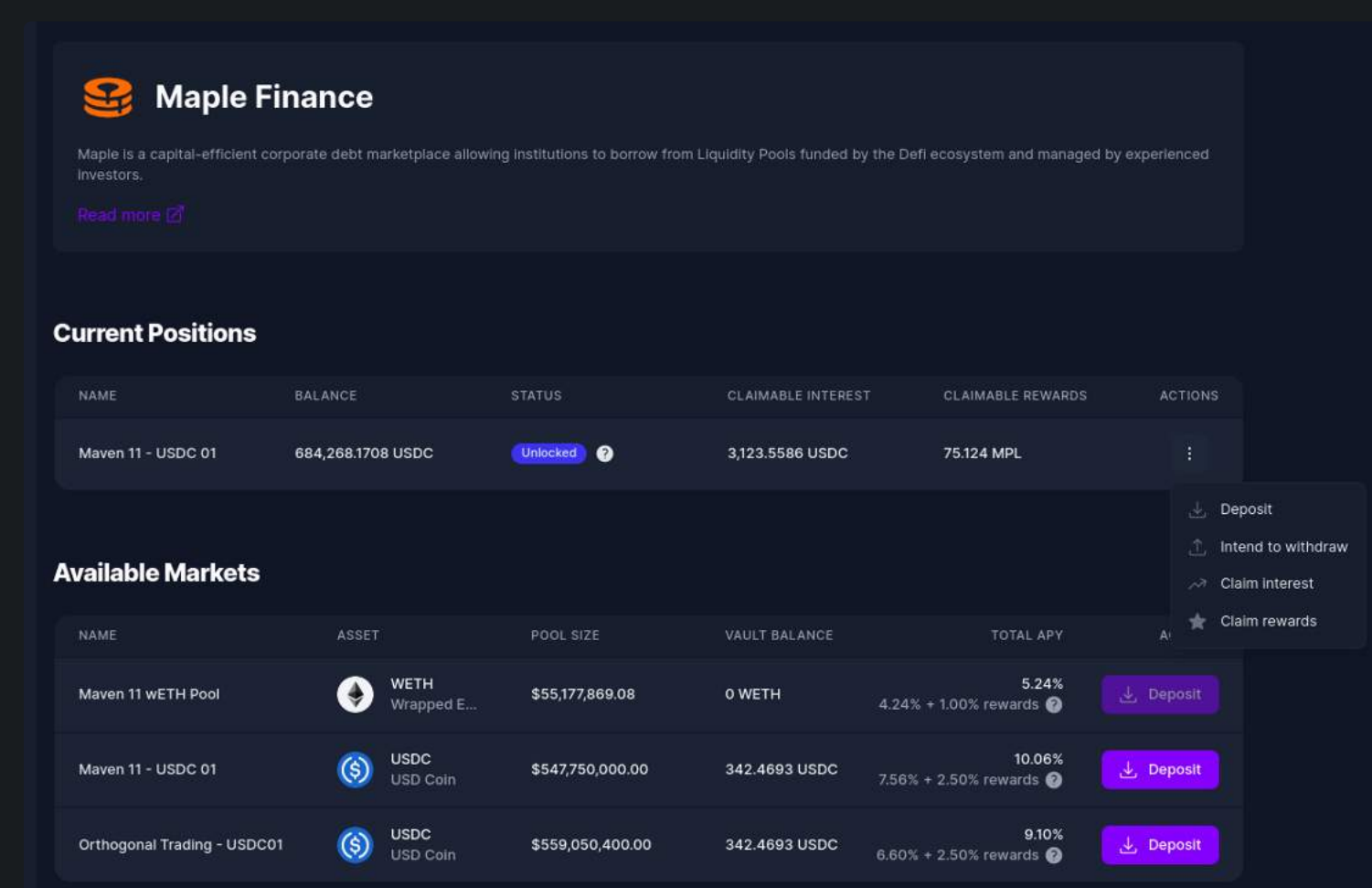


3. Enter the amount you wish to deposit and click on 'Deposit'.



## How To Add More Capital Into A Pool?

1. In your left-hand vault menu, go to "DeFi Protocols" and select Maple.
2. On your Current Positions, click on the three dots of the pool you would like to add more capital, and select 'Deposit'.



3. Enter the amount you wish to deposit and click on 'Deposit'.

## How To Withdraw From a Maple Pool?

1. In your left-hand vault menu, go to "DeFi Protocols" and select Maple.
2. On your Current Positions, click on the three dots of the pool you would like to withdraw funds, and select 'Intend to withdraw'.

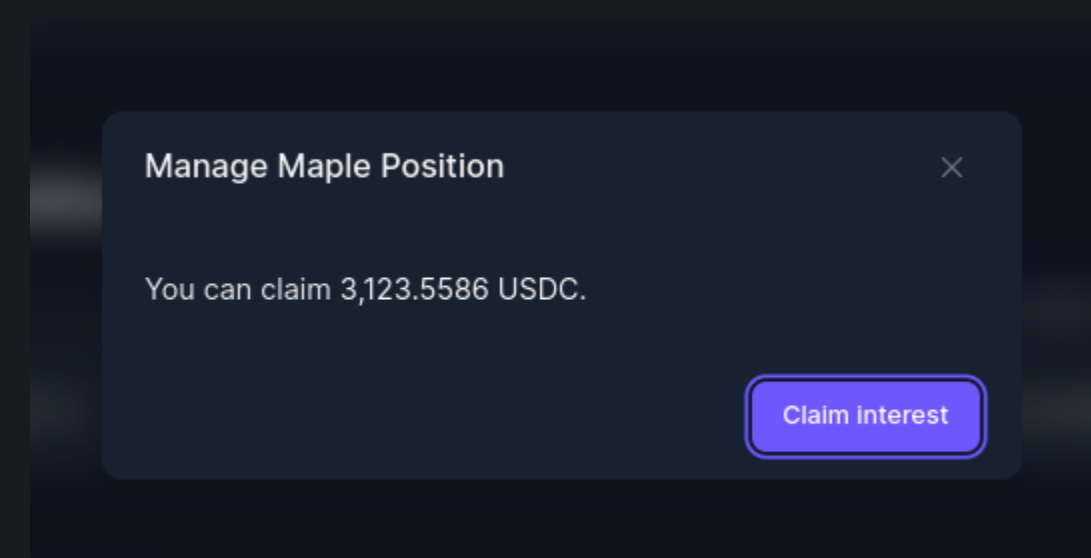


**i** This transaction will trigger a 10-day cooldown period. After that cooldown period is complete, you will have a 2-day window to withdraw your funds.

**i** Deposits to this Maple pool are locked for 90 days. If you make another deposit to this pool before the 90 days are up, the counter will restart based on a weighted average of your deposits. For example, if you deposit \$10m on day 1 and another \$10m on day 45, your lockup period on \$20m will be 60 days at the time of the second deposit. After this lockup period is finished, you may withdraw your funds via a two-step process. You can read more about the process [here](#).

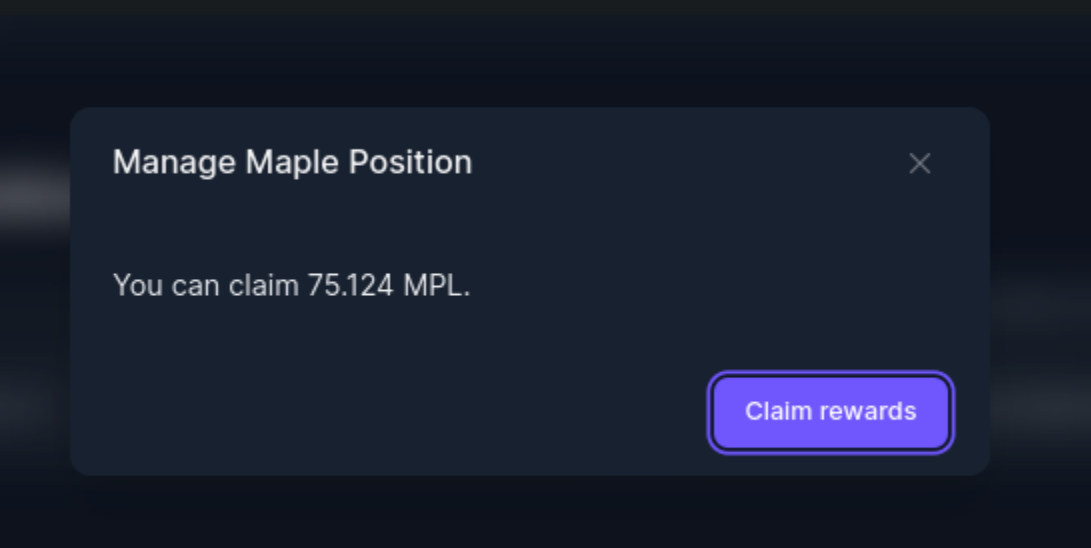
## How To Claim Interest?

1. In your left-hand vault menu, go to "DeFi Protocols" and select Maple.
2. On your Current Positions, click on the three dots of the pool you would like to claim interest, and select 'Claim Interest'.
3. If you have available interest to be claimed, click on 'Claim Interest'



## How To Claim Rewards?

1. In your left-hand vault menu, go to "DeFi Protocols" and select Maple.
2. On your Current Positions, click on the three dots of the pool you would like to claim rewards, and select 'Claim Interest'.
3. If you have available rewards to be claimed, click on 'Claim Rewards'.



# The Graph

## The Graph

The Graph is an indexing protocol for querying networks like Ethereum and IPFS. Anyone can build and publish open APIs, called subgraphs, making data easily accessible.

[Read more](#)

### Current delegating positions

[Read more](#) [Explore Indexers](#)

External Position ID 0 [Delegate](#)

INDEXER	DELEGATED AMOUNT	UNLOCKED AMOUNT	UNBONDING AMOUNT	ACTIONS
0x85fe...372d	1 GRT	3 GRT	2 GRT	⋮
0x52h...888j	2 GRT	4 GRT	3 GRT	⋮

The Graph is an indexing protocol for querying networks like Ethereum and IPFS. Anyone can build and publish open APIs, called subgraphs, making data easily accessible.

Enzyme introduces GRT delegation, now, vaults can delegate their GRT to indexers and earn GRT rewards, which are a portion of the index fees and query fees. Delegators contribute to securing the networking without the need to run a graph node themselves.

## Before Delegating

You will need to know the indexer address to whom you will be delegating your GRT. Therefore, you should explore the indexers by clicking on ['Explore Indexers'](#). This will take you to a list of indexers, where they display their own fees and rewards, please DYOR before selecting an indexer.

## How To Delegate GRT?

1. In your left-hand vault menu, go to "DeFi Protocols" and select The Graph.
2. Click on 'Delegate'.
3. Input the amount of GRT you want to delegate and the indexer address.
4. Finally, Click on 'Delegate' and confirm the transaction.

## The Graph

The Graph is an indexing protocol for querying networks like Ethereum and IPFS. Anyone can build and publish open APIs, called subgraphs, making data easily accessible.

[Read more](#)

### Current delegating positions

[Read more](#) [Explore Indexers](#)

External Position ID 0 [Delegate](#)

INDEXER	DELEGATED AMOUNT	UNLOCKED AMOUNT	UNBONDING AMOUNT	ACTIONS
0x85fe...372d	1 GRT	3 GRT	2 GRT	⋮
0x52h...888j	2 GRT	4 GRT	3 GRT	⋮

### Delegate

Amount: 8.9359 GRT [Max](#)

0.00 [GRT](#)

\$ 0.00

Indexer: Placeholder

#### Indexer info

Available delegation capacity: 2,632,622,668.9551

Display name: elipfra.eth  
0xe263...ccc1b0

#### Summary

Delegated amount: 1 GRT

Fee amount: 0.05 GRT

Total: 0.95 GRT

[Delegate](#)

## How to Undelegate GRT?

1. In your left-hand vault menu, go to "DeFi Protocols" and select The Graph.
2. On the left-hand side of your delegated position, click on the three dots and click on 'Undelegate'.
3. Enter the amount of GRT you wish to Undelegate and click on the 'Undelegate' button.

**ⓘ**

- Undelegated tokens are subject to a 28-day unbonding period, this means you cannot transfer your tokens or earn any rewards on these tokens for 28 days.
- If you undelegate while there is an amount of GRT that is currently unbonding, the unbonding period will reset and the whole GRT will need to wait 28 days. E.g you undelegate today 10 GRT (unbonding period 28 days). But next week you decide to undelegate 5 more GRT, then you have 15 GRT with a new unbonding period of 28 days from the moment of your last undelegated action.
- If you undelegate GRT, while having unlocked GRT, the unlocked GRT will be withdrawn to the vault.

### Undelegate

Amount: 8.9359 GRT [Max](#)

0.00 [GRT](#)

\$ 0.00

**ⓘ** Undelegated tokens are subjected to a 28-day unbonding period. This means you cannot transfer your tokens or earn any rewards for 28 days.

[Undelegate](#)

## How to Redelegate GRT?

You can redelegate the GRT that has been unlocked (completed the unbonding period of 28 days).

1. In your left-hand vault menu, go to "DeFi Protocols" and select The Graph.
2. On the left-hand side of your delegated position, click on the three dots and click on 'Redelegate'.

**ⓘ** You redelegate the whole unlocked amount, you cannot specify how much GRT you want to redelegate.

## How to Withdraw GRT?

You can withdraw the GRT that has completed the unbonding period of 28 days.

1. In your left-hand vault menu, go to "DeFi Protocols" and select The Graph.
2. On the left-hand side of your delegated position, click on the three dots and click on 'Withdraw'.
3. Enter the amount of GRT you wish to withdraw, click on 'Withdraw' and confirm the transaction.

# Uniswap V2



The screenshot displays the Uniswap V2 interface. At the top, the user's wallet balance is shown as 1.7438 ETH. The main content area features a header for 'Uniswap V2' with a brief description: 'Uniswap empowers developers, liquidity providers and traders to participate in a financial marketplace that is open and accessible to all.' Below this is a section titled 'Available Pools' with a search bar and a table of trading pairs.

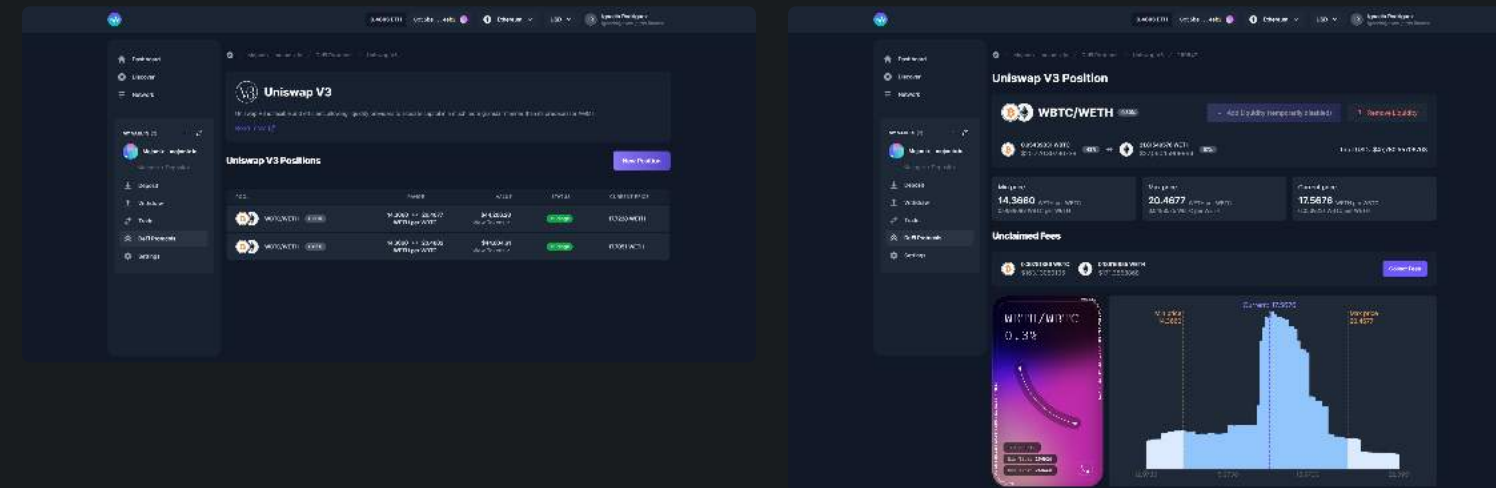
TOKENS	POOL SIZE	TOTAL APY	Deposit
Uniswap YFI/ETH Pool	\$300,985.14	0.00%	Deposit
Uniswap wNXM/ETH Pool	\$193,584.99	0.00%	Deposit
Uniswap WBTC/USDC Pool	\$594,835.51	10.06%	Deposit
Uniswap WBTC/ETH Pool	\$12,615,459.97	3.64%	Deposit
Uniswap USDC/USDT Pool	\$14,921,529.63	2.50%	Deposit
Uniswap USDC/ETH Pool	\$96,672,442.27	18.21%	Deposit
Uniswap UNI/ETH Pool	\$16,350,083.41	4.73%	Deposit
Uniswap UMA/ETH Pool	\$26,057.26	0.00%	Deposit
Uniswap SXP/ETH Pool	\$42,314.11	0.00%	Deposit
Uniswap SUSHI/ETH Pool	\$288,782.18	0.00%	Deposit

The left sidebar contains navigation options: Dashboard, Discover, Network, MY VAULTS (5), AGF Digital Dollar Yield Vault (Manager + Depositor), Deposit, Withdraw, Trade, DeFi Protocols, and Settings.

