# **ContinuumDAO White Paper**

16th April 2025

# **Welcome to Continuum**

Chainless Solutions for Real World Assets

# **About ContinuumDAO**

ContinuumDAO is a community that is collectively building a future in which all blockchains are linked, to enable the tokenization of everything. We realise that the entirety of finance will transition to web3 in the next few years and that the biggest opportunity for blockchain is to provide DeFi like services for actual businesses, whether that is to raise capital, or allow investment in assets or services that it would be impossible to do so using traditional tools. A future open to everyone, not just in the financial centers of the world.

As the backbone of ContinuumDAO, we have the first public institutional grade Multi-Party-Computation (MPC) node network. This, together with our system of on-chain and cross-chain governance and our commitment to open source code and permissionlessness, forms a strong and durable framework that will encourage the tokenization of Real World Assets (RWAs) on an open protocol that everyone can help run, and anyone can contribute towards and is owned by the community. An unstoppable system, just like the internet on which it runs.

# **About AssetX**

AssetX is ContinuumDAO's RWA tokenization Factory. We have created a system that will allow businesses, big or small, whether established or not, anywhere in the world, even in countries without established stock exchanges, to raise finance for their enterprises, or release capital from illiquid assets.

It is a self-directed fast and cheap RWA issuance service. This factory is an on-chain system that allows Issuers to create RWAs without any coding. They are free to select one or more blockchains to deploy their RWA. The RWA can have multiple Asset Classes and fractional ownership to create sophisticated securities or commodities. The resulting RWA can be freely traded on and between all of the supported blockchains. The assets are also linked to a decentralized storage layer to fully

describe every aspect of them and they optionally allow the Issuer to restrict ownership to certain wallets, or enforce KYC/KYB using zkProofs. AssetX is designed to allow compliant generation of regulated securities, without compromising on the power and revolutionary aspects of DeFi.

In today's world, capital formation for enterprises is broken. It is expensive, time consuming and only open to very large organisations. It is controlled by commercial banks and management consultancies. AssetX is the solution, akin to a web3 trustless 'crowd sourcing' service. It is the first permissionless RWA tokenization platform, meaning that you can simply connect your wallet and generate a multichain RWA. It is the alternative for businesses to raise capital by creating tokenized equity, or Asset Backed Securities, or complex CDOs in a compliant way on web3. The businesses can then distribute or sell their RWA assets, working with collateralized lending platforms and DeFi marketplaces and drawing on liquidity from multiple blockchains.

We see a world where entrepreneurs can take back control of their fund raising, whilst satisfying the diverse requirements of regulators around the world. Our service is live on testnet now and you are free to try it <a href="https://factory.assetx.org">https://factory.assetx.org</a> with full documentation <a href="here">here</a>

# **About Tokenization**

# **Background of Tokenization**

#### The Rise of RWA in Web3

RWA have quickly risen to prominence as a transformative narrative within the Web3 industry.

The promise of RWA is to bridge the gap between TradFi and DeFi. It offers the potential to revolutionize trading and democratise ownership by tokenizing tangible assets such as equity, private capital, funds, stocks, bonds, real estate, minerals, collectables, commodities, etc. The concept not only streamlines access to traditionally illiquid markets, but also enhances transparency, efficiency, global access and security in asset management. As the integration between RWA and blockchain technology proceeds, it holds the potential to reshape global economic structures, unlocking new avenues for growth, investment, and cross-border financial collaboration. This convergence marks an innovative moment in the evolution of DeFi, signaling a future where traditional and digital economies seamlessly intersect. Many leading financial figures now openly state this, e.g. Larry Fink of Blackrock, in his 2025 Chairman's Letter to Investors, tied tokenization to broader trends like the growth of private markets and infrastructure investment, projecting a massive opportunity—potentially a \$68 trillion market by 2040 for infrastructure alone, which could be partly fueled by tokenized assets.

Most financial people would acknowledge that DeFi rails for RWAs are ideal for the reasons stated above, but it seems that in the enthusiasm to tokenize, some very important principles that underpin web3 have been neglected.

# Problems with RWAs today

Despite the promise of RWA, there are some notable pain points that need to be addressed.

