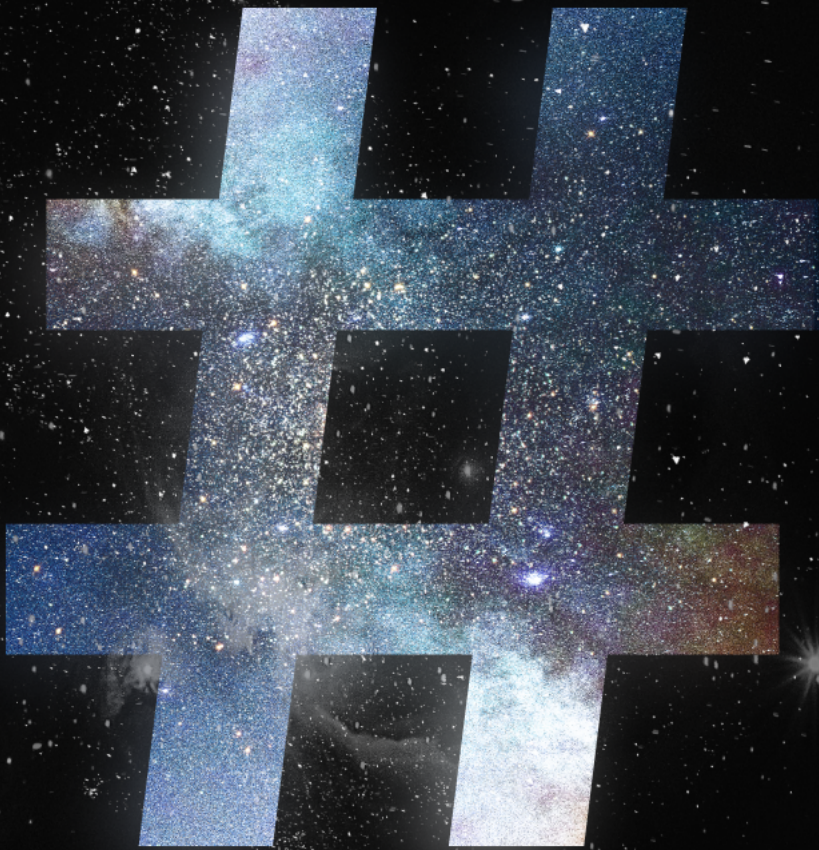


# Hashtag.Space White paper



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# Executive Summary

**The Hashtag protocol**, as delineated throughout this white-paper, stands at the forefront of blockchain innovation, offering a comprehensive suite of services that redefine the landscape of domain name services and digital asset management. Through the strategic implementation of decentralized technologies, Hashtag introduces a groundbreaking approach to domain ownership, management, and utility, distinguished by its unique tokenomics model.

At the core of Hashtag's offering is the **Decentralized Domain Name Service (HDNS)**, which leverages smart contracts to facilitate the seamless minting, management, and resolution of domains. This service not only empowers users with unparalleled control over their digital assets but also enhances the domain's utility by incorporating metadata and keyword functionalities. The integration of the Hashtag Token Distribution System further enriches the ecosystem, providing a dynamic and responsive economic model that rewards participation and fosters community growth.

**The Space Token**, pivotal to the Hashtag protocol's tokenomics, underpins transactions, rewards, and governance within the ecosystem. Its supply, intricately tied to domain purchases and governed by a unique multiplier formula, ensures a dynamic and responsive token economy. This economy is further supported by an innovative bonding curve mechanism, which serves as a platform for token exchange and liquidity management, directly correlating the token's value with the protocol's adoption and success.

**The Rewards Distribution Schedule**, encompassing **Referral** and **Staking Rewards**, exemplifies the protocol's commitment to incentivizing community engagement. Referral Rewards encourage ecosystem expansion through domain referrals, while Staking Rewards offer multiple avenues for earning, including Browser Plugin Staking and Node Staking, aligning user contributions with network performance and reliability.

In summary, the **Hashtag protocol** emerges as a unique and revolutionary platform within the blockchain domain, characterized by its innovative tokenomics model. It not only provides a decentralized and user-empowered approach to domain name services but also establishes a robust and equitable rewards system that incentivizes community participation and growth. As the protocol continues to evolve, it promises to unveil new services and features, further cementing its position as a leading force in the decentralized digital landscape.