Uniswap V2 empowers developers, liquidity providers and traders to participate in a financial marketplace that is open and accessible to all.

With Uniswap V2 you can **Trade** and **provide liquidity to pools**, available on **Ethereum**.

# Uniswap V3

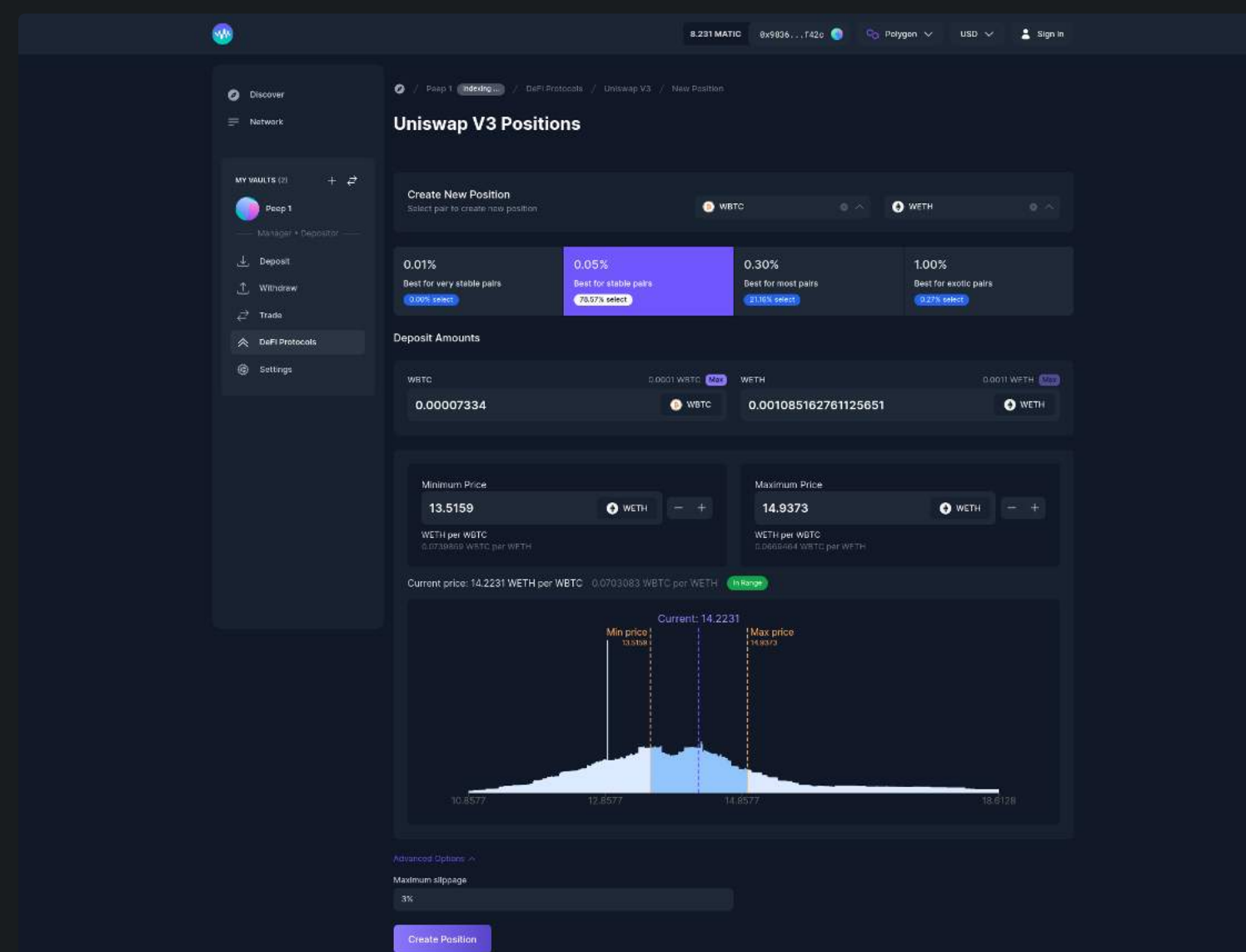


Uniswap V3 is flexible and efficient, allowing liquidity providers to allocate capital in a much more granular manner than its predecessor AMMs.


With Uniswap V3 you can **provide liquidity** within a certain price range to express directional views or increase your capital efficiency. Uniswap V3 is available on both **Ethereum** and **Polygon**.


## How To Provide Liquidity To Uniswap V3?

1. In your left-hand vault menu, go to “DeFi Protocols” and select Uniswap V3.
2. Click on 'New Position'.



3. Select your pair, the fee tier, and the amounts to deposit.
4. Then click on 'Create Position'.

 You can modify your maximum and minimum price.

 In the case you experience slippage problems, you can adjust your slippage threshold under the advanced options, by default is set to 3%.

## How to Add and Remove Liquidity?

You can add and remove liquidity by simply going to the open position and selecting 'Add/Remove Liquidity'.

## How to Collect Fees?

You can claim your fees by going to the open position and clicking on 'Collect Fees'.

# Yearn



The screenshot displays the Yearn Finance dashboard. At the top, the user's wallet balance is shown as 1.7438 ETH. The interface includes a sidebar with navigation options: Dashboard, Discover, Network, MY VAULTS (5), and DeFi Protocols. The main content area features the Yearn logo and a description: "Yearn Finance is a suite of products in Decentralized Finance (DeFi) that provides lending aggregation, yield generation, and insurance on the Ethereum blockchain." Below this is a table of available vaults.

VAULT NAME	ASSET	BALANCE	TOTAL ASSETS	APY	Deposit
yvUSDT USDT yVault 0.3.5	USDT Tether USD	17.4344 USD	\$24,825,867	0.01%	Deposit
yvYFI YFI yVault 0.4.3	YFI yearn.finance	-	\$3,011,880	0.63%	Deposit
yvWETH WETH yVault 0.4.2	WETH Wrapped Ether	-	\$71,546,956	0.09%	Deposit
yvWBTC WBTC yVault 0.3.5	WBTC Wrapped Bitcoin	-	\$6,319,351	0.00%	Deposit
yvUSDC USDC yVault 0.4.3	USDC USD Coin	-	\$97,847,886	1.44%	Deposit
yvUNI UNI yVault 0.3.5	UNI Uniswap	-	\$341,597	2.05%	Deposit
yvRAI RAI yVault 0.4.2	RAI Rai Reflex Index	-	\$9,114	0.00%	Deposit
yvLINK LINK yVault 0.4.2	LINK ChainLink Token	-	\$1,015,336	0.61%	Deposit
yvDAI DAI yVault 0.4.3	DAI Dai Stablecoin	-	\$111,053,085	1.59%	Deposit
yvCurve-stETH Curve stETH Pool yVault 0.3...	steCRV Curve.fi ETH/stETH	-	\$69,947,085	4.04%	Deposit
yvCurve-sETH Curve sETH Pool yVault 0.3.2	eCRV Curve.fi ETH/sETH	-	\$812,644	13.90%	Deposit
yvCurve-Aave Curve Aave Pool yVault 0.3.5	a3CRV Curve.fi aDAI/aUSD...	-	\$440,806	0.00%	Deposit
yv1INCH 1INCH yVault 0.3.2	1INCH 1INCH Token	-	\$167,881	0.00%	Deposit

Yearn Finance is a suite of products in Decentralized Finance (DeFi) that provides lending aggregation, yield generation, and insurance on the Ethereum blockchain.

With Yearn, you can **Lend** your assets to **yearn vaults**, and in exchange receive **yvTokens** that generate yield, available on **Ethereum**.

# Borrow, Rewards & Airdrops

## Borrow

Use your funds as collateral for loans, with [Compound](#), [Aave](#) and [Liquity](#). In this release we introduce borrowing, you can now deposit collateral, borrow and repay your loans from the Borrow tab.

It takes 3 steps to borrow on Enzyme:

1. On the Vault menu, go to the Borrow section and "Create a Debt Position".
2. Click on the 3 dots and select "Add Collateral". Select from the drop-down menu the asset you want to post and then specify the amount and click on "Post Collateral".
3. Click on the 3 dots and select "Borrow asset". Select from the drop-down menu the asset you want to borrow and then specify the amount and click on "Borrow Asset".

**Remember, if you borrow your max available you risk a margin call.**

### How to repay my borrowed asset?

On the Vault menu, go to the Borrow section and click on the 3 dots from your external position and select "Repay Assets". Select from the drop-down menu the asset you want to repay and then specify the amount and click on "Repay Loan".

### How to redeem collateral?

On the Vault menu, go to the Borrow section and click on the 3 dots from your external position and select "Withdraw Collateral". Select from the drop-down menu the asset you want to redeem and then specify the amount and click on "Withdraw Collateral".

### Important concepts to understand:

#### Risk levels

We calculate the risk level warnings based on your net collateral from your weighted average of the assets you add as collateral.

e.g. If you have \$1000 worth of Aave posted (50% collateral factor) and \$1000 of USDC posted (80% collateral factor) you can borrow  $\$500 + \$800 = \$1300$ . So your net collateral factor is the amount you can borrow divided by the total collateral you've posted  $1300 / 2000 = 65\%$ .

#### Yellow (High risk)

This warning will be displayed with a safety factor of 75% of your total posted collateral.

Liquidation risk is very sensitive to price movements in your collateral, therefore we chose an arbitrary safety factor of 75%.

#### Red (Margin Call)

This warning will be displayed when the borrowed assets will immediately trigger a margin call. Therefore we have disabled the borrow asset button.

### Collateral Factor

When using an asset as collateral, this number represents the maximum percentage that can be borrowed against it.

### Borrow Rate

The currently yearly APY you pay to borrow an asset net of rewards. Negative rates mean you earn to borrow the net of the protocol rewards.

### Current LTV(Loan to value)

This shows the ratio of the value of your borrowed assets to the value of your collateral assets. As this number approaches your Maximum Loan To Value, you increase your likelihood of being liquidated.

### Maximum LTV(Loan to value)

When the value of your borrowed assets is equal to or greater than this proportion of the assets you have deposited as collateral, your positions are eligible for liquidation.

## Rewards

When interacting with protocols like [Compound](#), [AAVE](#), [IDLE](#) strategies and [Yearn](#), Enzyme users are often eligible to claim rewards. It's now possible to claim these rewards directly from the integration interface in their corresponding Rewards section.

When you try to claim rewards, the app will prompt you to add the token you're claiming to tracked assets that you must do before you claim. This will enable your Vault to recognise the asset, and include it in the Vault's NAV.

A couple of important notes on farming & rewards in general;

- When you have unclaimed tokens, your Vault potentially becomes a target for arbitrageurs. We would recommend that you either claim them regularly or use measures to reduce this risk (eg. limiting who can buy new shares or charging an entrance fee).
- Note that some farmable tokens can not be held in a Vault because it might not yet be supported in the Enzyme asset universe. We, therefore recommend that you use the tools we've provided to "claim & redeposit" or "claim & swap" in a single atomic transaction because of the reason stated above.
- Once you have claimed your rewards (in this example, COMP), the position won't update in your overview until either you do a trade or you receive a new deposit. However, your Vault's NAV will no longer be open to arbitrage until substantial rewards accrue.

## Airdrops

It can be the case that your Vault is eligible for an airdrop or otherwise has a claim on tokens that it did not receive via investment or the Enzyme-native trading integrations. As long as these assets are in the supported asset universe, there is a method to claim these tokens that mitigates the risk of a front-running attack.

1. Temporarily disable depositors into your Vault. This can be accomplished by setting both the Minimum Deposit and Maximum Deposit to 0 in the Policies tab of the Vault Manager Launchpad.
2. Claim the tokens to your Vault's address (shown on the Overview tab of your Vault's main page, in the Vault Factsheet tab at the bottom of the screen).
3. Add the asset in question to your Vault's Tracked Asset list. As a reminder, this list is automatically generated by trading activity within Enzyme, but must be manually updated for tokens that accrue to the Vault outside of any Enzyme integrations. To update this list, go to the Settings tab of your Vault Manager Launchpad and scroll down to the Add Tracked Assets tool.
4. Re-enable deposits in the Vault on the same screen as Step 1 by entering your investment limits and clicking save. If you choose to have no investment limits, simply toggle both options off and hit save.



# Signaling an Upgrade



Enzyme is constantly evolving. The range of tools available for asset management in decentralised finance continues to grow at a significant rate.

At every upgrade cycle, Vault Managers will have the ability to signal an opt-in upgrade to Enzyme's latest release contracts.

From the point a Vault Manager signals an upgrade, depositors have 7 days to review the proposed upgrade and configuration before the manager can finalise it. During that period, no new subscriptions are allowed but depositors have the option to opt-out by redeeming their shares.

During the upgrade, all fees are paid out to Vault Manager and HWM is reset to the initial GAV after the upgrade.

***IMPORTANT:*** Please note that whilst users are never forced into an upgrade, only the latest release of Enzyme will be actively maintained. If you want to access the latest features and bug fixes it is advised to upgrade to the latest version of the protocol as indicated by the Enzyme Council. Currently, this is v4.



# Vaults for DAOs & Organisations

DAOs, companies etc

Until recently, Enzyme has primarily catered to single Vault Managers owning an Ethereum wallet. This section explores how to create Enzyme products with organisations using Gnosis Safe.

## What is Gnosis Safe?

Gnosis Safe is a multisig wallet which allows organisations to customize how they manage their crypto assets, with the option to require a predefined number of signatures to confirm transactions before they are executed. This helps prevent unauthorized access to organisation-owned crypto.

## Why Gnosis Safe + Enzyme?

You might be asking yourself why would anyone want to use a multisig to manage assets with Enzyme? Here are a few reasons:

- Organisations are able to access a quick & easy way to connect to multiple DEX trading venues (eg. DEXs, aggregators, derivatives), DeFi protocols (eg. depositing to AMM pools, lending) and DeFi benefits (eg. farming or airdrops) **from one place**.
- Enzyme provides users with full, easily readable, auditable and transparent reporting over assets being managed.
- Organisations can delegate trading to 3rd-party for efficiency in a non-custodial way (and revoke it at any time). The 3rd party can also be a trading bot.
- Organisations can pull in outside investors to invest alongside their strategies and charge optional fees (eg management, performance, entrance all calculated and distributed in an automated way).
- Gnosis Safe gives Vault managers a way to layer organisational governance structures on top of their products.