#### Limitation of ERC20

Almost all 'RWAs' today are comprised of either stable coins, or tokenized Treasuries or other bonds and some commodities, which are indeed solid use cases, but not comprehensive. These can realistically be represented by simple tokens such as ERC20 on EVMs, but this standard was never meant to cover sophisticated securities, that need to comply with the diverse regulations that makes up the security laws in many jurisdictions. Neither does the ERC20 standard allow for different asset sub-classes, or the kind of on-chain data that is necessary to both fully describe an asset AND permit decentralization. The ERC20 standard will not usually be satisfactory for trustless interactions and permissionless issuance of RWAs, unless somehow linked to on-chain data connected to the RWA. Tokenization as we can see today does open up the gateway to DeFi, but it is NOT a permissionless process. Instead the existing tokenization platforms are completely centralized. You must register with them and they will issue a token representing your asset.

#### Blockchain Silo

Existing RWAs that are built with a more complex Semi Fungible Token (SFT) that are more suited to say fractionalized ownership are almost always confined to a single blockchain, with isolated 'whitelists' and with limited interoperability between chains. There is now a prevalence of special purpose RWA blockchains, which usually have rigorous KYC/KYB and AML procedures. These may well attract a lot of capital from TradFi, but the more mature general purpose blockchains, which have a lot of existing liquidity may find it difficult to comply with security laws. There are several SFT standards, such as ERC7518, ERC6960 and ERC3643 that have been adopted recently, but they will never be natively interoperable. Also a truly interoperable RWA will not only interact with other EVMs, but should also do so with some of the newer fast growing and popular parallelized chains such as Stellar, XRPL, Solana, SUI SEI, Aptos and NEAR.

#### 'De-tokenizing'

There will never truly be trust in tokenization of assets until the topic of 'de-tokenization' is addressed. This has been sorely neglected, outside of the redemption of FIAT from stable coins. Put simply, an RWA needs to have data linked to it describing how to swap tokens for the underlying asset and this needs to be reviewed and certified by lawyers.

#### Risks Associated with Centralized Data Ownership

Finally there is a lot of data associated with an RWA. Examples are prospectuses for equity type capital formation, which can be hundreds of pages in length, due diligence reports, legal and financial statements, and on-going annual reports, dividend statements, notices to holders etc. One approach that some web3 organisations have taken, is to state that this information is available on some website (usually their own), but this would not conform to the decentralized ethos of DeFi. What happens to the RWA if the platform holding the data goes out of business?Even if this information is stored on decentralized storage, such as IPFS, how can such data be linked to the primary asset in a trustless way? There are no RWAs that have adequately addressed this.

In designing a permissionless way of issuing an RWA, it was necessary to start with a fresh sheet of paper and re-imagine what is required. This is the approach that we have taken.

# Why tokenization is the trend that is going to happen soon

RWA has been considered as stable and trustworthy assets and valuable commodities, ranging from real estate to precious metals and even business equities. However, traditional methods of managing, trading, or investing in these assets are often costly, illiquid, and inaccessible due to geographical, financial, and regulatory constraints.

Tokenization is the process of converting actual assets as commonly understood in finance, into onchain tokens with blockchain technology. These tokens represent a claim on the underlying asset, making it easier to manage and trade in a decentralized manner. This innovation brings several notable advantages:

- Increased Liquidity: Tokenization enables the creation of liquid markets for traditionally illiquid assets, such as real estate, oil, minerals. These assets, which have historically been difficult to store, manage, and trade, will now be easily transferred on blockchain platforms with the right solution. This facilitates low-cost and more efficient transactions, 24/7, whilst expanding access to broader secondary markets.
- Transparency and Security: Blockchain technology provides a decentralized and transparent trading environment, ensuring security in asset ownership, reducing risks associated with fraud or mismanagement.
- Attracting a Diverse Range of Investors: Traditional investments often require significant
  capital or are confined to institutional access, limiting participation to a select few. Through
  tokenization, assets can be fractionalized, lowering the entry barrier for individual investors.
  Additionally, tokenization appeals to a broader audience by offering flexibility, accessibility,
  and the opportunity to engage in global markets.
- Global Accessibility: Blockchain technology enables the tokenized asset to be accessible to
  a global market, enabling everyone to trade and invest without any geographical restrictions,
  or at least well defined and easy to implement geo-fencing.

