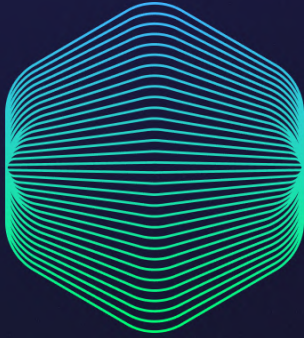


DeHive

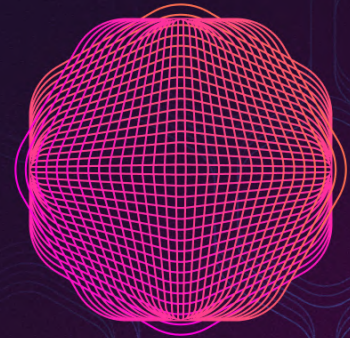
Whitepaper v.1.3 | August 2021

Intro



DeHive provides a first-to-market decentralized crypto cluster protocol. The platform allows anyone to become a holder of the top DeFi tokens packed into one Cluster. This Cluster comprises leading DeFi assets that serve as a benchmark for the economic health of the crypto market.

The DeHive protocol uses an in-built system of oracles to ensure the acquisition of the selected tokens at the best market price. As a result, the Cluster is backed by a set of crypto assets in an optimal the selected proportion for passive income generation optimal exposure



The DeHive platform provides an effective strategy for users to stakehold the Cluster token which represents constituents of the specific index, and yet at the same time benefit from participating in yield farming opportunities offered by third party protocols.

Let the DeHive protocol bring you the honey of yield farming and passive income!

Decentralized portfolio problems and solutions

“

Holding a crypto portfolio is a process that contains difficulties from a technical standpoint, involves risks due to the volatility of different crypto assets, and requires continuous attention to market changes. Thus, successful portfolio holding can be arduous and mandates frequent monitoring and adjustment.

Problems

There are several problems associated with maintaining a crypto portfolio:

- **CONTROL OVER FUNDS:**

The portfolio owner should have full control over their holdings. This requirement cuts off almost all centralized solutions because these do not guarantee the user full control over their funds, as there is always a choke point where the user delegates part of the control to the platform;

- **RISK OF LOSSES:**

Probably the most pressing problem of all. High volatility of underlying assets in the portfolio, high slippage during operation, impermanent loss within token pools, and several other factors can lead to losses within your portfolio. Thus a crucial requirement of the DeHive protocol will be to minimize the risk of losses for the user and protect funds;

- **HIGH RISK OPERATIONS:**

High risks connected with operations in the crypto industry in general and DeFi in particular require the most secure and effective strategies for portfolio holding;

- **SECURITY:**

2020 was filled with examples of broken protocols that were based on concepts involving AMMs, vaults, pools and other modern DeFi features. A primary goal of the DeHive protocol will be to develop a secure system for portfolio holding;

- **SIMPLICITY:**

Blockchain technology itself requires high technical knowledge, particularly when interacting with DeFi protocols, while CeFi solutions do not make user interaction much simpler. Thus, portfolio holding should require minimum operations from the user's side;

- **FUND FLOW RESTRICTIONS:**

One of the main characteristics of the crypto market is its volatility. The value of assets may change within hours and even minutes. That is why it is important for the user to be free to access their portfolio at any time for deposits and redemptions. There should be no restrictions on the portfolio owner's ability to exit their position or to enter.

DeHive's solution

The DeHive platform offers solutions for each of the problems highlighted above:

- **CONTROL OVER FUNDS:**

Since we have discarded all centralized solutions, we are developing DeHive as a completely decentralized platform. All core logic elements are based on smart contracts, so there is no KYC, no ownership over transferring funds, no control sharing and other features synonymous with centralized protocols. The user is in full control of their funds and has oversight of its own assets deployed based on their target allocation.

- **RISK OF LOSSES:**

First of all the platform has no AMM-like elements, swaps, arbitrage or other components that could affect the price of the assets, create impermanent loss or result in price manipulation. From this point of view, all funds are protected. Also, losses from the volatility of assets is minimized because of the approach taken in choosing the assets and their weights in the portfolio. The platform is based on a strong economical and mathematical approach in order to minimize risks to the holder.

- **HIGH RISK OPERATIONS:**

The portfolio is built upon proven econometric theory, with the underlying assets in the portfolio chosen in order to minimize the risk. In general, all holding strategies and DeFi strategies (for subsequent steps in platform development) are created by experienced in-house DeFi analytics and specialists. Their choices are based on 4+ years of experience in the field of blockchain, crypto-assets and DeFi.

Cluster and econometric value

In order to follow all requirements mentioned earlier and to solve the stated problems, DeHive has devised a platform for crypto-cluster creation.