## Hashtag.Space - Your Gateway to Web 3.0

A large, stylized number '3.0' is positioned on the right side of the page. The digits are filled with a vibrant, multi-colored galaxy pattern, featuring shades of purple, blue, and pink against a dark background. The number is rendered in a bold, sans-serif font.

**Hashtag.org (Hashtag Space)** is a Web.3 platform and organization that supports citizens around the globe with Anonymous Immutable Internet Infrastructure, which ensures basic human rights, economic independence and individual liberty without the fear of persecution or prejudice. Using a hashtag domain is a step forward from the well-known .com service used on the Internet. Unlike the standard protocol using HTTP, this new method uses the universally recognized symbol, the hashtag (#), to access the Internet. And it is the “#” symbol in front of the domain that acts as the Top-level domain.

**Why did the #domain name break up with the traditional top-level domain? Because it found someone more decentralized and secure with Hashtag! #sorrynotsorry**

Think of the hashtags seen in Twitter and Instagram posts. **The Hashtag Blockchain Domain Service** allows you to effectively own those hashtags as domains. They can be resolved just like traditional domains into whichever records the hashtag owners set, such as wallet addresses, web URLs, IPFS URLs, and much more.

Hashtag aims to develop a decentralized domain service that enables users to mint existing or new Hashtag domains as **NFTs**. The NFTs will contain metadata that defines records that function calls can resolve to. This service also includes both on-chain and an off-chain domain resolution via smart contracts and a (distributed) resolution client that can communicate with the domain service. A **blockchain domain service** is a set of services that leverage blockchain technology to provide domain name registration, management, and resolution. These services aim to introduce a decentralized, secure, and transparent domain name system that is not controlled by any centralized authority. Blockchain domain services can include features such as domain name registry, resolution, auction, escrow, transfer, management, dispute resolution, ownership verification, expiration and renewal, as well as privacy and security solutions.

In addition to a decentralized domain service, Hashtag aims to develop a distributed network that enables stakeholders to host nodes containing a domain resolution service that covers multiple decentralized domain service protocols, including Hashtag. The Hashtag utility token (**\$SPACE**) powers this decentralized domain resolution model, allowing node operators to earn rewards for hosting the domain resolution services, running the SPACE plugin and a host of other features yet to be announced in the coming releases.



# A Breakup Story: #Domain and Traditional Top-Level Domains

The hashtag symbol has morphed into an indispensable facet of our digital dialogue in the expansive universe of the Internet. Cast your mind back to 2007, amidst the chaos of the San Diego wildfires, when Nate Ritter ingeniously deployed the hashtag "[#sandiegofire](#)" as a beacon for aggregating crucial updates concerning the disaster.

Fast forward to the present, and the hashtag has ascended to emblematic status, symbolizing a generation unafraid to voice its opinions and participate in global conversations. Effortless in its utility, the hashtag connects individuals to a myriad of discussions, embodying simplicity itself.

## The Era of Web 2.0 Domains

A website, in essence, is a collection of web pages brimming with content—text, images, files, and beyond. These pages reside on a web server, essentially a powerhouse computer. The domain name serves as the digital address for these pages. Upon entering a domain into your browser's search bar, it intuitively seeks out the corresponding server.

Gone are the days of numerical site addresses. Initially, to locate a site, one would input an IP address — a sequence of numbers punctuated by dots. However, memorizing countless IP addresses proves a Herculean task for mere mortals. Thus, numeric combinations gave way to text-based domain names.

## The Quandary with Traditional Domains

Traditional domains, initially designed for a broader Internet role —including email and payments — have largely stagnated, confined to website display. This stagnation can be attributed to their reliance on centralized servers since the dawn of the Internet, stifling innovation and cementing a highly centralized framework.

**Domain Name Services (DNS)**, the digital monikers representing websites, fall under the purview of centralized entities such as **ICANN (Internet Corporation for Assigned Names and Numbers)**, with registrars like GoDaddy perched on centralized servers. Rather than outright ownership, registrars merely grant users access to domains, retaining the power to revoke access as they see fit. DNS, despite its pivotal role, is not without its flaws:

- **Centralization:** Its hierarchical, centralized structure renders DNS susceptible to cyber-attacks, censorship, and governmental meddling.
- **Security Vulnerabilities:** DNS faces threats like DNS cache poisoning, redirecting unsuspecting users to malicious sites. Trust breaches can precipitate security lapses.
- **Privacy Concerns:** DNS queries, transmitted in plain text, are ripe for interception, compromising user privacy.
- **Speed Hiccups:** Delays in DNS query resolution can dampen the browsing experience, especially for time-sensitive activities like online gaming.
- **Scalability Challenges:** The burgeoning Internet user base and device proliferation may overwhelm DNS, given its hierarchical architecture and protocol constraints.