Let's explore a few concrete use-cases that might be interesting:

### 1. DAO Treasury Management

DAOs often sit on large treasuries which are not being actively managed. It can be challenging to manage a DAO treasury efficiently and track its performance transparently. This is a perfect use-case for Gnosis Safe + Enzyme. Organisations can simply plug their Gnosis Safe into Enzyme and engage with a purpose-built asset management toolkit.

### 2. Crypto Investment Clubs

Investment clubs are groups of individuals who join together to invest together and share resources. In many countries they also benefit from regulatory exemptions. Members of such clubs typically meet on a periodic basis to make investment decisions as a group through a voting process and recording of minutes, or gather information and perform investment transactions. A combination of Gnosis Safe + Enzyme enables you to set one of these up in minutes!

### 3. Eliminating Operational Risk

In general, nobody likes operational risk — especially organisations. If a Vault Manager were to compromise his/her private key or become incapacitated there is a question over what happens to the future of their assets. By having a multisig, you can drastically reduce these kinds of operational risks.

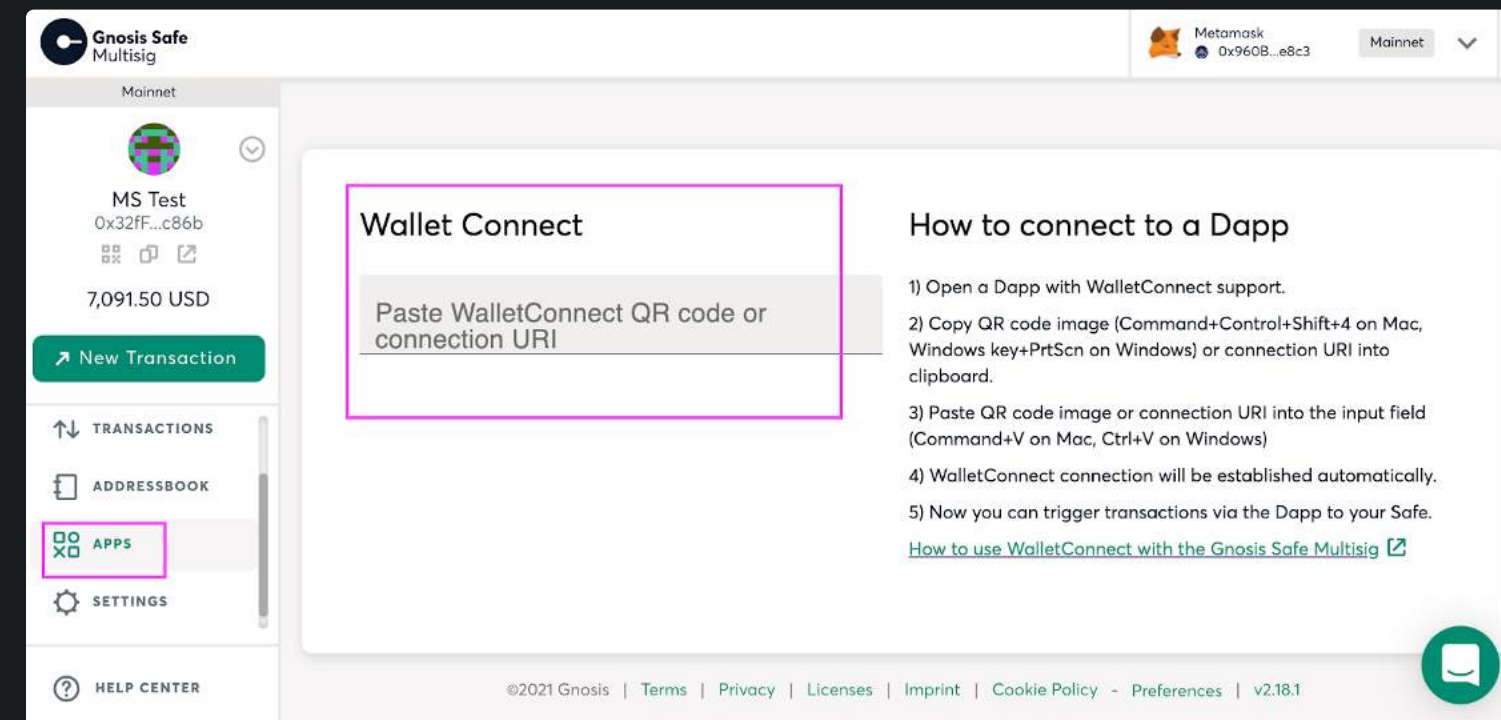
The possibilities are endless, those are just a few common use cases of a multisig on Enzyme.

# Gnosis Safe - Ethereum

## Step 1: Connect to Enzyme with a multisig.

If you don't already have a multisig safe, go to the [Gnosis Safe app](#) and follow the instructions to set up your Safe. If you already have one ready, just load it up from the Gnosis app.

Once you're set up with your Safe, click on Apps -> Wallet Connect.



Now go to the [Enzyme App](#) and connect using Wallet Connect. You'll see a QR code pop up which you need to copy to clipboard. Now go back to the Gnosis Safe page and paste the QR code into the wallet connect box highlighted in the image above.

You're now connected to Enzyme with your multisig!

## Step 2: Setting up with Enzyme.

If you go back to the [Enzyme app](#) now, you'll see you are connected with your multisig wallet! You can now start plugging your organisation into Enzyme. Make sure you are on the "For Vault Managers" launchpad and click "Create". If in doubt, you can refer to our [user docs](#) here or [contact us](#).

## Step 3: Deploying your Enzyme vehicle

Once you're done creating your organisation's connection to Enzyme, you will get prompted to sign a transaction. Submit the transaction and then go back to the Gnosis Safe App. Make sure you are logged in with one of the **multisig Owner** addresses and connect with Wallet Connect. It should prompt you to sign a transaction. Now keep repeating this process with other **multisig Owners** until you've passed the signing threshold. At that point, your Enzyme vehicle should be deployed on-chain and visible on the Vault Manager launchpad. For more information on what you can do with Enzyme, this might be a good time to [refer our user docs](#).

## Recommendations


Gnosis Safe Approval transactions take time and depending on how you have set up your gnosis safe wallet, you may need additional extra steps. It can be slow and inefficient to pass the multisig threshold every time you need to do a trade or interact with a DeFi protocol on Enzyme. So we've come up with a way to delegate trading to one address. The owner of this address can be a bot, a company's trader or an assigned group delegated by a DAO.

In order to delegate trading to one (or more) addresses, go to the Settings tab from the Vault Manager Launchpad and scroll down until you see Delegate Trading. Enter the Ethereum address and the add user address and submit the transaction. Now just go back to the Gnosis Safe app and repeat the steps provided earlier. Ask the multisig owners to log in with their address, connect via Wallet Connect and sign the pending transaction.

# Gnosis Safe - Polygon



1. Go to [app.enzyme.finance](https://app.enzyme.finance).
2. On the top right corner, click on **Connect Wallet** and select **WalletConnect**.
3. Below the QR code, click on “Copy to clipboard”.
4. On a new browser tab, go to your [Gnosis Safe Wallet](#) account.
5. Navigate to Gnosis **Apps** > **WalletConnect**.
6. **Paste the QR clipboard** you have previously copied at step 3 and make sure that it connects successfully to Enzyme.
7. **Go back to the Enzyme App**, you will see that your Gnosis wallet is now connected.
8. Now you can continue the process of [creating a vault](#). For an in-depth explainer of all decisions that you need to make creating a vault, you can watch this [video](#).
9. Once you have completed the vault creation process and you submit the transaction, make sure you have the WalletConnect app open on your Gnosis. **You will not receive the transaction request to approve if you don't have your WalletConnect App open on Gnosis.**

 If you are using Ethereum mainnet, don't click on Open Dapp, instead, click on “keep using WalletConnect”.

## Recommendations

Gnosis Safe Approval transactions take time and depending on how you have set up your gnosis safe wallet, you may need additional extra steps. It can be slow and inefficient to pass the multisig threshold every time you need to do a trade or interact with a DeFi protocol on Enzyme. So we've come up with a way to delegate trading to one address. The owner of this address can be a bot, a company's trader or an assigned group delegated by a DAO.

In order to delegate trading to one (or more) addresses, go to the Settings tab from the Vault Manager Launchpad and scroll down until you see Delegate Trading. Enter the Ethereum address and the add user address and submit the transaction. Now just go back to the Gnosis Safe app and repeat the steps provided earlier. Ask the multisig owners to log in with their address, connect via Wallet Connect and sign the pending transaction.

# Add Gnosis Safe Wallet To Your Enzyme Account

When you add a wallet to your account, you need to sign a message with that wallet to prove that you have control over that wallet.

Adding a Gnosis Safe wallet to your Enzyme account is slightly more complicated, because signing a message with a Gnosis Safe wallet is an actual transaction that needs to be sent to the blockchain.

Here are the detailed steps to add a Gnosis Safe wallet to your Enzyme account:

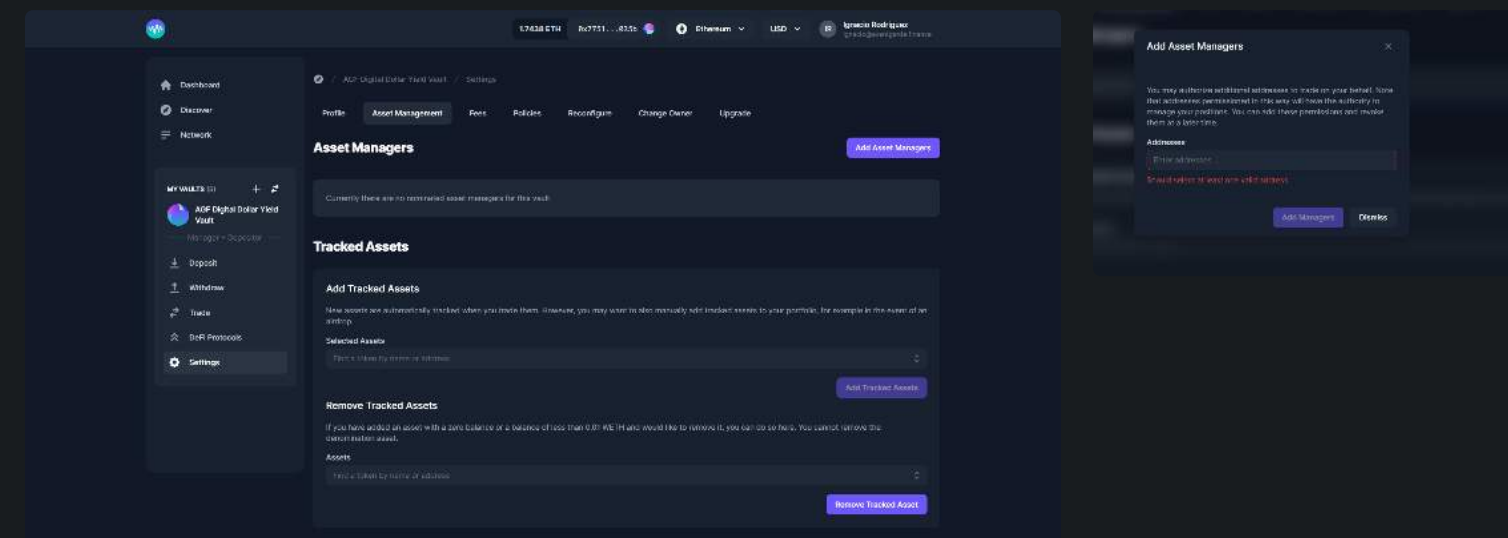
1. **Sign up / Sign in** to your Enzyme account.
2. **Connect your gnosis safe wallet**, if you don't know how to do that you can check it in [here](#).
3. Go to your account profile and click on the "**Start Adding Wallet**" button.
4. A modal will appear where you need to click on the "**Sign with Wallet**" button.
5. **Check your Gnosis Safe**, the transaction to sign the message should appear there. Click on the "**Submit**" button.
6. All the required number of wallets need to sign the proposed transaction in Gnosis Safe, and the transaction then needs to be executed in Gnosis Safe.
7. Once the transaction has been executed, you will need to copy some transaction details. **Copy the hash string of the "Sign Message \_data(bytes): 0x[someLongHash]"**. (You would copy **0x[someLongHash]**)
8. **Go back to the Enzyme App**. If the modal to start adding a gnosis-safe wallet is still open ("**Start Adding Wallet**"), please close it.
9. Click on the "**Finish Adding Wallet**" button.
10. **Complete the modal** by adding a **wallet name/label** and **paste the hash string you copied in step 7 above** in the message hash field and click on the "**Submit**" button.

If you have problems with these steps, don't hesitate to reach out to [support@avantgarde.finance](mailto:support@avantgarde.finance).

# Delegate Trading

## Assigning Asset Managers

If you are using a Gnosis Wallet, it can become slow and inefficient to pass the multisig threshold every time you need to do a trade or interact with a DeFi protocol on Enzyme. So we've come up with a way to delegate trading to one address. The owner of this address can be a bot, a company's trader or an assigned group delegated by a DAO. The interesting thing about this permission is that it only gives permissions for trading and that permission can be revoked any time by the organisation.




In order to delegate trading to one (or more) addresses, go to Settings > Asset Management > Asset Managers, click on the button to "Add Asset Managers". Enter the Ethereum address and Add Managers and submit the transaction. Now just go back to the Gnosis Safe app and repeat the steps provided earlier. Ask the multisig owners to log in with their address, connect via Wallet Connect and sign the pending transaction.

# Account



In this release, we have introduced Enzyme Accounts. Now, Vault managers can register an account that allows for an aggregate view of all vaults they manage in one central place. Soon after this release we will enable push notifications whenever you have a new vault subscriber, redeemer, or simply an activity of which you would like to be notified.

 Accounts are strictly optional.

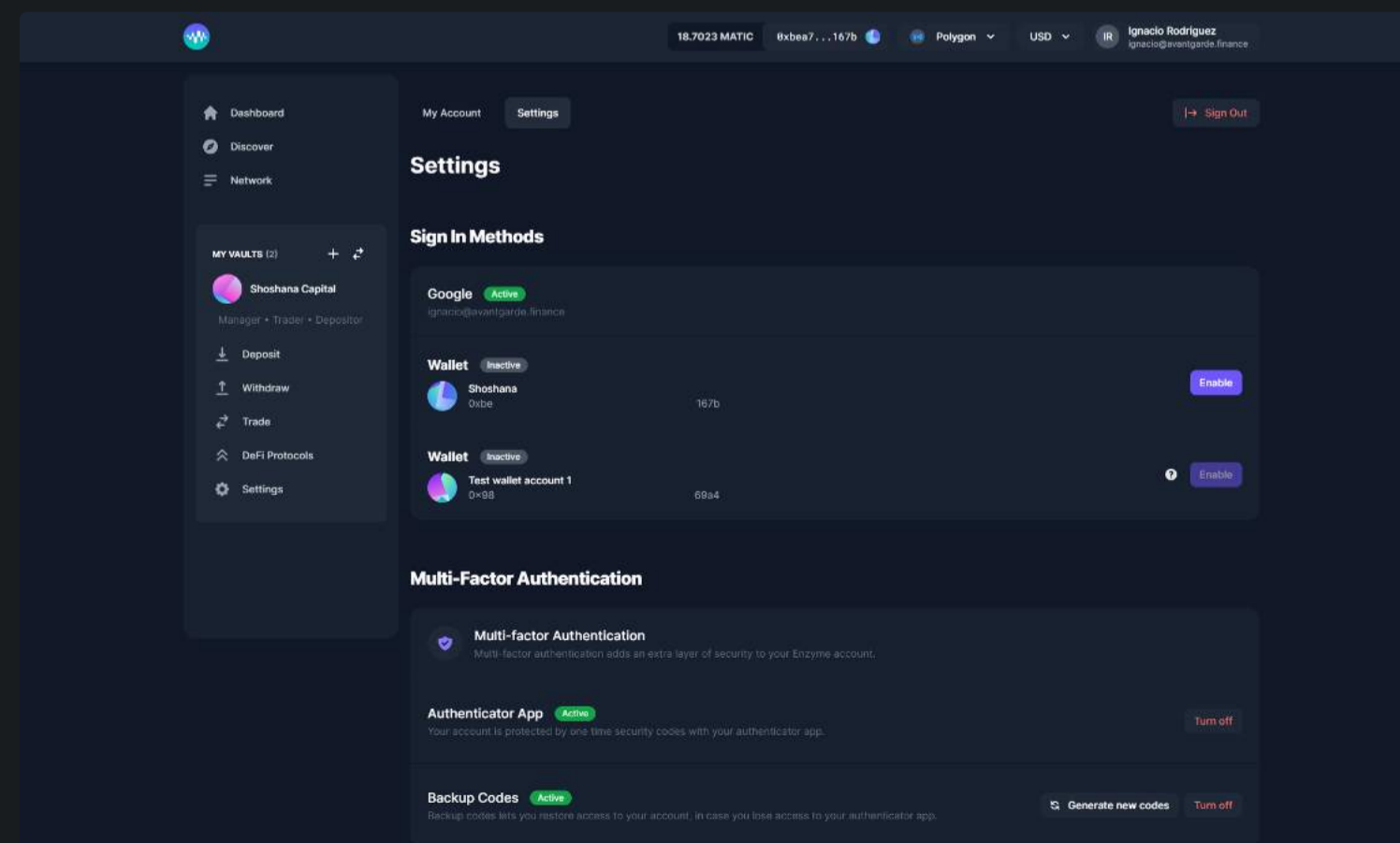
## My Account



If you click on your name on the top right corner of your screen, you will see your account details. You can also add wallets to your account here. Adding wallets to your account allows for aggregated views of both your performance as an investor in Enzyme vaults, as well as all of the vaults that you manage.