# **Development of Tokenization**

The development of tokenization has revolutionized the way we perceive and interact with assets. At its core, tokenization transforms both tangible and intangible assets into blockchain-based cryptocurrency, enabling a secure, transparent, and decentralized system for ownership and trade.

Over time, tokenization has extended beyond cryptocurrencies to include diverse assets such as real estate, art, commodities, and intellectual property. By enabling fractional ownership, it makes high-

value assets accessible to broader audiences, democratizing investment opportunities and opening new pathways for financial inclusion.

Blockchain technological advancements have facilitated seamless asset tokenization. These innovations enhance liquidity, allowing tokenized assets to be traded efficiently on global digital exchanges. Moreover, blockchain interoperability, once developed for RWAs, will strength the ecosystem, ensuring scalability and usability.

Regulatory progress has played a crucial role in the mass adoption of tokenization. The legal frameworks and compliance protocols provide the trust and security necessary for institutional and retail participation. Tokenization's ability to reduce transaction costs, eliminate intermediaries, and enhance transparency is reshaping traditional finance, paving the way for a new DeFi future.

# **Our Core Value Proposition**

Continuum provides a multi-chain, end-to-end solution designed to simplify the entire tokenization journey, ensuring an intuitive and efficient experience for users. From pre-tokenization to post-tokenization, Continuum offers self-guided tools and functionalities needed to tokenize and manage RWAs effortlessly and connect DeFi protocols so users can easily access multiple secondary markets.

Continuum is building the first RWA tokenization platform, which is permissionless, multi-chain and intuitive. Embark on this journey with us!

#### The Process of Tokenization

The general tokenization process can be divided into the following steps:

### 1. Legal ownership of the assets

It is necessary to prove that the tokens legally represent the underlying assets and that they uniquely do so. The approach will vary depending on the region, but examples of custody could be a Trust, or a Special Purpose Vehicle, or in the case of equity, clear company records assigning shares to tokens. The Constitution or Articles of Association of the custodial entity should clearly state that tokens solely represent the underlying assets, conveying ownership of them by the token holders. This part needs to be undertaken with the assistance of a reputable law firm.

# 2. Token representation of the assets

The next step is to decide how exactly tokens will represent the underlying assets. Firstly, the assets can be broken down into separate 'Asset Classes'. Examples of the classes for e.g.

equity, could be common, or preferential shares. For loan products, the classes could be different dividend payouts depending on risk, duration, or investment size. For tickets to an event (a 'digital' asset already), the classes could be seating positions in an arena. For a commodity such as crude oil, the classes could be types of crude. For rental income, the classes could be different property sizes. The possibilities are endless.

It is also necessary to define to what degree the assets can be subdivided. A decision could be made that a property could only tokenized as a single unit, or be sub-divided into 10\*\*18 units.

#### 3. Which blockchains to use

The RWA tokens will be accounted for in the public ledgers of one or more blockchains. How to decide which ones?

It may be appropriate to only use one blockchain. This would reduce complexity and the risks of interoperability, but there are reasons to to consider the use of multiple chains.

- (a) Firstly concerning risks, the use of more than one chain would allow the possibility for the Issuer to transfer tokens and trading to another chain if one of the chains was experiencing problems.
- (b) Access to liquidity. Some institutions, or hedge funds may only operate on certain blockchains. The inclusion of multiple chains could significantly enhance the market for the RWA tokens.
- (c) Some institutions, that might be target buyers, may only be allowed to operate of certain public blockchains.
- (d) Marketplaces and lending platforms. It is worth exploring which platforms would consider the trading of the RWAs, or their use as collateral for lending. If they operate of only limited chains, then this would be an argument to include those chains.
- (e) Cost, speed, finality and decentralization. Some chains have cheap gas, some have guaranteed finality, some have a rapid block production (fast) and some are more decentralized (more secure). In the end, the RWA Issuer must consider all the positive and negative factors here.
- (f) KYC/KYB. If the RWA wishes to restrict ownership, due to compliance laws, then the implementation is likely to only be accessible from certain blockchains. The inclusion of such a chain would allow KYC/KYB on every other chain in the RWA.