It is important to reiterate that the "index" (in a form of DeHive Cluster) simply comprises an autonomous smart contract deployed on the relevant blockchain network, operated directly by users calling functions on it (which allows them to interact with other users and to allocate their own selected assets directly on the blockchain, and with no further management by, control by, or interaction with the original entity which had deployed the smart contract (which entity solely functions as a provider of technical tools for users, and is not offering any sort of securities product or regulated service]).

Cluster as crypto portfolio

DeHive is aiming to create a platform where the user can control a decentralized and diversified portfolio of crypto assets through a simple unified interface. The Cluster contains a set of assets chosen by analysts and crypto specialists in order to minimize the risk of dumps.

Secondly, the proportion of assets in a portfolio is chosen in an efficient way, so the risk of loss is minimal, as volatility of the assets is counteracted by one other. Finally, the price of the Cluster is pegged directly to the weighted sum of prices of the portfolio. So, the price of the Cluster is a correct representation of the portfolio value.

Also, since the Cluster is a transferable token, the user holds a tokenized crypto basket, so they can enter any market in order to trade with the Cluster. Essentially, the Cluster represents the tokenized value of your portfolio.

Cluster as a market metric

Portfolio holding is not the only function of the Cluster. Assets and their proportions are assembled in such a manner as to cover the core of the DeFi market. Thus, the DeHive Cluster acts like a decentralized and scaled analogue of an equity index.

Therefore, if the Dow Jones indexes work as a global measure and are considered as a comprehensive mirror of the global equity market, the DeHive Cluster works in the same way, but more “locally,” connected to the DeFi ecosystem.

In fact, the DeHive Cluster can be used as a statistical indicator of changes in the overall market value, because the Cluster itself represents an economical model which is based on strong mathematical and econometric equations. That is why a true decentralized Cluster is a missing piece of the current DeFi ecosystem.

DeHive's solution

- **SECURITY:**

As mentioned, the DeHive platform does not include such vulnerable features as AMMs, swaps or liquidity pools and cannot be arbitrated. This is the basis for a secure platform devised by experienced specialists in the sphere of smart-contract development. The development process is curated by a team of experienced in-house auditors to ensure the security of the platform.

- **SIMPLICITY:**

Purchasing multiple crypto-assets takes time and requires a number of transactions, each with a corresponding fee attached. Also, this process requires manual portfolio balancing in order to make it work. With the DeHive platform, we provide the user a balanced crypto-basket on their desired allocations, and the depositing process is wrapped into a single operation with all purchases performed by the protocol itself. The same applies to the portfolio liquidation process.

- **FUND FLOW RESTRICTIONS**

The user has full control of their funds, with no limitations in time or amount. The user can deposit or redeem at any time.

DeHive Clusters

So, what is so special about DeHive Cluster?

First of all, the protocol provides two types of Clusters: platform verified and custom ones.

There will be several platform verified Clusters which cover particular spheres of the DeFi space. These will contain sets of crypto-assets, carefully selected by our DeFi specialists in proportions based on strong mathematical and econometric equations. Each set of tokens is wrapped into a Cluster, and each Cluster represents a separate sector of the DeFi market.

DeHive Clusters can be seen as an extensive form of crypto index and can be characterised by several key features:

- The synergy of the protocols automatically keeps the portfolio stable.
- The rebalancing mechanism optimizes the number of assets in the user's portfolio to achieve the weighted balance. On the opposite of underlyings trading, the optimization mechanism aligns the proportion to keep the value of the Cluster stable.
- The Cluster lock mechanism enables profit accumulation strategies built upon yield farming protocols.
- Cross-chain opportunities allow users to assemble several Clusters in different ecosystems, covering all the promising DeFi segments.

As for the custom Clusters: the platform incentivizes the community to create their own Clusters.

Why is this valuable?

First of all, a Cluster creators can use their own set of tokens and model for proportions and balancing amounts. Secondly, such a Cluster can be added to the yield farming part of the protocol with the strategy developed by the creator. And the main incentive is that the Cluster creator will get a commission from the yield generated by that Cluster.

Of course, custom Cluster creation is closely connected to the DAO and the community. The DeHive team cares about the community and the health of the protocol, so custom Clusters will be voted as a proposal in the DAO contracts. All custom items will be approved not by the platform itself, but by the platform community.

The DeHive Cluster is built on a concept that is materially different from that of an AMM. So, there are no price rebalances, no bonding curves, no arbitrage opportunities. Thus, the price depends only on the price of the underlying assets. All the underlying assets are securely stored in the smart contracts bound to the user that purchased the Cluster. Moreover, all values are transparent, so the user is able to check that their funds are intact.

Expansion plans

The DeHive platform will launch on the Ethereum blockchain, since this already has a wide and stable DeFi ecosystem. We are not limited to only one chain however.

Cross-chain operations

The first chain to be integrated with the DeHive network is the Polygon chain since it is an extremely prospective framework for development, building and connecting Ethereum-compatible blockchain networks.

DeHive has major plans for expanding the platform to several chains. First on the way are Binance Smart Chain and Avalanche. These are young EVM compatible blockchains, both with growing DeFi ecosystems, whose integration is already in our roadmap.