Here you can personalize and manage your account. From updating your avatar, changing your email address and your name or username, to adding your social media links and website.

## Settings



Here you modify your signing methods and you can improve the security of your account, which we highly recommend. You can set up a Multi-Factor Authentication, adding an extra layer of security to your Enzyme account, and please make sure you backup your codes.

# Protocol Access

⋮

Accessing the protocol requires MLN tokens: 25 bps taxation on the AUM held by a vault in Sulu (v4).

The way it works, is simple, it is accrued in the form of shares, to an Enzyme Council Contract

`ProtocolFeeReserveProxy`:

- **Ethereum:** [0xb7460593bd222e24a2bf4393aa6416bd373995e0](#)
- **Polygon:** [0xf0bfee2a93b0a1f9c5f6c1d731a6cf1308d68b2d](#)

The accrual event happens whenever the vault receives a deposit, shares are redeemed or a migration/reconfiguration happens.

To optimise this process, this release uses a shares buyback mechanism:

1. The taxed shares are minted at an inflated rate (e.g., 50 bps) above the effective target rate (e.g., 25 bps).
2. Funds can use **\$MLN** to buy back the collected shares at a discount (e.g., 50%).
3. Funds that take advantage of shares buybacks ultimately pay the effective target rate (25 bps) while funds that do not (and leave the Enzyme Council and protocol with the burden of finding other mechanisms for converting shares to \$MLN) pay the inflated rate (50 bps).

## Auto-Access:

The Auto Access feature, allows vault managers to automatically use MLN to access the protocol. For this to work, there needs to be **\$MLN** available in the vault.

To enable the Auto Access feature, please go to Settings > Fees > Auto Access > and click on the button that says "Enable Auto Access"

You can find more technical details in the [Sulu Specs](#).

# Insurance



Enzyme recognizes the importance of securing funds held within the platform. To provide additional protection and peace of mind to our users, we have partnered with leading insurance providers in the DeFi space. These insurance protocols offer coverage for funds held at Enzyme, safeguarding against potential risks and vulnerabilities.

## Nexus Mutual

[Nexus Mutual](#) is a decentralized insurance protocol that enables users to obtain coverage against smart contract risks. Enzyme has collaborated with Nexus Mutual to offer insurance cover specifically tailored to Enzyme funds. Users can purchase coverage directly through Nexus Mutual's platform using the link provided below:

- [Enzyme Cover on Nexus Mutual](#)

## InsurAce

[InsurAce](#) is another insurance protocol that offers coverage for various DeFi platforms, including Enzyme. By utilizing InsurAce, Enzyme users can protect their funds against potential risks and vulnerabilities. To purchase insurance coverage for your Enzyme funds through InsurAce, please follow the link below and search for Enzyme:

- [Enzyme Cover on InsurAce](#)

## Additional Considerations

While Enzyme has partnered with the above-mentioned projects to provide insurance options for user funds, it's important to note that insurance coverage is subject to the terms and conditions set forth by the respective insurance protocols. Users are responsible for familiarizing themselves with the coverage details, exclusions, and limitations before making any insurance purchases.



# Risks and Nuances

For any questions about these issues, our team is always happy to help.

## Smart Contract Risk

When interacting with any smart-contract protocol, there is always some degree of risk that an edge case or code vulnerability can result in funds being lost. We take security very seriously and have extensively engaged multiple auditors across every release of new code, and maintain a comprehensive unit and integration testing suite.

It's important to note that despite these precautions, there is still a risk that some edge case or bug exists which could result in user funds being lost. You can review the latest audit report [here](#).

## Oracle Risk

Enzyme relies on oracles to calculate the GAVs of any investment product. If these oracles are compromised in any way, they can provide attack vectors to users which could lead to a loss of funds.

## Untracked Assets

If assets appear in a Vault which were not acquired through trading, they will be *untracked* by the Vault and therefore not reflected in the pricing (GAV, NAV) of the Vault. Examples of when this could happen include airdrops or when a Vault Manager claims assets owed from yield farming. In order to make these assets "trackable" by the Vault, you should add them assets to Tracked Assets from your settings page. Note that as long as these assets are not claimed, the Vault may be arbitrated. It is therefore advisable that you either leverage the suite of policies available (eg. the [Buy Shares Caller Whitelist](#) or a [whitelist](#)) to mitigate these risks.

## Asset Risk

It is the Portfolio Manager's responsibility to stay on top of any nuances surrounding tokens. The available asset universe is not intended to be any list of endorsement. Things to look out for could include the risk of token migrations, deviations from the ERC-20 standard, the degree of centralised custodial risk (eg. USDT) and how prices are derived (for example, we use the BTC/ETH rate for WBTC).

## Number of Positions

You can hold up to 20 positions in any Enzyme product. Note that gas costs required to operate (eg. investments, trades, etc) increase as the number of assets you hold increases.

## Farming Rewards

A few things to note if farming is part of your Vault strategy.

- When you have unclaimed tokens, your Vault potentially becomes a target for arbitrageurs (at the expense of other depositors in your Vault). We would recommend that you either claim them regularly or use a whitelist to prevent malicious actors.
- Once you have claimed your rewards (in this case, COMP), the position won't update in your overview until either you do a trade or you receive a new deposit. However, your Vault's NAV will no longer be open to arbitrage until substantial rewards accrue.
- If you think that you'll only be claiming rewards once a week, it might make sense to use an entrance fee to deter arbitrageurs.

## External Positions

⚠ It is important to note that a vault which is able to interact with external positions requires a much higher degree of trust.

It is possible some or all of the funds get temporarily or permanently locked into the vault.

We strongly recommend that public vaults with unknown managers do not interact with external positions. This is the recommended option in the template we provide.

## Pricing Risk

**Fund owners and asset managers must be aware of the pricing mechanism assumptions and vulnerabilities involved in the assets they hold if their investors are unknown/untrusted entities.** This is because a fund is potentially exposed to share price arbitrage to the extent that Enzyme's understanding of the value of its holdings deviates in value from what can actually be acquired by trading or redeeming those assets.

In other words, one of the scenarios below could occur and cause a material impact to the real value held by your vault that is not immediately reflected in the price of your vault's shares.

### Example: Wrapped or synthetic assets using a Chainlink price

With many wrapped assets (e.g., wBTC, cxDoge, and Lido stETH) and potentially synthetic assets (none currently), the protocol assumes that the asset (e.g., wBTC) maintains a 1:1 price with its underlying (e.g., BTC).

In the case of wrapped assets, the underlyings are held in custody by a third party (e.g. Bitgo, in the case of wBTC, or the Lido smart contract in the case of stETH). If access to the assets is lost by the custodial entity (e.g., contract vulnerability or private key compromise), the protocol will continue to treat the wrapper as 1:1 with its underlying, even though its real value would be between 1 and 0.

The same would be true of a collateralized synthetic asset that became under collateralized.

A full list of assets where a 1:1 assumption is used will soon be available in documentation and the Enzyme app.

### Example: Assets that rely on external protocol assumptions

For example, Curve stablecoin pools rely on the assumption that all assets in the pool are generally worth the same (this is a simplification but is directionally accurate). The price feed used for those tokens within Enzyme would become unstable if any of the assets in the pool lost its peg (which would lead to a "bank run" of sorts, imbalancing the Curve pool).

### Example: Assets that rely on external protocol security

For example, the [YearnVaultV2PriceFeed](#) that is used for pricing yVault tokens relies on its yVault contract correctly reporting its value in a way that cannot be manipulated by price oracle manipulation attacks.

## Slippage

Slippage in DeFi is the difference between the expected amount of a transaction and the actual amount at which the transaction is executed. There are two types of slippage:

- Type 1 refers to the value loss incurred in a trade when there is a discrepancy between the DEX price (e.g. Uniswap) and the current asset prices that Enzyme sources from Chainlink. This may happen especially in case of a large-volume trade.
- Type 2 slippage attributes the value loss to the changing price of a trade between the time when a transaction is sent and the time it is mined. This can happen if there are other trades happening on a given DEX at the same time.

By default the Enzyme app is configured to allow a slippage threshold of up to a 3% but this parameter can be customised before submitting the transaction. In order to modify the threshold, you must click on Advanced Options > Maximum slippage and enter the desired % of slippage. Be aware that manually reducing the slippage tolerance below the default threshold may result in failed transactions.

Also, trading slippage % may differ across decentralised exchanges depending on the relative levels of liquidity for the required token swap. By default the Enzyme app shows you the best trading price among the several options available. This is the power of aggregation of the Enzyme protocol. You can always see "Best price" on top of the list, as illustrated in the screenshot below.

## Trade

EXCHANGE	PRICE	AMOUNT	VS. REF*	VS. BEST
Paraswap V5 ParaswapPool4-48%...	0.6183	32,227.5...	-0.36%	Best price
Uniswap V3 Swap USDC > WETH > LDO	0.6173	32,175.2...	-0.52%	-0.16%
Uniswap V2 Swap USDC > WETH > LDO	0.3943	20,551.9...	-36.46%	-36.23%
Curve Swap				No Price
Private Market Ma...				No Price

Bear in mind that this Maximum Slippage will only cover Type 1 slippage, as defined above. However, The Cumulative Slippage Tolerance Policy will cover both Type 1 and Type 2 as it will account for cumulative slippage value over time, and will also let the accumulated slippage value diminish over time.

**Set Cumulative Slippage Tolerance** Enabled

Caps the amount of slippage a manager can accrue over a 7-day period. This policy prevents managers from making trades that may potentially benefit themselves but not the vault.

10.00%

Slippage occurs mostly when you are swapping tokens, so here you can find a list of the Enzyme DeFi integrations where slippage is relevant:

### DEX protocols where you can incur in slippage:

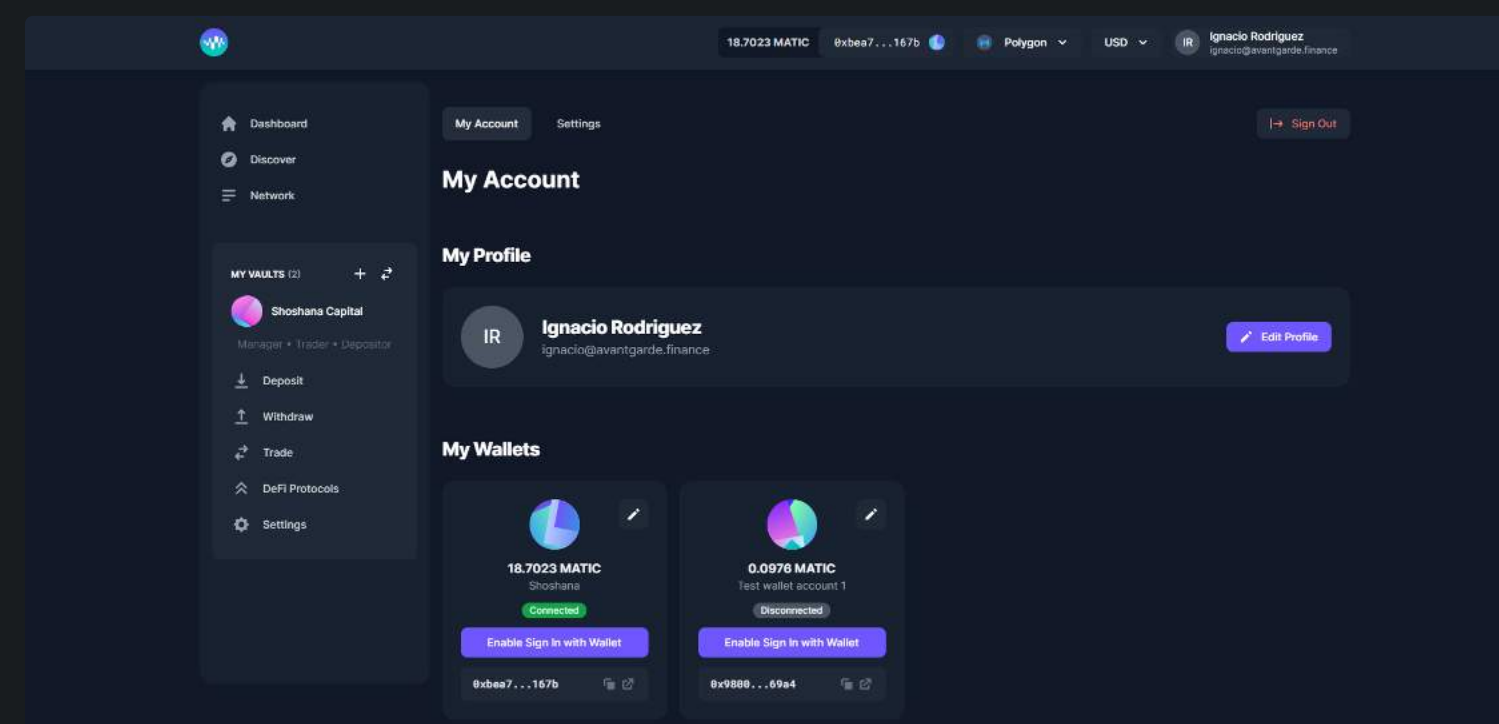
- Curve Trading
- Paraswap Trading
- Uniswap V2 & V3 Trading