### 4. Registered security creation

One of the problems of tokenizing RWAs is that every jurisdiction has their own laws concerning what constitutes a security and how to register. Very often, even if a security license is not required, there will be requirements that sales are restricted to 'sophisticated', or 'accredited' investors, that all investors are KYCed and that the regulators are informed. Often only residents or citizens from certain countries are allowed to invest, or those from some countries (e.g. OFAC listed countries) may not trade. Sometimes, for some categories of assets and in some jurisdictions, it not necessary to register a security. The bar is usually

quite low and most investments will require registration. It is important to consult a commercial lawyer to decide what rules apply in each case.

Aside from the need for KYC and AML compliance, the regulators often require that the Issuer can facilitate transfers from wallets without the signature of the wallet holder. Such a situation could occur when a holder dies, or is deemed to have contravened AML laws.

# 5. Minting the assets

The Issuer can then 'mint' 'value' in each of the Asset Classes on each blockchain.

Describing the assets

Once the RWA has been created, it should be fully described. For a permissionless and trustless system, the descriptions have to be linked on-chain to the tokens themselves. The data ideally would be held in decentralized storage and not on an individual website, which could be shut down or compromised. Such descriptions are designed to both reassure potential holders about value and prospects of the tokens and to satisfy the requirements of a security regulator.

The most important information to provide are details about the Issuer. For an equity backed asset, the Issuer should provide a Prospectus describing the benefits and the risks surrounding the RWA for holders. For an Asset Backed Security, it may be appropriate to provide third party valuations to provide a basis for the traded value. For a public offering, usually a lot of Due Diligence will be needed concerning the company and its team. Such reports would be provided by third party management consultancies. Other information would be details about who can invest in the RWA, third party credit ratings, financial and legal statements and details about upcoming dividend payments to holders. It may be useful to link metadata, descriptive text about the assets, images and videos to inform potential holders about what they may be buying. Finally, if the RWA is a security, it is important that the security license details are connected to the actual RWA.

#### 6. Marketplaces, lending platforms and RWA vaults

One of the significant advantages of tokenizing as an RWA is access to the machinery of DeFi. Because of the restrictions surrounding trading in securities, the number of holders and traders for an RWA may be limited, so it is important that the Issuer and holders can easily find venues to trade and borrow against their assets. If they are borrowing against their RWA, it should be possible to continue to collect dividends, which hopefully would exceed the interest payments.

A core requirement for an RWA is to provide all the information about the assets in one place. It should be easy for a prospective buyer to find assets to buy and where to do so and what restrictions there are around the RWA.

The Issuer should provide as much information to holders as they can about opportunities for their RWA within DeFi. A lot of DeFi platforms will only accept ERC20 tokens (or similar on non-EVM chains). Ideally, on EVMs, the RWA would provide ERC20 interfaces to the underlying tokenized RWA, so that they can be staked alongside more typical crypto tokens such as WBTC.

#### 7. KYC/KYB and AML

The Issuer can decide (with legal advice) if they need to restrict sales of their tokenized RWA. If they do, then the Issuer should have some options from which to choose. Ideally the basic option is the maintenance of a whitelist of wallet addresses that can trade. This would allow the Issuer to furnish their own KYC procedures. Alternatively the Issuer would ideally be able to use the RWA tokenization platforms own KYC/KYB procedures. This may include checks that the wallet holder is over 18 years old, comes from a certain country (or not) and is 'sophisticated' or 'accredited'.

#### 8. De-tokenization of RWAs

The Issuer should provide to holders instructions and costs associated with swapping their tokens for the underlying assets. This should include how long it would take for this process and any unusual instructions. As an example it may not be possible to take control of crude oil without obeying the laws concerning this.