The next major goal is joining the Polkadot ecosystem. DeHive also has plans in place for Substrate-based solutions in our roadmap planned for early 2022.

NFT Clusters

The NFT market is booming right now, and NFTs are entering the DeFi space. The DeHive team is working on several developments in this domain:

Clustering NFT protocols;

Using NFTs as a tool for Cluster representation;

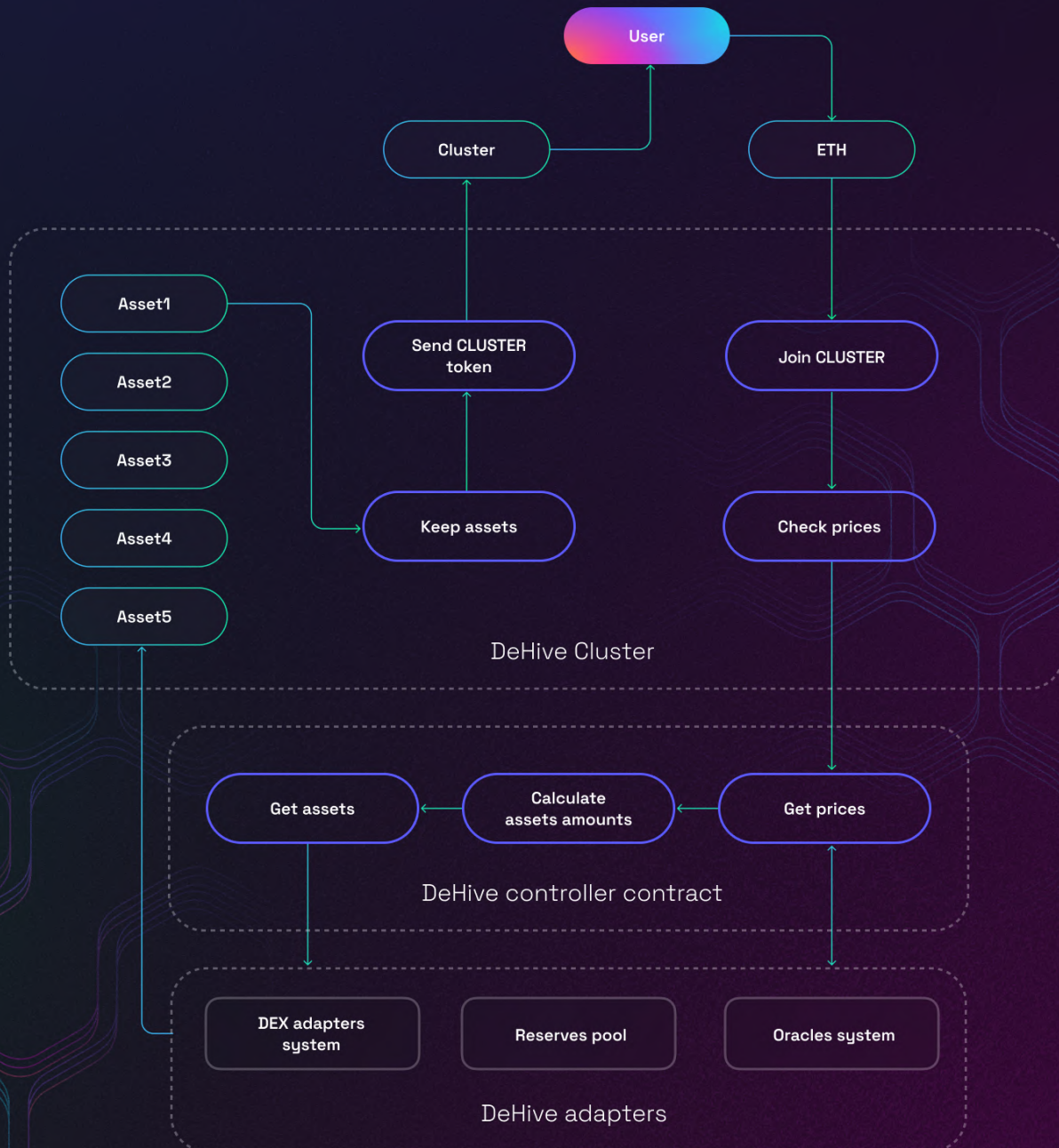
Providing utility value for NFTs within the protocol.

Once the core functionality is finished, the platform will be expanded for NFT Clusters.

Protocol mechanics

1. Cluster assemble

In order to acquire the DeHive Cluster, the user needs to make a contribution in ETH corresponding to the weight of the selected underlying assets that represent the Cluster.