### DeFi Integrations with no slippage:

- Aave
- Compound
- Convex
- Staking
- Idle
- PoolTogether

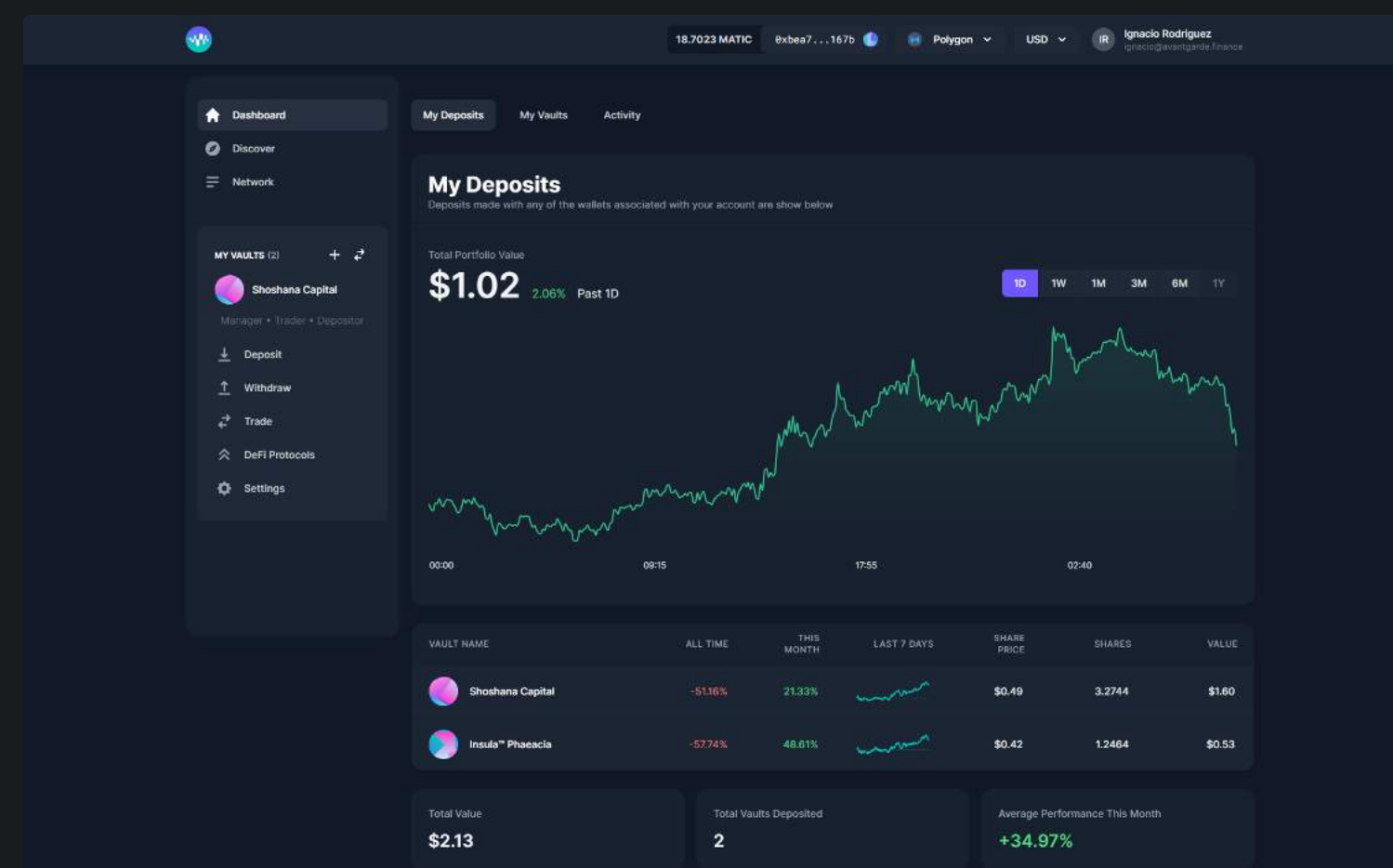
# Browsing the Enzyme Universe

## Account



Creating an account is strictly optional, and allows for an aggregate view of the vaults in which you own shares. Simply click the **Sign In** button on the top right corner of the app and follow the prompts to create your account. Once that's done, on the **My Account** tab, you'll be able to add connected wallets. Using these connections, the App can populate the dashboard below.

## Dashboard



The dashboard is available when you've created an account and logged into the Enzyme app. Here you can see your deposits, vaults you manage and your recent activity.

## Discover

**Discover All Enzyme Vaults**  
Find a vault with a proven track record on Enzyme, and free yourself from the day-to-day hassle while retaining full custody of your assets. You can filter strategies by assets, risk and performance, and find one that fits your risk profile.

**Today's Top Gainers**

Vault Name	Share Price	Change
GreenTec Fund	\$0.14	+22.89%
Acropolis Fund	\$986.73	+19.95%
BambilaDAO - DeFi Portfolio	\$0.18	+19.36%

**Largest Vaults**

Vault Name	Share Price	Depositors
USF Fund 1	\$1,232.60	3
Outstasemling	\$2.03	42
AGF Digital Dollar Yield Vault	\$1.00	4

**New Vaults**

Vault Name	Share Price
CoKa Health Fund	\$0.00
Chaosbox USDC / ETH	\$12,934.68
Ethereum Diamonds Fund	\$0.00
FantB Capital	\$0.00
Treasury	\$0.00

**DeFi Integrations**  
Enzyme gives you access to a large universe of DeFi tokens and protocols. Start to earn yield by lending or providing liquidity, or invest in an insurance market? No problem. You can do it all through Enzyme.

**You can build and scale vaults now!**  
Enzyme empowers you to build and scale vaults based on the investment strategies of your choice.

**Get the most out of your vaults with Enzyme**

Users	Developers	Company
Documentation	Protocol	Enzyme
Specs	Audit	Partners
Feedback & Bug Reports	Bug Bounty	Terms Of Use
Blog		Privacy Notice

Explore the Enzyme universe from the discover page. Here you will get the network status and various vaults that are active across the Enzyme ecosystem. Is a great place to stay up to date with the Enzyme.

# Browsing the Investor Launchpad

## Finding the right vault

Enzyme allows Vault Managers create vaults that allocate investor funds within the decentralised finance ecosystem. As a depositor, you can buy shares in these products with confidence; the manager's track record is transparent, the rules by which the vault operates and the fees that it charges are written in code, and your funds are always in your custody.

Researching Vaults begins on the Enzyme Discovery page and then goes to the [leaderboard](#).

NAME	AUM	SINCE INCEPTION	THIS MONTH	24H	LAST 7 DAYS
Whiteboard Capital	\$10.02	1.32%	0.00%	-4.82%	
PolyZyme	\$9.35	4.27%	0.00%	-5.76%	
One Vault To Rule Them All	\$4.04	-5.81%	0.00%	0.00%	
Cymru Capital	\$3.02	8.49%	0.00%	-6.30%	
CMIS test	\$2.11	-0.22%	0.00%	-0.26%	
	\$2.56	-0.72%	0.00%	0.00%	
Redeem, shall we?	\$2.02	0.75%	0.00%	-6.07%	
Kaleb Capital	\$1.41	3.92%	0.00%	-6.09%	
GM lambo rekt moonbol put your meme her...	\$1.37	2.77%	0.00%	-7.80%	
Avocado	\$1.24	5.89%	0.00%	-8.00%	

The leaderboard is a list of the best performing Enzyme Vaults. You can sort the leaderboard by various metrics, or further refine the results using the filters.

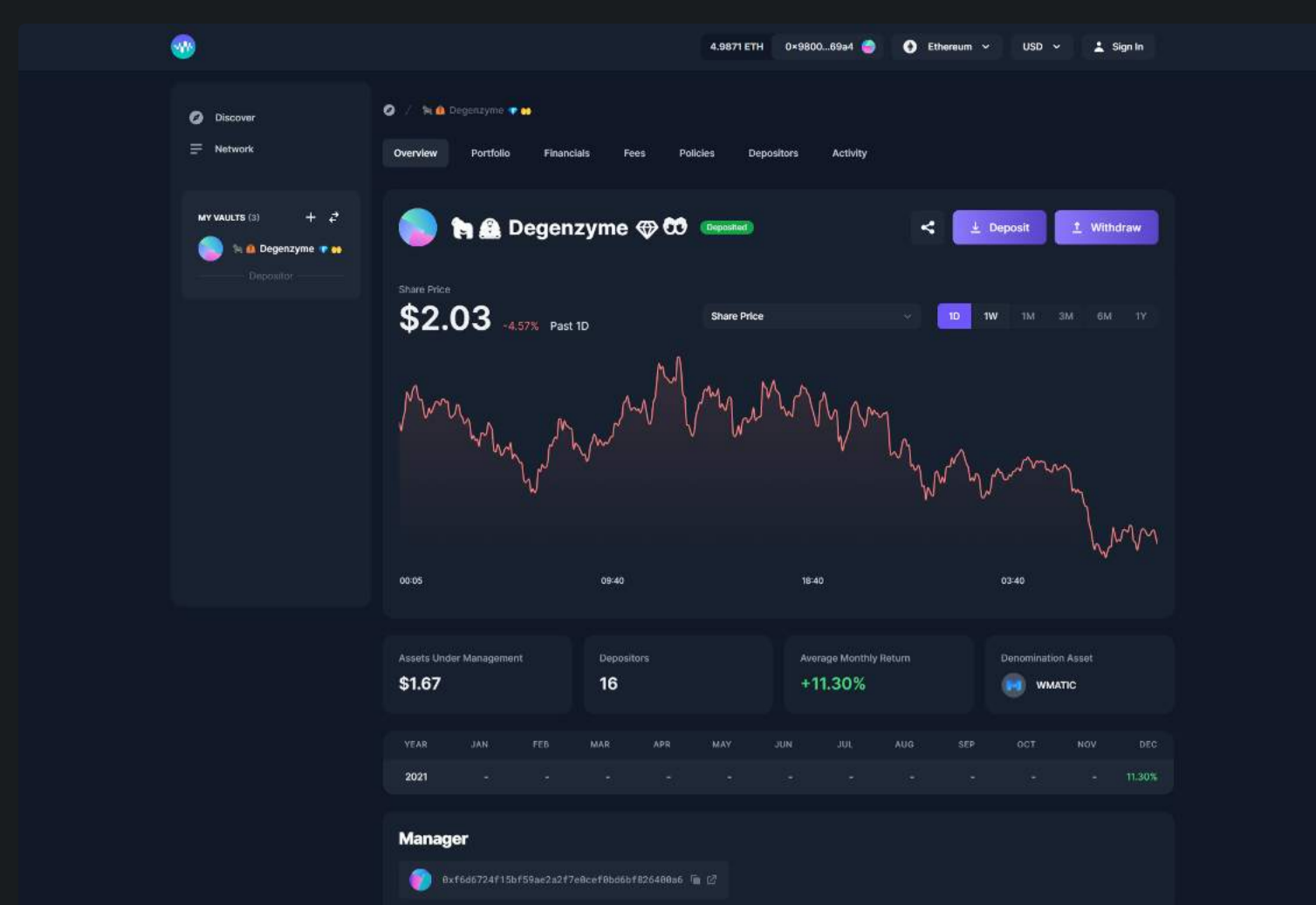
If you find a Vault that looks like it has potential, click on it to go a little deeper with your diligence.

# Browsing Vault Information

Do the diligence before you deposit!

Once you've narrowed your search of promising vaults, clicking into the "View Details" button on the vault you want to investigate further will give you a wealth of information. It can be divided broadly into three sections. Before we get into those however, note that all numbers displayed on this page are measured in the currency you've selected in the settings menu in the top right corner of the screen.

## Overview



The top portion of the vault overview page shows you its performance over time, as well as some basic headline information.

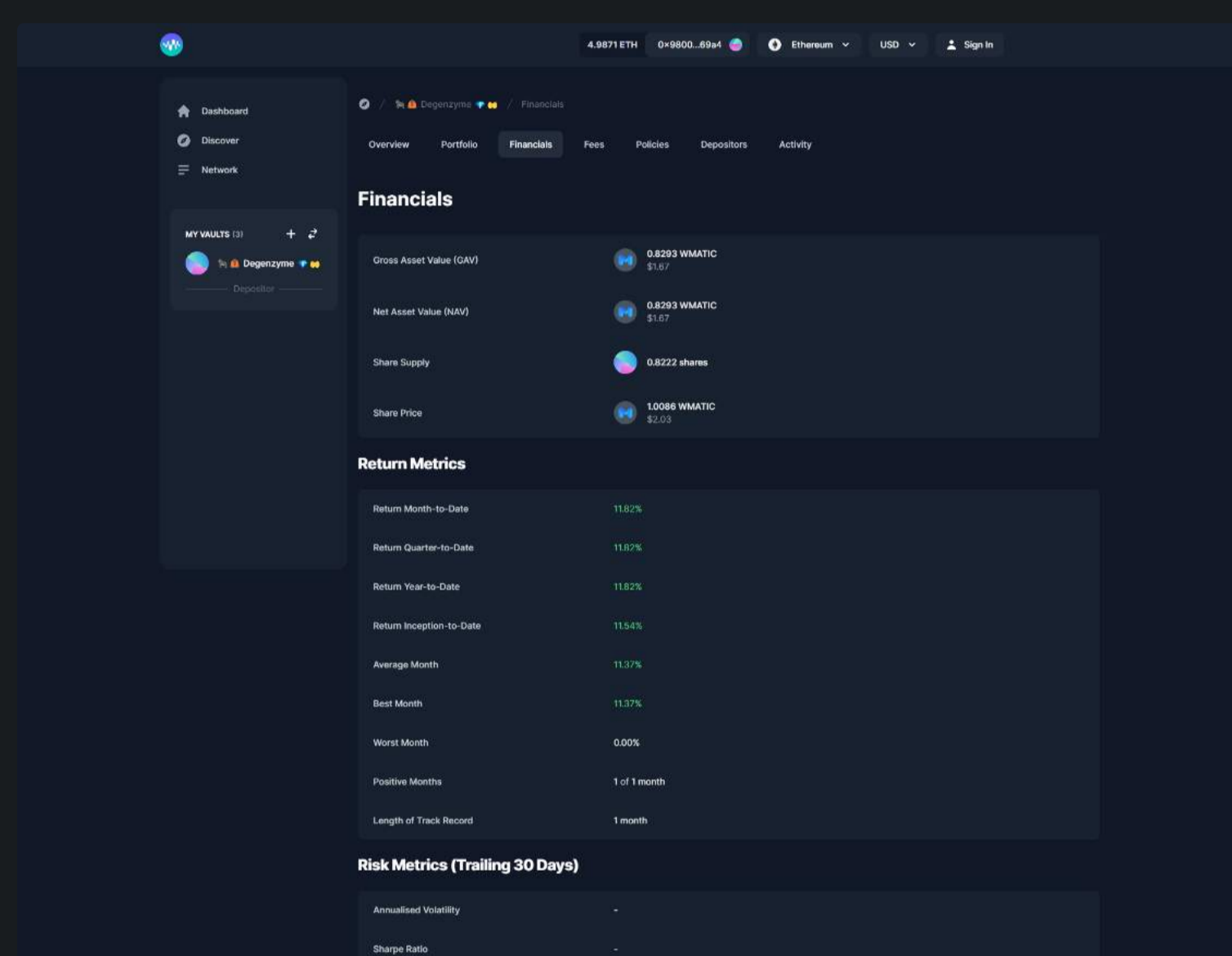
The drop-down menu in the top right corner of the chart allows you to show the product's share price or its assets under management. The monthly return table breaks out the performance of the share price into monthly increments (against the currency of your choosing).

## Portfolio

The Portfolio page shows the vault's current positions. It features a table with the following columns: Asset, Balance, Price, Change 24h, Value, and Allocation. The table lists three assets: WMTIC (Wormhole Token), ETH (Ethereum), and WATC (Wormhole Asset Token). The WMTIC asset has a balance of 5927, a price of \$1.01, a change of -0.2%, a value of \$1.38, and an allocation of 78.1%.

On the portfolio tab, you'll find the vault's current positions.

## Financials



Investment performance is not just about GAV though. Most investors care about other metrics too. Enzyme calculates these provable metrics from on-chain data. A sample of just a few of the metrics you can get from the financials section can be found in the image below.