The **Web2** era remains under the dominion of centralized conglomerates, prioritizing profit over user experience. Yet, DNS's critical role is underscored by its inherent challenges, necessitating enhancements in security, privacy, and potentially foundational technological shifts. This is where Hashtag Space steps in.

## **A Brave New World: Web3 Domains**

Web3 domains are the fresh-faced rebels shaking up the traditional Internet landscape. Also known as NFT, crypto, and blockchain domains, herald the decentralization era — free from institutional, corporate, or individual censorship, suspension, or hijacking attempts.

**NFT domains are essentially a suite of smart contracts, a sophisticated term for blockchain-based software. This paradigm shift redistributes control from corporations to users. Blockchain's transparency and openness ensure unparalleled security, with users exclusively authorized to update their NFT domains, mitigating fears of hacks or domain theft.**

**Web3** is poised to redefine the Internet alongside the metaverse, cryptocurrencies, **NFTs**, and **GameFi**, with domain names spearheading this transformative journey from Web2 to Web3, courtesy of blockchain's magic.

## Hashtag.Space

Enter **Hashtag.space**, rejuvenating the hashtag symbol in an unprecedented manner. Hashtag Space unveils a **Decentralized Domain Name Service**, encapsulated within **#HashtagDomains**, transforming the mundane act of purchasing a domain into an enchanting experience. By merely pointing your **#domain** to your website's URL on the Web 2.0, voilà — your site operates within the decentralized realm as a **#hashtagdomain**.

**Hashtag.Space** (hereafter referred to as 'Hashtag') offers a **Decentralized Domain Name Service** by using Hashtag domains.

We aim to solve the problem of companies struggling to find available domain names through traditional top-level domains and protocols. With Hashtag domains, customer websites can be accessed through traditional and decentralized internet, as well as the dark web, using a single browser plugin.

Hashtag provides a decentralized domain naming service that enables users to mint existing or new Hashtag domains as NFTs. Domain owners can set metadata as records e.x. target url, or geo-coordinates, or wallet addresses that can be resolved to. Any application can resolve these records to reveal the information behind them. This service will also include on-chain and off-chain domain resolution.



In addition to a decentralized domain service, Hashtag has developed a distributed network that enables stakeholders to host nodes containing a domain resolution service that covers multiple decentralized domain service protocols, including Hashtag. The Hashtag utility token powers this decentralized domain resolution model, allowing node operators to earn rewards for hosting the services. It should be noted that the services offered by Hashtag do not stop at domain resolution. As the project continues development, new services will be rolled out, such as a decentralized VPN service, a message streaming service, and other interesting features.

## Hashtag Domains

Hashtag domains are a unique type of domain that differ from traditional domains in that they have a '#' symbol in front of the domain that acts as the Top-level domain. Think of the hashtags seen in Twitter and Instagram posts. The Hashtag Blockchain Domain Service allows you to effectively own those hashtags as domains. They can be resolved just like traditional domains into whichever records the hashtag owners set, such as wallet addresses, web URLs, IPFS URLs, and more.

**The Hashtag Blockchain Domain Service** consists of two main components: **the Hashtag Domain Naming Service (HDNS)** and **the Hashtag Token Service (HTS)**. The HDNS covers services related to domain registration, configuration, record management, keyword management, and domain resolution. The Hashtag Token Service, on the other hand, deals with token distribution and management, vault management, reward pools, and treasury management.

Dive into the array of perks that come with securing your hashtag domain through Hashtag Space:

- **Iconic # Symbol for Your Domain:** Embrace the globally recognized # symbol, making your domain stand out.
- **Decentralization at Its Best:** Experience a domain that's decentralized, unstoppable, and beyond the reach of censorship. For instance, should China decide to block your site, users within its borders can still navigate to your content via [#hashtagspace](#), although direct access might be restricted in blocked regions.