#### 9. Voting rights

In the world of traditional finance, owners of common equity usually have voting rights. There is no reason for these rights to be ignored for RWAs. In fact DeFi allows a much more refined ability to vote, similar to how DAOs function and hopefully this will allow a much more involved community of holders. The issuer should determine if their RWA has voting rights, which Asset Class within their RWA can vote and for a multi-chain RWA, how to collect votes from all holders.

# 10. On-going updates

Once the RWA has been created and described, with perhaps a license awarded, the Issuer must keep updating the RWA:

(a) When new backing assets are added, new tokens can be minted to represent them. This process should be fully documented with information attached to the RWA

- (b) Periodically, the Issuer should distribute dividends to token holders, fully documented.
- (c) It is important to keep the investment community up to date with how the venture is progressing. This can be achieved by posting financial performance statements and management reports, all connected to the RWA. Important news, or structural changes will require notices to be issued and any legal changes should also be attached to the RWA.

# AssetX: How to tokenize your assets

AssetX is now live on testnet at <a href="https://factory.assetx.org">https://factory.assetx.org</a> and most of the features detailed above can already be accomplished with the existing AssetX frontend, with full documentation <a href="https://example.org/leaf-40.20">here</a>

A demo of AssetX can be seen here

# **AssetX Roadmap**

Our near term roadmap will permit KYC controlled wallet whitelists to be created. We have included zkProof technology to preserve as much privacy as possible in a decentralized way, so that potential holders can register for AssetX. We have developed multichain smart contracts to allow the Issuer to choose between maintaining access to the RWA with their own whitelist, or allowing the whitelist to controlled by KYC/KYB, with optional checks on the age and residency/citizenship, as well as the investor accreditation status.

We have finished the smart contract development to allow distribution of dividends to all holders, but we need to add this to the frontend of AssetX.

We are about to launch our public testnet. Our goals are to find any flaws or bugs and to continuously improve the UX and UI.

We have built signatures in our MPC network for ed25519 Edward's Curve that is used by important blockchains such as Stellar Soroban, Solana and NEAR. We will build contracts on these chains to allow extension of AssetX to them with full inter-operability.

We are building our on-cross-chain governance system, extending the OpenZeppelin Governor contract. This will allow all of our contract code to be solely maintained by DAO voting, including proxy upgrades and admin functions such as fee changes. Our extensions have added cross-chain governance and multi-function voting to the existing For/Against/Abstain model. We are testing this

now and we are building a frontend that will allow voting for holders of RWAs (if enabled by the Issuer). This will essentially create DAO-like functionality for any RWA created by AssetX.

We have created an ERC20 that is an interface to a single Asset Class of an RWA on a single chain. The Issuer may optionally deploy this ERC20, so that the RWA can be used in DEXes, marketplaces and lending protocols. It remains to develop the frontend functionality for this. A major task for us is to contact existing lending protocols, crypto wallets and marketplaces and integrate AssetX into them.

We need to audit our smart contracts before mainnet. This is the major task for us before we can start to generate revenue.

We are not mainly interested in addressing the existing crypto users, but we seek to attract a lot of new users from traditional finance. After mainnet (and even before this time) we need to educate businesses about the possibility of 'crowdfunding' via web3 using AssetX and the potential advantages of capital formation using DeFi.

Our intention is to launch on mainnet in H2 2025, after our public testnet and audit.

# **ContinuumDAO Governance**

# Why Have we Built a DAO?

The adoption of a DAO for Continuum is not just a governance choice; it is a strategic necessity to unlock the full potential of RWA-related services. By leveraging the DAO model, we ensure that the RWA tokenization and management remain decentralized and transparent. Here's why a DAO is the ideal structure for Continuum:

# Decentralized Trust in RWA Management

RWA tokenization bridges the gap between traditional assets and Web3 ecosystems, requiring a high level of trust to attract traditional investors and custodians. ContinuumDAO enhance this trust by distributing governance power among stakeholders, preventing any single entity from exercising unilateral control over critical decisions. Furthermore, DAO-driven decision-making ensures the security and resilience of the underlying MPC network, which serves as the cornerstone of Continuum and its innovative derivative products.