- Gross Asset Value (GAV)
- Net Asset Value (NAV)
- Share Supply
- Share Price

## Return Metrics

- Return Month-to-Date
- Return Quarter-to-Date
- Return Year-to-Date
- Return Inception-to-Date
- Average Month
- Best Month
- Worst Month
- Positive Months
- Length of Track Record

## Risk Metrics (Trailing 30 Days)

- Annualised Volatility
- Sharpe Ratio

## Fees

The Fees page provides a detailed view of the vault's fee structure. It includes a table with the following columns: Fee Type, Rate, Frequency, Period, Amount, and Maximum Fee. The table lists three fee types: Performance Fee (Rate: 10.0%, Frequency: 30 days, Amount: 0.000000000000000000, Maximum Fee: 0.000000000000000000), Protocol Fee (Rate: 0.0%, Frequency: 1 day, Amount: 0.000000000000000000, Maximum Fee: 0.000000000000000000), and Swap Fee (Rate: 0.0%, Frequency: 1 day, Amount: 0.000000000000000000, Maximum Fee: 0.000000000000000000).

The Fees section lays out exactly how much you'll pay in fees to buy and own shares of this product, as well as the accrued Protocol fees the vault has accumulated.

## Policies

The Policies page provides a detailed view of the vault's policy settings. It includes sections for Allowed Adapters, Allowed Assets For Redemption, and Single Asset Redemption Threshold. The Allowed Adapters section lists the adapters that are allowed to interact with the vault. The Allowed Assets For Redemption section lists the assets that are allowed to be redeemed from the vault. The Single Asset Redemption Threshold section lists the threshold for single asset redemptions.

On the Policies section, you will see if the vault has any policies such as Allowed Investors, Investment Limits, Restricted Assets and others.

## Depositors

The Depositors page provides a detailed view of the vault's depositors. It features a table with the following columns: Depositor, Balance, Number of Shares, and Paid Out Fee. The table lists several depositors, including 0x1234... (Balance: 0.1234, Number of Shares: 0.1234, Paid Out Fee: 0.000000000000000000), 0x5678... (Balance: 0.5678, Number of Shares: 0.5678, Paid Out Fee: 0.000000000000000000), and 0x9012... (Balance: 0.9012, Number of Shares: 0.9012, Paid Out Fee: 0.000000000000000000).

Here you will see a list of all vault's depositors.

## Activity

The Activity page provides a detailed view of the vault's recent transactions. It includes sections for Redemption, Protocol Fee Collected, Swap, and Share Transfer. The Redemption section lists recent redemptions, including one for 4.444 WMTIC (Amount: 4.444, Depositor: 0x1234...), one for 0.789 WMTIC (Amount: 0.789, Depositor: 0x5678...), and one for 0.123 WMTIC (Amount: 0.123, Depositor: 0x9012...). The Protocol Fee Collected section lists recent protocol fees, including one for 0.000000000000000000 (Amount: 0.000000000000000000, Depositor: 0x1234...). The Swap section lists recent swaps, including one for 1 WMTIC (Amount: 1.000000000000000000, Depositor: 0x1234...) and one for 0.000000000000000000 (Amount: 0.000000000000000000, Depositor: 0x5678...). The Share Transfer section lists recent share transfers, including one for 0.123 (Amount: 0.123, Depositor: 0x1234...) and one for 0.456 (Amount: 0.456, Depositor: 0x5678...).

Here you can see the activity from the Vault, deposits, withdrawals, trades, and paid out fees.

# Making an Investment

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## Depositing to Enzyme Vaults

Once you've settled on a Vault, you'll need to connect your wallet to the Enzyme app. Click on the `Connect Wallet` button in the top right corner and choose your connection provider. Metamask, Wallet Connect, Coinbase Wallet and Gnosis Safe are currently compatible; if you do not see your preferred provider, please leave us feedback. We are actively integrating new wallets.

Once you're connected, make sure you've got some of your chosen network's native asset (ETH or MATIC) to pay for gas, then click the `Invest` button in the top right corner of the Vault's page. That will launch a modal that looks like this:

You can invest in a vault using ETH or MATIC (depending on which network the vault is on) or the Vault's denomination asset. This is the asset against by which all benchmarks are measured for the Vault's fees. In the case above, the Vault's Denomination Asset is WMATIC. Investing in the vault via the denomination asset is a two step process and requires a transaction for each step.


1. Choose an amount to invest and approve it; this transaction grants the vault permission to spend the assets in your wallet
2. Deposit those assets in return for vault shares


After the `Approve` transaction, the modal above should stay open and allow you to execute the `Deposit` transaction. If you navigate away while the `Approve` transaction is processing, clicking the `Deposit` button on the vault page will bring it up again.

You also have the option of investing with the network's native asset (MATIC, in this case, or ETH on mainnet). This requires only one `Deposit` transaction.

Once you've completed either process above and the `Invest` transaction is successfully mined, you are officially a token-holder. The app will take a moment to reflect the changes.

Ownership in Enzyme Vault's is represented by an ERC-20 token that enables you to redeem your shares. You can see an example of one of these tokens [here](#).

 Investment in an Enzyme Vault **only** occurs through this two step process. Do not, under any circumstances, send assets directly to the fund contracts. While they will appear in the fund, you will not have a claim on them to redeem.

 We strongly warn against investing into an Enzyme vault which is allowed to invest in external positions unless you know and trust the manager. This can potentially lead to locked up or lost funds. We recommend you check the policies section on a vault regularly to ensure that no external positions are allowed. We will be introducing automated notifications to alert users of such changes in the near future.

**Limit External Positions To A Specified List** (Enabled)

No external positions allowed.

# Monitoring Your Vaults



Keep an eye on your investments

Keeping track of deposits into your Vaults is easy, and starts again at the **Dashboard**. On the **My Deposits** tab, you can see the total value of all your investments in Enzyme products charted (once you've held shares long enough for there to be data), as well as a table with your positions broken out individually. You can also find your Deposit History, which shows when you've bought and sold shares.

If you have not created an account, you can still browse the various vaults in which you own shares if you are connected to the app with the wallet that owns those shares. In the left-hand column, or on mobile in the menu that opens from the top right corner, there is a **My Vaults** section that allows you to look at each of your vaults individually. There is no aggregated view without an account, however.

# Redeeming

As a depositor into a Vault, you are entitled to withdraw your pro-rata share of that Vault's assets at any time. There is an important nuance to note here, however. Your shares do not entitle you to your pro-rata share of the Vault's assets in the denomination currency unless the vault manager specifies it otherwise in the "Allowed Assets For Redemption" policy.

If that is the case, you will be able to redeem the value of your shares in the asset that the vault manager has chosen.

As this new redeemable option was just introduced in this latest release, we can expect that old practices may continue. Therefore it is highly probable that when you as a depositor would like to redeem your shares, you may receive a slice of every asset the Vault holds.

**i** Let's look at an example. Say you own 1% of the shares outstanding in an Enzyme Vault that's denominated in WETH. Its total assets under management equal 100 WETH, and its portfolio is divided evenly between WETH, WBTC, YFI, and UNI. If you were to redeem your shares, you would receive WETH, WBTC, YFI, and UNI in equal proportions that add up to a total value of 1 WETH. You would not just receive 1 WETH.

In either case, to redeem shares, login to your wallet connection provider and click into the Vault's info page. In the top right corner of that page, click the **Redeem** button. This will launch a modal showing your current balance and an input field for you to choose an amount to redeem.

Once you've chosen an amount of shares to redeem, click **Continue**. On the transaction modal that pops up next, confirm the information on the transaction and then click on **Submit**. This will bring up your wallet connection provider asking you to confirm the transaction. Once that's been done, the transaction will be mined and the appropriate token balances will be sent to your wallet.

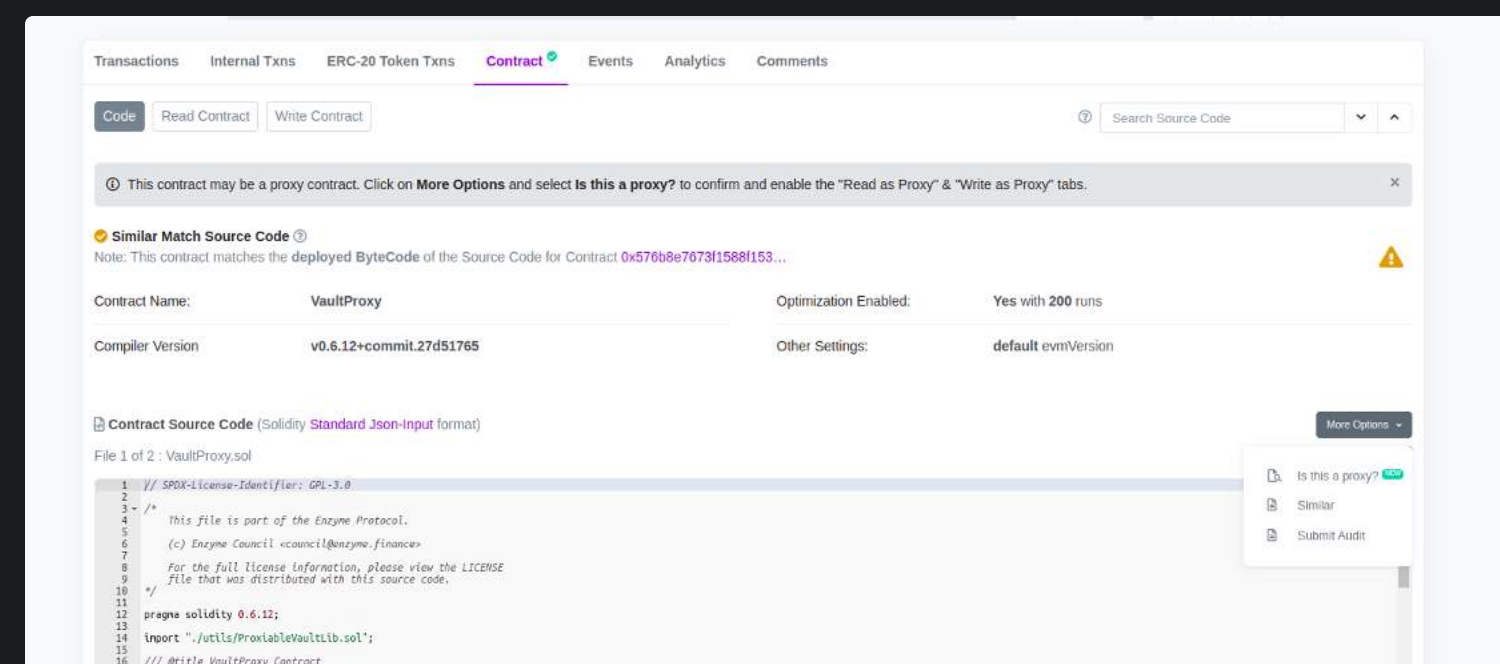
**w** If redeeming from a vault that holds external positions, note that redemption in kind can lead to a loss of funds. This option should be disabled on our user interface. If you are unable to redeem from a vault holding external positions, please contact us to discuss other possibilities.

## Redeeming through Etherscan or Polygonscan

In the case that the [Enzyme App](#) is not available, and you wish to withdraw fund from any vault, you can do so by following these steps

**i** You need to previously know your Vault Address. You can get that information on the URL slug in your Enzyme App, or you can find it as the contract creator of the share/token of the vault.

1. Search on [Etherscan](#)/[Polygonscan](#) for the vault address.
2. Go to **Contracts, More Options** and click on "is this a proxy?"



3. A prompt will appear and will be auto-populated, click on **Verify**, and **Save**.
4. **Click on the link** that is prompted below in a green box.
5. Then, go to **Contracts**, and select **Read as Proxy**.
6. Go to item number seven named **GetAccessor** and **click on the link** addressed populated below.
7. Then, go to **Contracts, More Options** and click on "Is this a proxy?"
8. A prompt will appear and will be auto-populated, click on **Verify**, and **Save**.
9. **Click on the link** that is prompted below in a green box.
10. Then, go to **Contracts**, and **Write as Proxy**.
11. **Connect your Wallet** to Etherscan/Polygonscan by clicking on the option that says **Connect to Web3**.
12. Go to item 17. from the list, named **redeemSharesInKind**. Here you will have to specify:

**\_recipient (address)**: Your wallet address

**\_sharesQuantity(unit2566)**: You will have to convert the number of shares to 18 decimals.

**i** e.g:  
10 share = 1000000000000000000 > 1 + 19 zeros  
1 share = 100000000000000000 > 1 + 18 zeros  
0.1 share = 10000000000000000 > 1 + 17 zeros

**\_additionalAssets(addresses[])**: here you should add an empty pair of square brackets `[]`

**\_assetsToSkip (address[])**: here you should add an empty pair of square brackets `[]`

13. Once that's completed, **click on Write, and sign the transaction** with the connected wallet.

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# Insurance

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Enzyme recognizes the importance of securing funds held within the platform. To provide additional protection and peace of mind to our users, we have partnered with leading insurance providers in the DeFi space. These insurance protocols offer coverage for funds held at Enzyme, safeguarding against potential risks and vulnerabilities.

## Nexus Mutual

[Nexus Mutual](#) is a decentralized insurance protocol that enables users to obtain coverage against smart contract risks. Enzyme has collaborated with Nexus Mutual to offer insurance cover specifically tailored to Enzyme funds. Users can purchase coverage directly through Nexus Mutual's platform using the link provided below:

- [Enzyme Cover on Nexus Mutual](#)

## InsurAce

[InsurAce](#) is another insurance protocol that offers coverage for various DeFi platforms, including Enzyme. By utilizing InsurAce, Enzyme users can protect their funds against potential risks and vulnerabilities. To purchase insurance coverage for your Enzyme funds through InsurAce, please follow the link below and search for Enzyme:

- [Enzyme Cover on InsurAce](#)

## Additional Considerations

While Enzyme has partnered with the above-mentioned projects to provide insurance options for user funds, it's important to note that insurance coverage is subject to the terms and conditions set forth by the respective insurance protocols. Users are responsible for familiarizing themselves with the coverage details, exclusions, and limitations before making any insurance purchases.




# Risks and Nuances



## Migrations

Enzyme is constantly adding new features and integrations with external decentralised finance protocols. Occasionally, these features will require a new release of the core Enzyme contracts. Investors should be aware that at every new Enzyme release, Portfolio Managers can opt in to upgrade their product from the previous version to the new version. This process gives Portfolio Managers an opportunity to change their original product configurations (eg. fees, rule-sets, etc). Once the product configurations are updated and the Portfolio Manager has signaled their intent to migrate to the new Enzyme version, the Portfolio Manager is restricted from accessing the upgrade for 7 days. This time period gives investors an opportunity to opt out of the product by redeeming their shares.

 At every release cycle, investors should regularly check the product configurations they are subscribed to in order to make sure they still agree to them.

In order to make this monitoring of events more user friendly, we will be releasing notification services for users in the coming months. In the meantime, any Enzyme upgrades will be well-publicised [here](#), [here](#), and [here](#).

## Smart Contract Risk

Enzyme takes security very seriously. Any publicly-available Enzyme code has been thoroughly audited; the results are available for anyone to read [here](#). However, when interacting with any smart contract protocol, there is always some degree of risk that an edge case or code vulnerability can result in funds being lost. Investing funds into an Enzyme product is an acknowledgement and acceptance of this risk.

For any questions about these risks, our team is always happy to [help](#).

## Oracle Risk

Enzyme relies on oracles to calculate the gross asset values of any investment product. If these oracles are compromised in any way, they can provide attack vectors to users which could lead to a loss of funds.

## Asset Risk

It is the Portfolio Manager to stay on top of any nuances surrounding tokens. The available asset universe is not intended to be any list of endorsement. Things to look out for could include the risk of token migrations, deviations from the ERC-20 standard, the degree of centralised custodial risk (eg. USDT) and how prices are derived (for example, we use the BTC/ETH rate for WBTC).

## Farming Rewards

Make sure you are using a Vault manager who understands the nuances of farming. When a Vault manager has unclaimed tokens, that Vault potentially becomes a target for arbitrageurs (at the expense of other depositors in the Vault). Typically its a good idea to make sure that a Vault which does farm, uses some kind of preventative measure (eg. a whitelist or an entrance fee) to deter such behaviour.