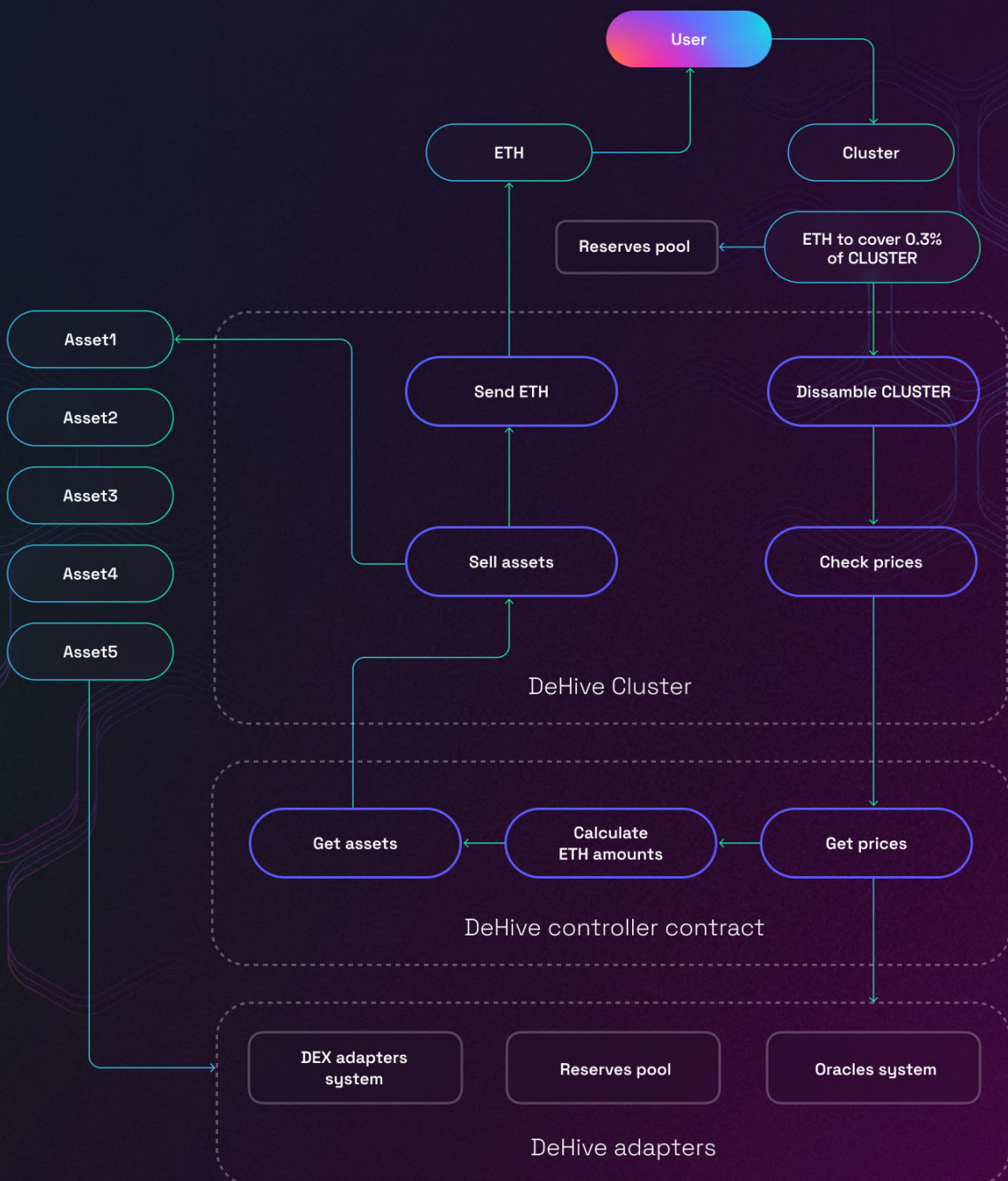


Simplicity was one of the goals when constructing the Cluster. The user performs a single operation, while the platform performs all purchases, Cluster value calculation, underlying storage, etc. All underlying assets which back the user's Cluster are securely stored and bound to the depositor and their values are transparently available.