# Efficient and Transparent Asset Governance

Tokenized RWAs require ongoing governance to manage risks, evaluate asset performance, and adapt to regulatory changes. Combining on-chain governance and Continuum Lawracle, ContinuumDAO provides a transparent framework where all decisions about the tokenized assets—such as asset approval, valuation adjustments, or payout distributions—are recorded and auditable on the blockchain.

# Resilience Against Centralized Failures

By decentralized governance and treasury management, ContinuumDAO minimises single points of failure that could jeopardize the integrity of tokenized RWAs. For example, decisions about custody providers, insurance mechanisms, or dispute resolution are made collectively, reducing risks associated with centralized mismanagement.

# Dynamic Adaptation to Regulatory Challenges

The RWA tokenization operates at the intersection of traditional finance and blockchain, where regulations can vary across jurisdictions. A DAO's governance model allows the community to collectively propose, evaluate, and implement compliance measures, ensuring that the project remains adaptable and aligned with related legal standards.

#### ContinuumDAO's Governance Model

ContinuumDAO adheres to a Constitution that is <u>here</u>. The Constitution also states how these rules may be changed by the DAO.

All business of the DAO is kept in our Forum <u>here</u>, especially the formation of new ideas and development of new proposals. Only proposals that conform to the Mission and Vision of the DAO, as laid out in the Constitution are eligible.

#### Governance roles

There are three governance roles: Committee, Contributor, and Citizen.

#### Committee

The CTMDAO committee are currently responsible for signing transactions in multi-sig wallets that will perform asset transfers as directed by DAO voting. The Committee also have administrative signing rights to all administrative smart contract functions, enabling redeployment, withdrawing or adding funds to contracts, as well as other administrative specific contract functions. All signing of contract functions will initially be via multi-sig wallets. Ultimately, the use of multi-sig wallets for asset transfers and signing administrative functions in smart contracts will be replaced with direct on-chain governance through voting, using an Execute function in a contract controlled by a method such as the OpenZeppelin Governor suite of smart contracts in the veCTM token.

#### Contributors

To achieve the CTMDAO mission and vision, we need an amazing DAO structure that can gather talented individuals from diverse backgrounds, respond quickly, and provide professional experience to the DAO. Additionally, we require a fully decentralized node network to ensure service stability.

ContinuumDAO has a group of full-time, or Core Contributors group. They are responsible for operating the frontend servers, official accounts, and other related tasks, such as paying bills from assets transferred to hot wallets from the Treasury. The performance of the contributors will be reported each quarter in the DAO to evaluate.

There are four Guilds: Research, Business development, Marketing and a Developer's Guild. The guild leader will develop each guild that will support the activities of new projects joining the Continuum.

#### Citizens

will have the right to join the governance process, which includes proposing, voting, and making contributions. A Citizen can raise a proposal, so long as it conforms to the DAOs Mission and Vision and they control a threshold amount of veCTM power, either in their own wallet, or delegated by other voters to their wallet. The instructions for creating a proposal are detailed <a href="here">here</a>

# DAO incentive system

The ContinuumDAO may utilise tokens and the welfare system to boost the performance of all DAO members.

- Full-time contributors and guild leader will receive monthly payment to attract and maintain dedicated workers, as in any traditional business.
- Node runners will receive rewards based on their performance and other requirements.
- Guild members will receive payment based on the outcome of the guild missions.
- All people who have veCTM or a contribution history have the possibility to receive future airdrops with different percentages. The number will be based on the performance of their previous contribution history.

# The ContinuumDAO Token

#### **Vested Token Model**

ContinuumDAO has implemented its token model on testnet (Arbitrum Sepolia for now)

Any holder of ContinuumDAO's ERC20 token (called CTM) can stake them into an NFT called veCTM (see the code on github). The staking is live at <a href="https://staking.continuumdao.org">https://staking.continuumdao.org</a>. All users who do so, following mainnet, will earn a share of the revenue from the protocol. The share will be decided by the DAO, with the balance going to the DAO Treasury. Holders who lock for 4 years will earn the most per locked CTM, decreasing linearly to zero, as is common in many other DeFi protocols. Rewards will be paid in CTM at a rate to be determined by the DAO. Fees collected can be used to buy CTM regularly by the DAO Committee and added to the smart contract CTM pool for rewards. In this way the available rewards for veCTM holders will dynamically reflect the Continuum usage. There will be a buy pressure for CTM to counteract any sell pressure from farmers selling tokens and the increased volume should benefit LP providers and attract DEXes to list CTM.