## External Positions

A vault that uses external positions requires substantially more trust in that vault's manager than other adapters. This is because redemptions might not always be possible if the Vault's assets are tied up in external positions.

If you are depositing into a vault which is able to hold external positions, make sure that you take the necessary steps to know who the vault manager is and establish trust between you.

It is possible for a manager to upgrade a vault to allow for external positions. This would entail a seven day cool-off period before the new changes take effect. We recommend you check the settings regularly to ensure this is not possible. We will be introducing automated notifications to alert users of such changes in the near future.

# Subgraphs



Avantgarde Finance maintains a number of subgraphs for Enzyme. They can be found below:

## Mainnet

- [Enzyme Core](#) - events related to the fundamental functionality of Enzyme vaults
- [Enzyme Asset Universe](#) - events related to the assets within the Enzyme asset universe
- [Enzyme Vault Lineage](#) - events related to the inter-version history of an Enzyme vault
- [Enzyme Vault Balances](#) - events related to the balances of a vault
- [Enzyme Vault Shares](#) - events related to the shares of a vault
- [Enzyme Token](#) - events related to Enzyme (MLN) token transfers & burn

## Polygon

- [Enzyme Core](#) - events related to the fundamental functionality of Enzyme vaults
- [Enzyme Asset Universe](#) - events related to the assets within the Enzyme asset universe
- [Enzyme Vault Lineage](#) - events related to the inter-version history of an Enzyme vault
- [Enzyme Vault Balances](#) - events related to the balances of a vault
- [Enzyme Vault Shares](#) - events related to the shares of a vault





# Fee Splitter

The Fee Splitter is a newly introduced Enzyme feature that allows you to split your fees among several wallets.

## Use cases

Shared asset management: you are sharing the effort of the management with another DeFi strategist and want to split fees with them.

Commercial partnerships: you have a person who is facilitating the onboarding of new depositors and you agree on a certain reward based on new AUM or future performance.

Distribution network: you have a network of allocators/distributors that are cooperating in the success of the DeFi strategy and you want to systemise the fee distribution.

## How to enable the Fee Splitter

The fee splitter is one of our enhanced features so if you are interested in using the Fee Splitter, please reach out our team via email to [support@avantgarde.finance](mailto:support@avantgarde.finance)

## How to create a Fee Splitter

1. After reaching out to the Avantgarde Finance team, you will be provided with a link where you can create your own Fee Splitter.
2. On the top right corner, click on "+ Create fee splitter".
3. Add all recipient wallets, specifying the % distribution for each wallet. Note that the total sum must always be 100%. You can split fees up to a maximum of **10 different wallets**.

The screenshot shows a modal window titled "Create fee splitter". It contains a table for "Percentage distribution" with six rows. Each row has an input field for an address and a percentage value. The values are 25%, 25%, 20%, 10%, 10%, and 10%. A "Total: 100%" is displayed at the bottom right of the table. There is a purple "+" button to add more recipients and "Create" and "Dismiss" buttons at the bottom.

4. Once you execute the transaction, the splitter will provide you with a contract address.

The screenshot shows the "Fee Splitters" section. It has a "+ Create fee splitter" button. Below is a table with the following data:

Created	Address	Recipient address	Allocation
31 Aug 2022 09:57	0xf99e444e88833e815dcff49d8482e961eb58e8f	0x98882e2e8a8ac7c57df59582f38c76da7d69a4	50%
		0x983638a3392e09d19f9a47e7b7f59a1f2d8d7f42c	50%

## How to connect the Fee Splitter to your vault

**For existing vaults:** to enable the fee splitter you will need to go to Settings > Fees and Fee Splitter. Copy the new address and paste it as the sole recipient of the management, performance, entrance or exit fees. Upon distribution/claim of the fees, the contract will automatically pay out using the underlying pro-rata split.

The screenshot shows the "Reconfigure Your Vault" dialog for a vault named "Peep2". It includes a "Reconfigure Vault" button and a section titled "Why Reconfigure?" with explanatory text. Below that is a "How to reconfigure?" section with instructions.

**For new vaults,** it is easier. We recommend creating the fee splitter contracts first, and then proceeding with the vault creation. As you define vault fees, you'll need to set the contract address as the only recipient address.

## Reconfigure Your Vault

The screenshot shows the "Fees" configuration page. It has a sidebar with "Fees" selected. The main content area has four fee settings, each with a toggle and a "Charge Management Fee" button:

- Charge Management Fee:** 1% rate, recipient address 0xc2f497c2a687186d21147f92a88e458827862.
- Charge Performance Fee:** 10% rate, recipient address input field.
- Charge Entrance Fee:** (toggle off)
- Charge Exit Fee:** (toggle off)

In case you manage several vaults with identical configurations, bear in mind that the splitter contract can be reused for more than one vault.

## How to claim fees

The screenshot shows the "Fees" section with the following table:

FEE TYPE	SETTINGS	RECIPIENT
Management Fee	Rate: 1.00%	0xf99e...
Performance Fee	Rate: 5.00%, High watermark: 1 DAI	0xf99e...
Protocol Fee	Rate: 0.25%	Protocol Fee contract

## Fee Splitters

One or more of the fees for this vault are assigned to a fee splitter - a contract that distributes the fee across multiple wallets - of which you are a part. You can claim your allocation on the following table.

The screenshot shows a table with the following data:

SPLITTER ADDRESS	YOUR PERCENTAGE	UNCLAIMED FEES	ACTIONS
0xf99e444e88833e815dcff49d8482e961eb58e8f	50%	0.00000008 shares	Claim

Any beneficiary of the fee recipient needs to go to the fee section of the vault, and click on claim fees.

**!** You need to be logged in with the address of the fee recipient.

## How to update the Fee Splitter

The fee splitter contract **cannot be updated**, so if you want to change the percentages or add/remove addresses you will need to create a new contract and replace it in your vault settings.

Are you ready to start using the Fee Splitter? Send us your request at [support@avantgarde.finance](mailto:support@avantgarde.finance).

# Fiat On-Ramp



The Enzyme Onramper feature allows Enzyme users to buy crypto natively in-app, with support for more than 180 countries and over 95 fiat currencies.

## How does it work?

[Onramper](#) has built intelligent order-routing engines to increase the success-rates of transactions by recommending the best route that is most likely to result in a successful transaction.

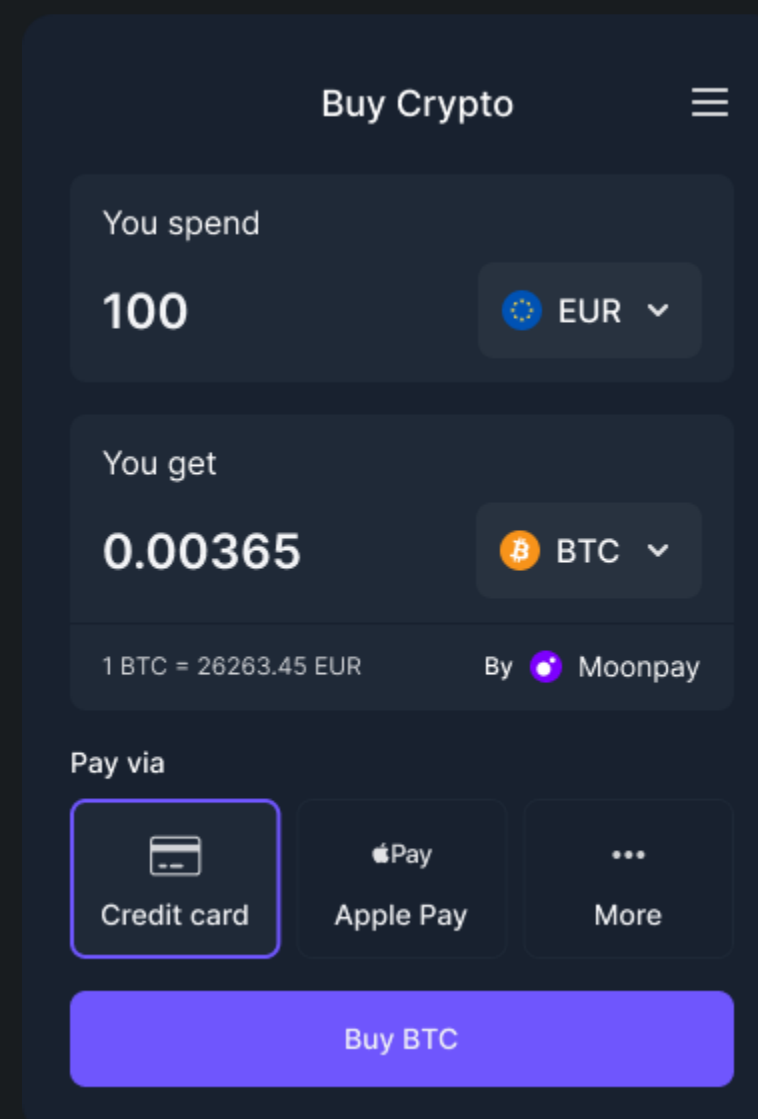
Onramper supports the following on-ramp providers:

- MoonPay
- Wyre
- Xanpool
- Mercuryo
- Indacoin
- Coinify
- UTOrg
- Transak
- Itez

The best conversation rate will be automatically selected, however, you can opt for any alternate provider.

## How to buy crypto on Enzyme?

1. Click your wallet in the top menu.
2. From the "Manage Connected Wallet" menu, select "Buy crypto".
3. Insert the amount you want to buy (eg. \$100).
4. Select the token you'd like to buy (eg. ETH).
5. Select your preferred payment method (Credit Card, Apple Pay or Google Pay).
6. The "Best Rate" will be automatically selected for you.
7. Click "Buy".



After your purchase is complete, your new funds will be available in your wallet (eg. MetaMask). You will then need to deposit your funds in a vault, or simply hold them in your wallet.

# Whitelabel App

Enhanced feature by Avantgarde Finance

Avantgarde's new whitelabel functionality has been one of the most frequently requested features from our users. We're thrilled to be able to bring this to you. The whitelabel App provides vault owners with the following features:

## Custom vault URL

Vault owners are now able to add a custom URL to drive traffic to their own unique link.

## Logo and branding

Vault owners are able to add custom logo, colour palette and branding.

## Control the investor journey

Vault managers can control and curate the customer journey they want.

## How does it work?

Good question! We have created a step-by-step demo video that guides you through the entire process which you can watch below.

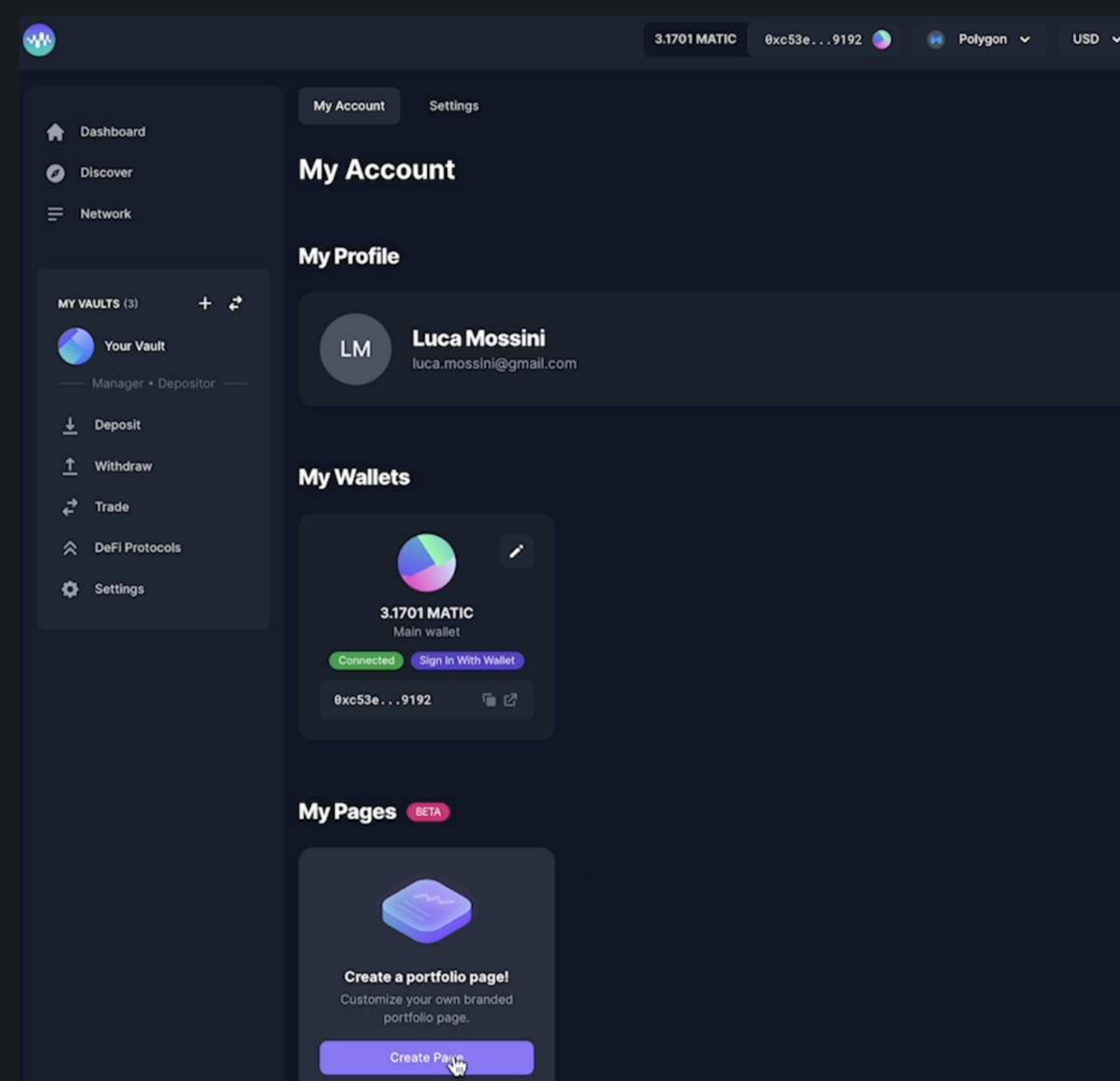


There are two prerequisites required to create the whitelabel page.