2. Cluster disassemble

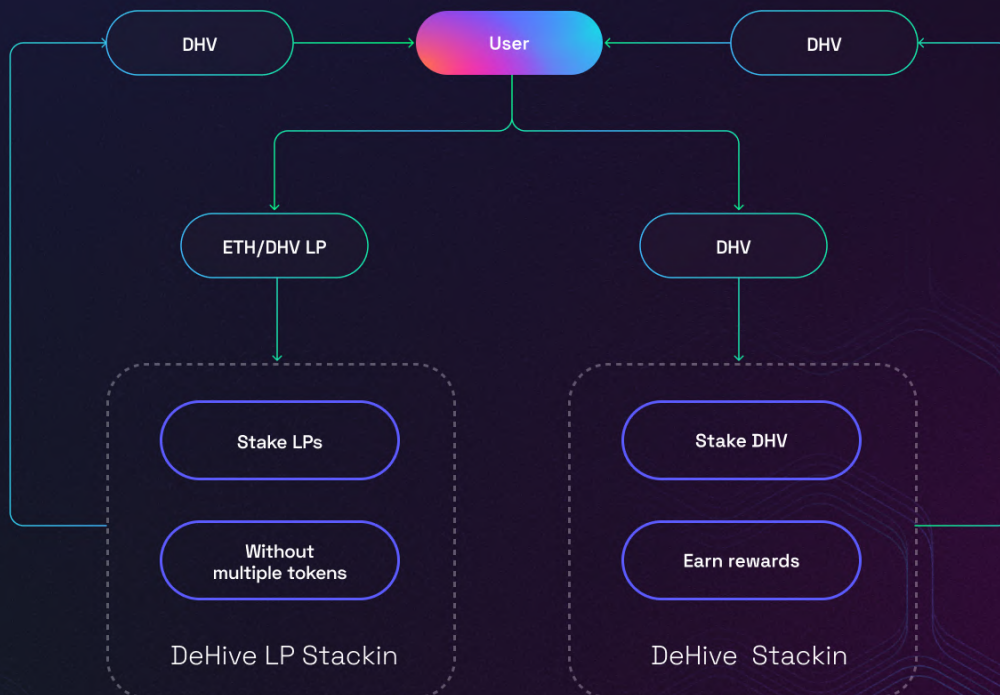
In order to exit, the user provides the Cluster or Cluster to the platform along with a certain amount of DHV tokens that will go to the protocol treasury and be used for subsequent rounds of liquidity mining, rewards distributions, etc., to encourage user's engagement with the protocol.

The user receives ETH in exchange for redeemed Clusters at the current market price, which is provided by a system of integrated oracles.



3. Liquidity mining

In order to incentivize the community and speed adoption, the platform provides liquidity mining for users which utilise platform services.



4. Yield farming

Another feature provided by the protocol is yield farming. This allows the user to boost their Cluster with additional protocol rewards from third parties. Every index is backed by the set of underlying assets. While the user holds the index, these underlying assets are securely stored on the contract but are not utilized.

As an optional functionality, users may allow the protocol to further re-allocate the underlying digital assets held in their chosen Clusters, and the protocol will apply these towards participation in yield farming protocols using the best strategies developed by an internal DeFi specialist.



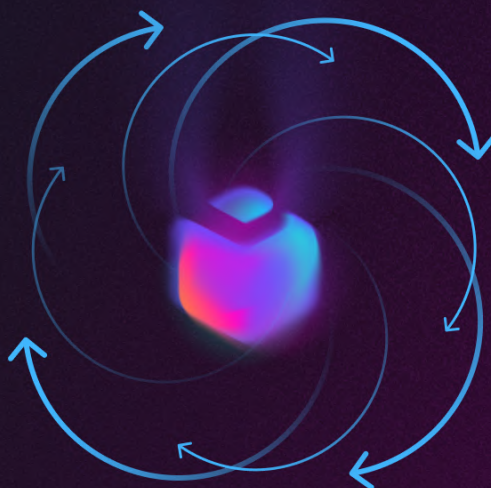
As a result, the user will be a portfolio holder who can watch the yield generated by the underlying assets held in their Cluster.

5. Custom Cluster creation

The protocol will have a widely developed DAO to support protocol decentralization. DHV would allow holders to create and vote on on-chain governance proposals to determine future features and/or parameters of the DeHive platform (the right to vote is restricted solely to voting on features of the DeHive platform; it does not entitle DHV holders to vote on the operation and management of the Company, its affiliates, or their assets or the disposition of such assets to token holders, or select the board of directors of these entities, or determine the development direction of these entities, does not constitute any equity interest in any of these entities or any collective investment scheme; the arrangement is not intended to be any form of joint venture or partnership).

One of the DAO's functions is to regulate the quality of custom Clusters that originate through the proposals system. Such Clusters differ from the default protocol ones. First of all, they contain a basket chosen by the community in a custom proportion. Secondly, the strategy for yield farming upon this Cluster (and other incentives) will also be proposed by the community.

DeHive provides the platform and infrastructure for specialists in the community to issue custom indexes that would potentially out-perform, and in return the Cluster creator will be incentivized with commissions from usage of this index, DHV token rewards, and yield generated by these Cluster products. This is a win-win solution for a dedicated community with its own economic models and ideas in the DeFi space.



Tokenomics

The native cryptographically-secured fungible protocol token of the DeHive platform (ticker symbol **DHV**) is a transferable representation of attributed governance and utility functions specified in the protocol/code of the DeHive platform, and which is designed to be used solely as an interoperable utility token thereon.

DHV provides the economic incentives which will be distributed to encourage users to contribute to and participate in the ecosystem on the DeHive platform, thereby creating a mutually beneficial system where every participant is fairly compensated for its efforts. DHV is an integral and indispensable part of the DeHive platform, because without DHV, there would be no incentive for users to expend resources to participate in activities or provide services for the benefit of the entire ecosystem on the DeHive platform. Given that additional DHV will be awarded to a user based only on its actual usage, activity and contribution on the DeHive platform and/or proportionate to the frequency and volume of transactions, users of the DeHive platform and/or holders of DHV which did not actively participate will not receive any DHV incentives.