The veCTM token is used for governance. It allows on-chain governance using OpenZeppelin's Governor contract, with extensions added by ContinuumDAO to allow multiple choice, multiple selection and weighted voting. Using our cross-chain messaging system, C3Caller, the governance becomes cross-chain, as well as on-chain. Any multi-chain dApp deployed using C3Caller can natively utilise this cross-on-chain governance and it will be used to maintain all of the admin function and also deployment for AssetX, so that these are controlled by the DAO, with no central control. A simple frontend for the ContinuumDAO governance is also being created, to be used for our DAO, but one that can also be implemented by any RWA issuer, or indeed any other web3 protocol.

The veCTM token is also used to stake on MPC nodes, adding an extra security measure to the inherently secure MPC algorithm. Only the DAO can un-stake these veCTMs, allowing a bad actor's veCTM to remain locked forever.

As well as being used for governance (via veCTM) and reward distribution, CTM will also be used as a payment option for all services in cross-chain messaging system, C3Caller and the RWA tokenization factory, AssetX. If a user chooses to do so, they will get a discount on the USD stablecoin fees. The fees for AssetX and for use of C3Caller will be determined by the DAO.

The vested NFT token (veCTM) can be split into two NFT's, so holders can sell part of their holding, or they can be added together. It will be possible to liquidate the veCTM with the holder receiving 50% of their CTM tokens for a 4 year lock, increasing linearly to 100% for a zero time lock. The balance of the CTM tokens will be returned to the DAO treasury.

# The MPC Network

ContinuumDAO's MPC network is live and running and can be viewed at <a href="https://dashboard.continuumdao.org">https://dashboard.continuumdao.org</a>

ContinuumDAO is the first **public** MPC network, which means that anyone can run an MPC node and potentially contribute to supporting cross-chain messaging, or indeed other future MPC applications, such as MPC wallets. The MPC system we use and why MPC is a superior system for collective signing is described <a href="here">here</a> . There is no limit to the number of nodes that can contribute to the network, or the amount of web3 traffic that could be accommodated. Individual nodes can be added to an MPC Group permissionlessly. The number of nodes in the group can be decided based on the degree of security required vs the speed of signing. Typically 3-7 nodes would be used. A Threshold number of these nodes are required to sign and this threshold can also be decided permissionlessly. The end result is an MPC node group which has a Public Key. The address derived from this key can be used by a messaging system (in our case C3Caller), or an MPC wallet, or for diverse other applications.

#### **Public MPC Nodes**

The instructions for running a node are in our <u>documentation</u>. After someone has created a node, they can attach a veCTM to it. As part of the attachment process, they can optionally identify themselves, with this information being stored in our node smart contract and publicly visible.

Staking on MPC nodes is live on testnet and can be managed at <a href="https://staking.continuumdao.org">https://staking.continuumdao.org</a>. The attachment of veCTM is a further security measure beyond the inherent security of MPC, since whereas they can attach the veCTM themselves, only a DAO vote can detach their veCTM and whilst it is attached, the veCTM cannot be liquidated or transferred to another address. A 'bad actor' running an MPC node will have their veCTM permanently locked. Anyone contributing to the MPC network will receive rewards from the DAO in CTM. The reward system that we have implemented (accessible from the staking panel) allows the DAO to score individual nodes out of 10 depending on how well they are performing (up time, speed). The reward is multiplied by the score. In this way we incentivize high quality nodes. The staking system is live on testnet.

Anyone can create an MPC node group, but this does not mean that it is automatically used for signing. As an example, ContinuumDAO's cross-chain messaging system C3Caller can choose which MPC groups to use and the public address has to be added by a governance vote. Naturally the DAO will choose MPC groups which have the highest veCTM stake and also where the nodes have provided maximum information about who is running them, including potentially KYC. It makes sense though that a decentralized application would have a few MPC groups between which they could switch, so that a problem with any one of them would not compromise the entire dApp. It is entirely up to a dApp to decide which MPC groups they want to use. They could for instance use MPC groups formed from their own community.