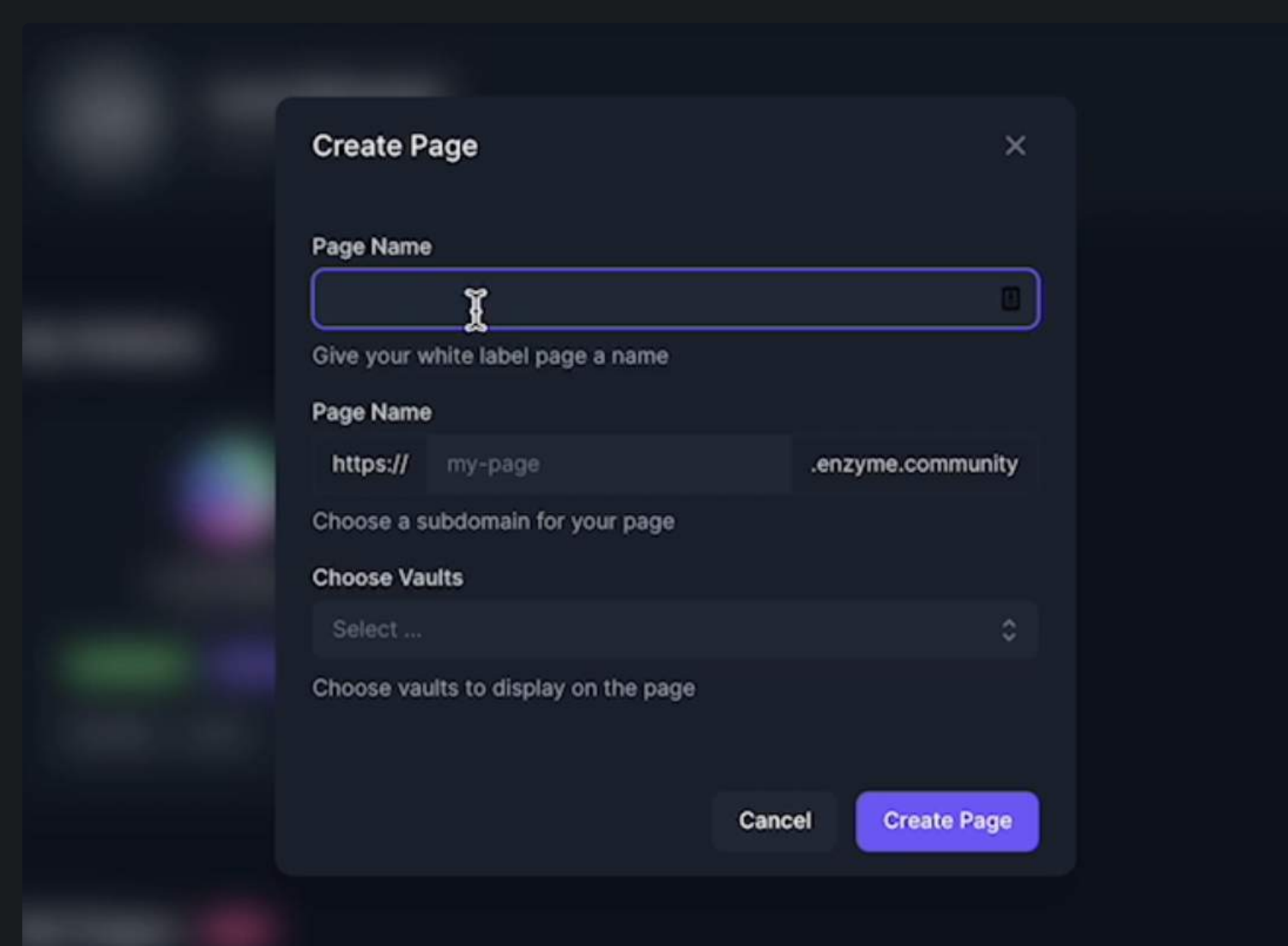
1. You need to have a vault. If you haven't yet created a vault, you can follow the steps to create one in this video [here](#) ('create a vault' starts at 6:05).
2. You need to have an Enzyme account. If you haven't yet created an account on Enzyme you can sign up for an account [here](#).

Once you meet this criteria, you can proceed to create your personalised whitelabel page.

First, you need to go to 'My Account', scroll down the page and select the 'My Pages' box.

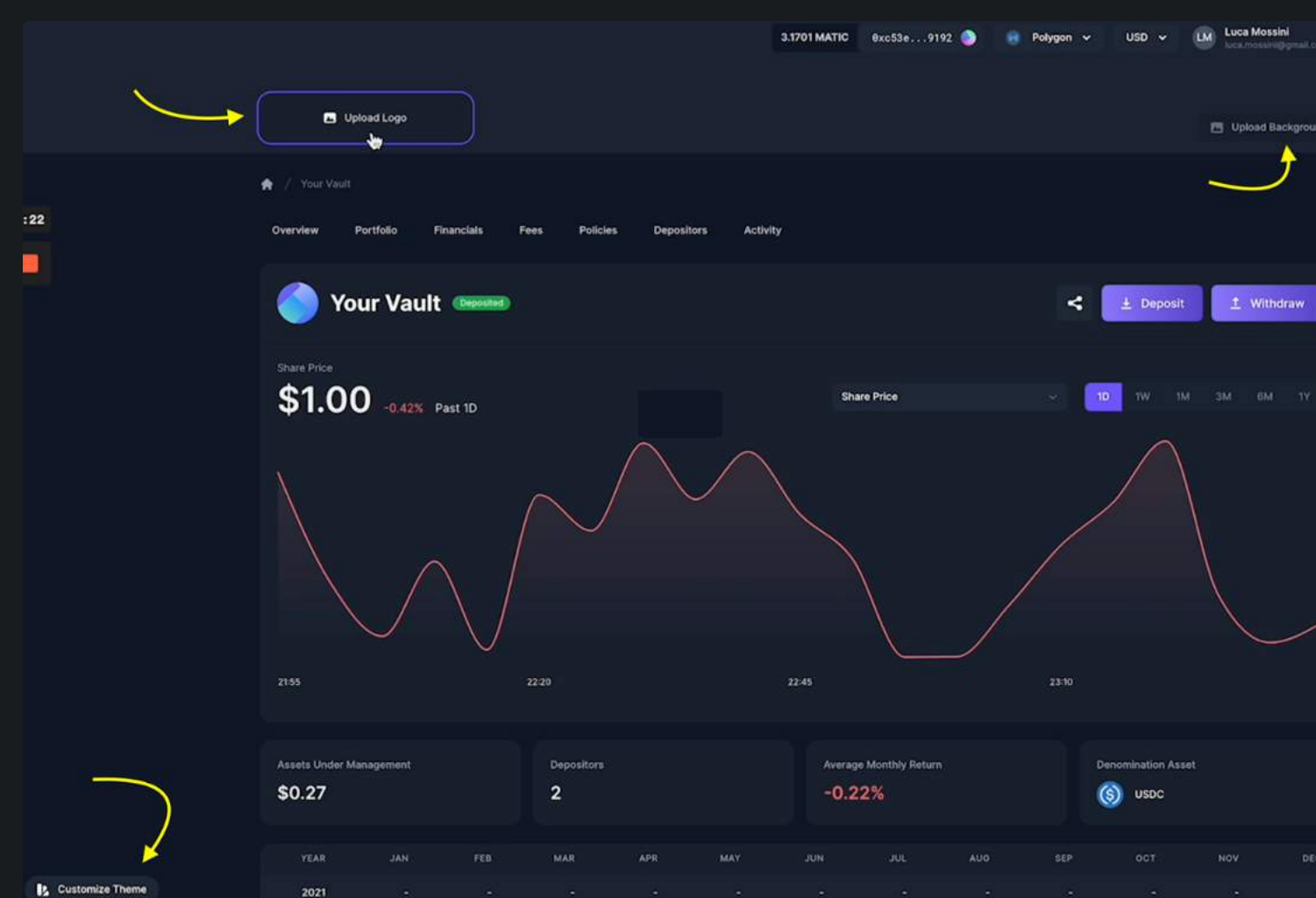


You will see a button labelled, 'Create Page'. Click on this and it will enable you to name the page, insert a custom subdomain and choose the vault you want this page to be allocated to. If you have more than one vault, all of these vaults will be visible in the 'Choose Vaults' dropdown menu, so be sure to select the correct vault that you would like to whitelabel.



Once you have populated the form with the page name, subdomain and chosen vault, select 'Create Page'. This will take you back to your account page where you are now able to edit your chosen vault via the 'My Pages' box.

Simply click on the "Customise" button and you will be redirected to your custom vault page.



Here you have the ability to change your logo, update your background and customise the theme and colour palette of the vault display page itself. This opens up a range of new possibilities for vault managers that want to create a clear point of difference and better attract and nurture potential investors.

If you need further support or would like to suggest improvements, please feel contact us at [support@avantgarde.finance](mailto:support@avantgarde.finance).

We hope you enjoy this new premium feature!

# Governance Overview



The Enzyme governance model is a user-centric model. It ensures users have permission-less access to a secure asset management protocol, and are protected from malevolent actors in the network. At the same time, users have the option to benefit from continuous innovation and improvements on top of the protocol, safeguarded by the thorough checks and analysis of the Enzyme Council, bound by fiduciary duties. The Enzyme Council, detailed in the next section, is responsible for taking decisions preserving the interest of the network's users.

The user always remains in full control, and are the sole decision maker with regards to the software they are running.

Neither the Enzyme Council nor the token holders can impact the smart contract code used by a fund manager. The fund manager must take a voluntary action in order to upgrade to new versions of the code, and the fund's investors are free to instantly redeem their shares if they are not happy with the version of the code being used. The fund manager is never forced to use a new version of the code they may or may not feel comfortable with. Users take full responsibility to upgrade from code that may contain security vulnerabilities.

As a result, the convergence of users towards a specific version of the Enzyme protocol shall give a strong indication to the Enzyme Council of their alignment with the users' sentiments and needs. Although the Enzyme Technical Council (ETC) owns and controls the ENS subdomains pointing to the latest contracts, the users are the ones truly deciding which version to base their business upon, which constitutes a strong signal to the community. This is further enabled by the unstoppable character of smart contracts (once deployed, the Enzyme contracts can not be taken back by the deployer).

However, users will be highly encouraged to always use the latest versions of the Enzyme protocol, as security vulnerabilities can be discovered and will be fixed in protocol upgrades. Users are also encouraged to conduct their own analysis, audit and review of the contracts they intend to use. The ultimate choice and responsibility relies solely on the user.



# The Enzyme Council

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The Enzyme Protocol was originally developed by a Swiss company called Melonport AG. Upon the February 2019 main net launch of the protocol, Melonport wound down operations and the protocol's governance was passed to the Enzyme Council. The Council is composed of the Enzyme Technical Council (ETC) and representatives from Enzyme User Representatives (EUR), both of which are described in subsequent sections.

## Fiduciary Duties and Conflicts of Interest

The Enzyme Council is bound by fiduciary duties, guiding principles and Enzyme Council Statutes. This means the Enzyme Council members will be obligated to act in the best interest of the Enzyme protocol. Any member violating their fiduciary duties will expose themselves to the revocation of their seat.

If an Enzyme Council member has a conflict of interest on a specific question, they should inform the rest of the members immediately and abstain from voting on the matter in question.

## Organization

The Enzyme Council has a Chair and Vice Chair which rotate bi-annually. Their responsibilities include coordinating the meetings and agenda. The Enzyme Council also contains several sub-groups which take leadership roles on specific topics, such as: audits, features, ecosystem projects, network parameters, token economics, community calls, etc.

## Who sits on the Enzyme Council today?

Enzyme Technical Council:

- **Chain Security**
- **Exa:** Co-founder of Exponent
- **Janos Berghorn:** Investor @ KR1
- **Avantgarde Finance:** Mona El Isa, Founder & CEO @ Avantgarde Finance
- **Nick Munoz-McDonald:** Smart Contract Auditor & Researcher @ G0 Group
- **Paul Salisbury:** Founder @ Blockchain Labs
- **Theophile Villard:** Co-founder of Multis wallet, contributor to Enzyme codebase
- **Zahreddine Touag:** Founder @ Woorton

Enzyme User Representatives:

- **Christopher Chase:** Founder @ humanDAO
- **David J. Sutcliffe:** Founder & CIO @ Insight 3 Capital

## Incentive Structure

The people with the right skills for the ETC are scarce. Members are therefore incentivised with a portion of the protocol's yearly inflation. That portion is currently capped at 20%, and vests on a schedule of 2 years.

Initially this should just cover the ETC's costs, but by providing that reward as a percentage of the annual inflation (ie. a proportion of total market cap), we also introduce an incentive to grow Enzyme's market cap by adding value to the network.

## Applying to the EC

Applications to the ETC and EURs can be made by emailing [council@enzyme.finance](mailto:council@enzyme.finance).

# The Enzyme Technical Council (ETC) :

## Overview

The Enzyme Technical Council was formed to provide technical expertise and efficiency in the protocol's decision-making processes. This design tries to find an optimum number of decision makers to ensure quick decision making. Binding members by their identity and fiduciary responsibilities reduces the risk of any malevolent behaviours. The ETC is primarily designed to represent our most important stakeholders (our users) by providing technical expertise and speed in decision making.

## Composition

The ETC is made up of a diverse set of people and entities. The initial members were appointed by the Melonport AG team prior to the launch of the Melon Protocol in early 2019 (later renamed Enzyme). Subsequently, more additions to the council have been made and have to be approved by two-thirds vote of existing MC members.

The decision-making process around this vote will be open and transparent to the community, and the Enzyme Council will be responsible for providing context for their decisions. Applicants should meet the following criteria:

## Responsibilities

The ETC is expected to attend bi-monthly meetings and participate in all votes. They are primarily responsible for decision making on the following topics:

- **Protocol Upgrades:** Future improvements to the Enzyme protocol smart contracts including bug fixes, security patches, feature additions, and third-party integrations. Upgrades also include adding new assets to the Enzyme Asset Universe and authorising new exchanges. When a protocol upgrade is needed (feature addition, bug fixes or security vulnerability), the ETC can either implement the upgrade itself or mandate an external developer or entity to conduct the implementation. Once the implementation is finished, the new code must be audited by an independent party. If the audit passes and the majority of the ETC agrees, the new contracts can be deployed.
- **Resource Allocation:** Inflation (described in the Tokenomics section) is the only financial resource available to the Enzyme community and a critical source for future growth and network effects. The yearly inflation of MLN is intended to be used to fund developments of the Enzyme protocol, as well as projects building within the Enzyme ecosystem. Prioritising and executing the allocation of these funds is of the utmost importance.
- **Network Parameters:** The asset management gas price per amgu needs to be set and adjusted according to network usage and market conditions. For more context on this issue, please refer to the Tokenomics.

It is expected that in order to vote smartly on these topics additional time is required to conduct thorough research and analysis.

# The Enzyme User Representatives (EUR)

## Overview

The Enzyme User Representatives are designed to collect, prioritise and deliver user feedback to the Enzyme Council on behalf of users.

The aim is for the ETC and EURs to maintain a close relationship and preserve a healthy feedback loop. The ETC is required to address concerns raised by the EURs, and both sub-committees should work together at defining and prioritising the pressing needs of the users of the Enzyme network.

Users are able to elect delegates to represent their interests on the Enzyme Council. Qualifying EURs managing a product with a minimum threshold of assets equivalent to 0.25% of AUM in ETH terms.

## Composition

The ratio of ETC : EURs is currently 5 : 2.

The EURs help balance power by checking the decisions made by the ETC and can inform users about any suspicious activity. It is possible for EURs to vote on the exclusion of a Melon Council member violating the MC statutes (through a two-third majority vote).

The EURs are currently coordinated using an invite-only Telegram group tied to the creation of a Melon fund. This is currently the forum we use to nominate and vote on EUR's.

## Responsibilities

The EUR's are expected to meet bi-monthly too; once with the ETC and once independently of the ETC. Their responsibilities include the following:

- **Community calls:** Organising and curating community calls.
- **User feedback:** Collating and gathering feedback from users in the ecosystem to integrate into the Council strategy & roadmap.
- **Growth:** Helping grow the user base and protect their best interest.
- **Monitoring:** Oversee and check that user's best interests are being correctly represented and prioritised by the ETC.

**IMPORTANT:** Pls note that the next round of EUR nominations will be taking place soon. If you'd like to nominate yourself or take part in the voting, read this [blog post](#) to find out more and [stay tuned](#) for more updates.

# TOKENOMICS

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This is a description of how the utility token for Enzyme (MLN) works within the system.

## **MLN as a utility token**

MLN is a utility token which gives you access to the protocol. Users pay fees in MLN to access the platform. The number of MLN you need to access the network is equivalent to 25 basis points of the AUM linked to your usage of the protocol. Once collected, these tokens are automatically burned.

If users fail to pay fees in MLN, they will get penalised for this because the protocol will dilute their vault shares by 50bps.

The MLN collected by the protocol is highly unlikely to offer any value to the MLN token in the short term given that inflation is likely to exceed the amount burnt for many years to come (see next section).

## **MLN to fund protocol development & growth**

Each year, up to 300,600 new MLN tokens can be minted by the minter contract. This MLN is to be used for current and future protocol development and growth. The Enzyme Council DAO can review grant applications and allocate those funds to projects, developers, maintainers and auditors who they believe can add value to the Enzyme ecosystem. Any MLN tokens not spent at the end of each year, are typically burnt.

## **Future planned MLN Utility**

It has been planned for a while to evolve and add more utility to the MLN token. The details of this will be confirmed in the future and may involve things like locking up and staking an amount of MLN to make a governance proposal.