DHV does not in any way represent any shareholding, participation, right, title, or interest in the Company, the Distributor, their respective affiliates, or any other company, enterprise or undertaking, nor will DHV entitle token holders to any promise of fees, dividends, revenue, profits or investment returns, and are not intended to constitute securities in Singapore or any relevant jurisdiction. DHV may only be utilised on the DeHive platform, and ownership of DHV carries no rights, express or implied, other than the right to use DHV as a means to enable usage of and interaction within the DeHive platform.

Token allocation

10m DHV tokens will be minted for the purposes of protocol maintenance. The following graph represents the distribution and circulating supply of DHV tokens.



Presale and public sale - 15%

Tokens available for early adopters. Will be available for sale from the DeHive sale smart contract and be subject to 10-month linear vesting. This portion will be minted during the TGE directly to the vesting contract.

Strategic round - 6%

This round concentrates on the DeHive strategic partners and advisors that can bring value to protocol growth & development through promoting and engaging into its ecosystem.

Seed round - 8%

The early sale phase for tokens, which helped fund initial development and preliminary activities to support the launch of the project. These tokens are locked until vesting starts and are also subject to 10-month vesting. This portion will be minted during the TGE directly to the vesting contract.

IDO/IEO - 1.5%

This allocation will be distributed through IDO and IEO platforms at the end of April (2021). There is no vesting rule for tokens acquired during this period.

Team and development - 19.5%

Tokens granted to the team are locked for 12 months, and then released linearly over 1 year.

Liquidity mining - 15%

In order to promote user adoption, the liquidity mining program provides DHV rewards for users which utilise the services of the protocol to create Clusters to hold as part of their portfolio (i.e. Cluster stakers.). This pool contains tokens for Ethereum liquidity mining programs, (e.g. DHV rewards for users creating Ethereum-based Clusters), and planned mining reserves for other chains (e.g. rewards for users creating Clusters on other chains). The Ethereum part of the pool will be minted directly to the reserve account after the platform's stable launch and before staking functionality has started. Tokens for other chains will be minted according to the integrations performed.

Community incentivization and partnership - 15%

This tranche of tokens is for incentivization programs, bug bounty, airdrops, partnerships and other activities and are not minted until the platform's stable release launch.

Company reserve - 20%

This portion of tokens is for cross-chain operations and operating in integrated chains will not be minted until six months after the stable platform release.