# **C3Caller Cross-chain Message Passing**

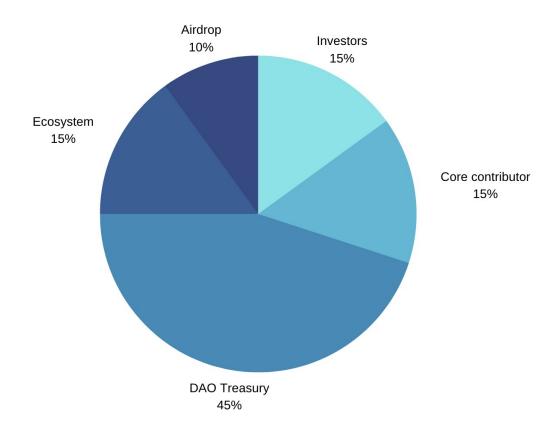
C3Caller (see the code on <a href="mailto:github">github</a>) is the system added to each blockchain that can interface with the MPC network to allow a dApp on one chain to sign a contract function on another chain. Full details describing it and about how to use it are provided in our docs . Any dApp can permissionlessly register the addresses of their main entry contracts on each chain using the web interface at <a href="https://c3caller.ContinuumDAO.org">https://c3caller.ContinuumDAO.org</a>. The admin can top up their account with CTM or a USD stable coin to pay for the cross-chain messaging. The cost of the messaging is determined by the payload size.

# **Tokenomics**

Until our TGE, all governance and control of the CTMDAO Treasury is achieved through voting at <a href="https://snapshot.org/#/continuumdao.eth">https://snapshot.org/#/continuumdao.eth</a> using a simple ERC20 token called CTMDAOVOTE on Polygon: <a href="https://polygonscan.com/address/0x1FAaf080a77C421e833CdfCbDeaAa273f0eE23b5">https://polygonscan.com/address/0x1FAaf080a77C421e833CdfCbDeaAa273f0eE23b5</a>

At TGE, CTMDAOVOTE tokens will be converted 1:1 for veCTM, with the CTM locked for 4 years. The fixed Total Supply of CTM will be 100 million.

## **Allocation**



#### **DAO Treasury – 45%**

- 35% allocated to Treasury reserve
- Allocated to nodes incentive
- Allocated to contributors incentive
- Up to 10% allocated to MultiDAO claimants as individual veCTM locked for 4 years, but without voting rights. The claim period will be for a window of 2 weeks through a smart contract.

#### Ecosystem - 15%

- 5% allocated for chain partners
- 5% allocated for project partners
- 5% allocated for incubation incentives

#### **Core contributors – 15%**

- 12% allocated for early core contributors. Each of these 4 core contributors will receive 2% as a veCTM token, with full voting rights and a further 1% as CTM with a locking period of 3 years and linear unlocking with 36 months
- 3% allocated for future core contributors

### Airdrop - 10%

• 10% allocated for Airdrop for veMULTI and MULTI holders. (Every veMULTI that has voted since the Compensation vote + anyone in the Early Steps Telegram Group who held MULTI on 14/07/2023). The airdrop will be as a veCTM token, locked for 4 years and with full voting rights.

### Investors - 15%

• 15% allocated for VCs: The terms of any allocation to VCs will be determined by DAO voting, including a locking period.

# **Token Utility**

- AssetX payments (USD and other stable coins, CTM)
- C3Caller cross-chain message payments (USD and other stable coins, CTM)
- Governance as veCTM
- Staking as veCTM
- Rewards for staking on MPC nodes

# **Ecosystem Development**

There will be a RWA grant program for new projects using Continuum. This could be either a grant of CTM from the treasury, or a time-limited reduction in fees for usage of Continuum.

The DAO will assist new projects that wish to use Continuum. This will be in the form of coding support, joint marketing, and technical support as required. These functions will be undertaken and organised by the DAO Guilds.