Vesting

Type

Linear vesting

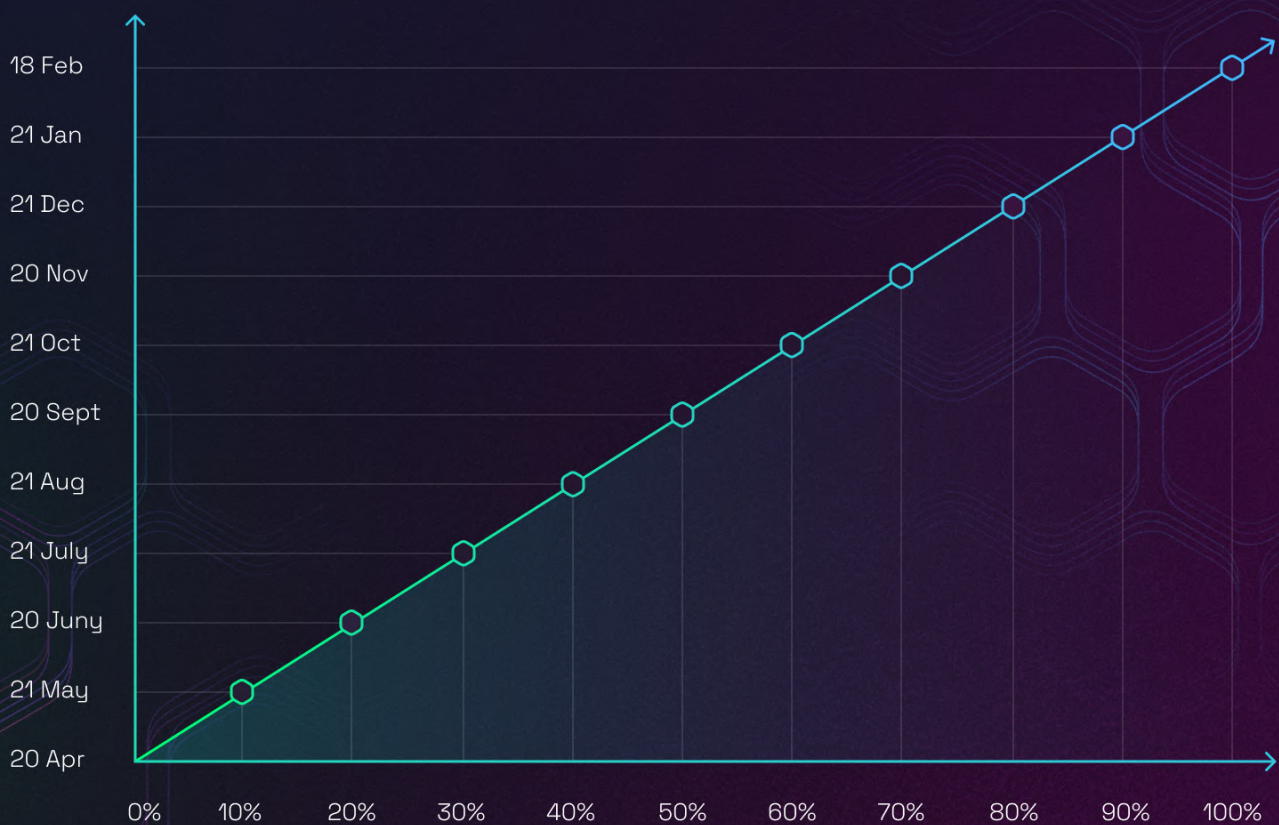
Period

10 months (applicable for all, seed, presale, and public sale rounds)

Start

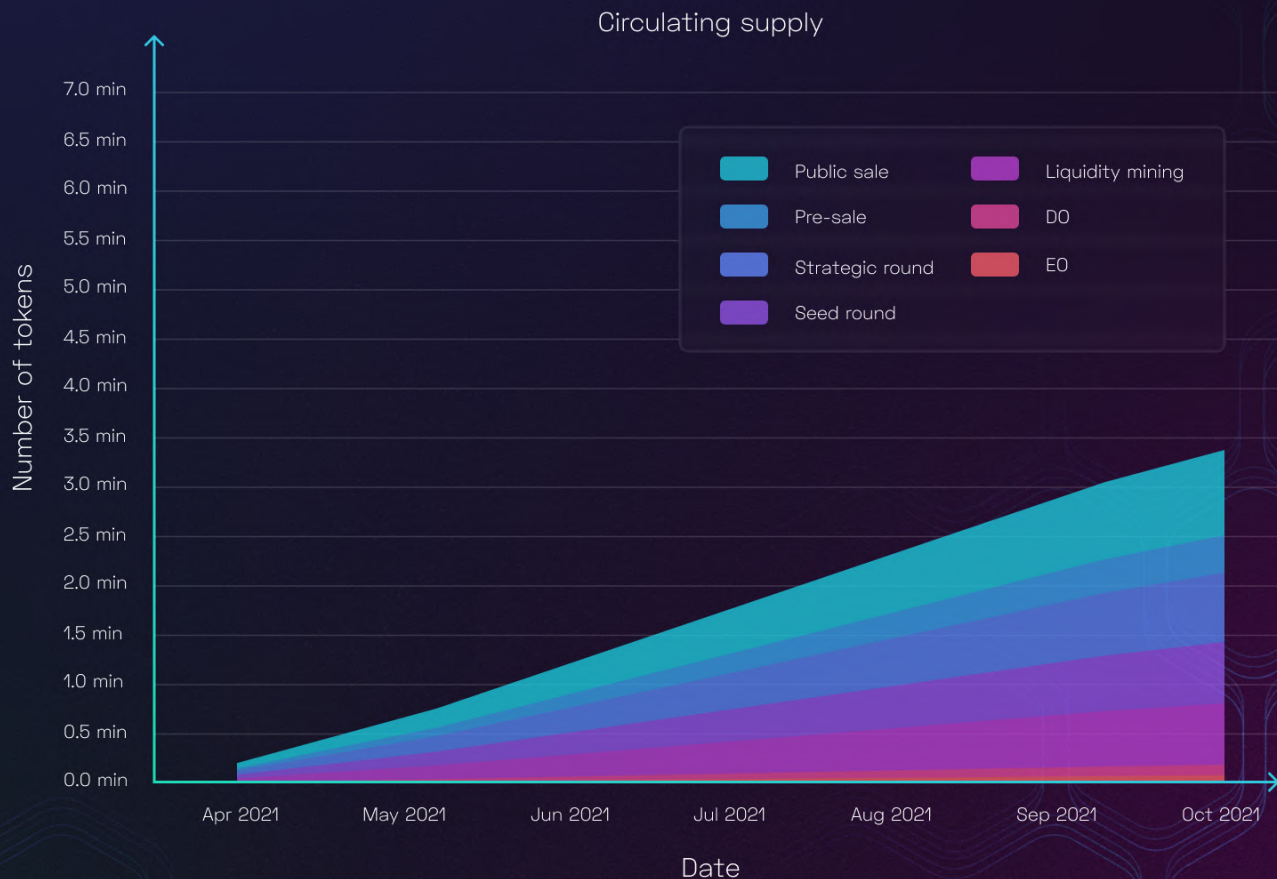
End of April, following the IDO event (the exact date TBA)

Since vesting is linear, a certain amount of tokens will be unlocked every day gradually (to be more precise - every block). 10% of the acquired amount will be unlocked at the end of each month accordingly.



At the end of each day, the user will be able to withdraw $\frac{1}{305}$ of the deposited amount. All tokens acquired during seed, presale, and/or public sale rounds will be available to claim until the end of the vesting period.

Initial circulating supply and vesting schedule

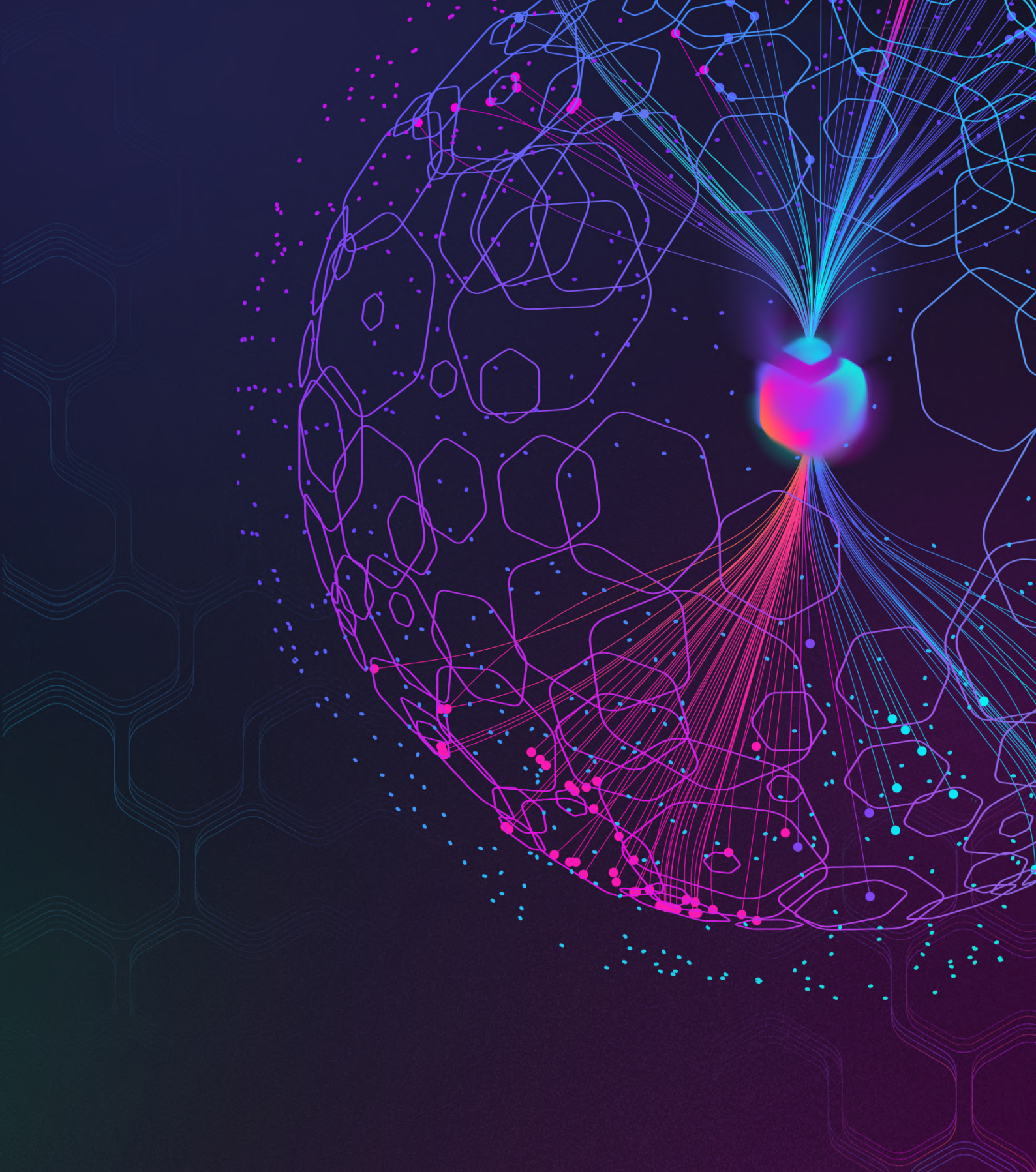


Community appeal

The community is the core of the DeHive ecosystem and the whole team is thankful to the community for showing interest so far. We hope to share the same values in terms of bringing convenience, accessibility, efficiency, safety and security to the current DeFi sector.


Furthermore, we want to share our gratitude to all early contributors and adopters who have shown confidence in our project.


We hope that our joint efforts will help us achieve our goals and pioneer a new vertical within the crypto market - a fully decentralized crypto Cluster - in the best way.



2021

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