- **Simplified Cryptocurrency Transactions:** Crypto wallets often resemble a jumble of complex digits, making transactions a meticulous task of copy-pasting to avoid errors. With a **#domain**, assign an easy-to-remember name to your wallet, streamlining the process of receiving cryptocurrency funds.
- **Unparalleled Ownership and Control:** Break free from traditional constraints with a domain you fully own and command. Construct a Web3 website on a foundation of absolute ownership. Your domain remains yours indefinitely — sans renewal, gas, or hosting fees. Why did the programmer opt for a hashtag domain? To **#ownit**, of course!
- **URL Redirect for the Interim:** Not quite ready for decentralized hosting but covet a **#domain**? Simply link it to your existing domain name, allowing the **#domain** to direct users to your current website.
- **Browser Plugin for Universal Access:** While **#domains** naturally resolve in the Hashtag.Space app, a simple plugin for Chrome users to access **#domains** directly within their preferred browser.
- **Effortless Registration and Accessibility:** The hunt for .com domains can prove formidable, with many desirable names already claimed. The use of the **#** symbol simplifies domain access for everyone.
- **Exclusive Trademarks:** Upon registering your hashtag domain, the option to trademark it secures your unique digital asset, protecting it from unauthorized use. Proof of ownership is required to contest a registered hashtag.
- **Flexible Capitalization:** Your hashtag can mix capital and lowercase letters in any combination. Regardless of how users type it, they'll be directed to your page, with the browser adjusting to display your exact hashtag. Register **#SaveTheWhales**, and even if someone types **#savethewales**, they'll still find their way to you, with the browser showcasing **#SaveTheWhales**.

# Hashtag Browser Plugin

Dive into the digital realm with the innovative browser plugin. from **Hashtag.Space**, set to revolutionize your online navigation experience. Designed to seamlessly integrate with Chrome upon its main release, this plugin is not just limited to resolving **#domains**. It goes a step further by providing robust support for both unstoppable domains and **ENS (Ethereum Name Service)**, ensuring a comprehensive coverage of decentralized-web spaces.

Enhancing its functionality, users can activate resolution services such as **#STAKEWEB2** and **#STAKEGOOGLE** directly within the plugin. The **#STAKEWEB2** feature allows users to resolve their hashtags across all websites, including popular social media platforms like Facebook and Instagram, through the use of the keywords attached on the domains, ensuring your digital presence is universally accessible. Meanwhile, **#STAKEGOOGLE** extends the reach of your hashtags to the search results of leading search engines such as Google, amplifying visibility and engagement.

But the perks don't stop there; upon installing the plugin, users unlock an exciting opportunity to participate in the browser plugin rewards pool. By staking in this pool, users can earn extra rewards, making their journey through the decentralized web not only seamless but also potentially profitable. This plugin promises to enhance your browsing experience by blending accessibility, security, and incentive-based interaction in one compact, powerful package.

## Keywords Resolution

In the innovative ecosystem of the Hashtag protocol, users are granted the unique ability to enrich their domains with keywords, transforming how domains are identified and interacted with in the digital space.

# Keywords

This feature allows domain owners to attach specific keywords to their domains, enhancing discoverability and relevance in a crowded digital landscape. To further incentivize the optimization of keyword relevance and visibility, the Hashtag protocol introduces a bidding system where users can leverage **SPACE**, the native token, to bid on the value of these keywords. This strategic component ensures that keywords with the highest bids gain precedence, enabling them to resolve hashtag domains more effectively over those with lower bids. Both the dedicated app and the browser plugin are designed to recognize and prioritize domains based on the attached keywords and their bid values.

This dynamic resolution mechanism not only democratizes domain visibility but also introduces a competitive marketplace for keyword prominence, significantly enhancing the utility and flexibility of domain usage within the Hashtag.Space ecosystem.

## Decentralized Domain Resolution

In the current landscape of blockchain domain services, such as **UD (Unstoppable Domains)** and **ENS (Ethereum Name Service)**, there exists a notable gap in achieving true decentralization, particularly in the context of their resolution clients.

These services often depend on **RPC (Remote Procedure Call)** providers like Infura to facilitate communication with their domain registrars, which introduces a level of centralization contrary to the decentralized ethos they promote.

**Hashtag.Space** is poised to disrupt this status quo by empowering users to actively engage in the domain resolution process through a novel node infrastructure. This infrastructure will enable direct communication with our registrars via RPC, sidestepping the reliance on third-party providers and fostering a genuinely decentralized network. Users are invited to run specialized blockchain clients that integrate seamlessly into this ecosystem, contributing to the network's resilience and decentralization.

By staking space on a node and participating in resolution services, users have the unique opportunity to earn rewards, marking a significant advancement in the decentralization of domain resolution services and setting a new standard for autonomy and user empowerment in the digital domain landscape.

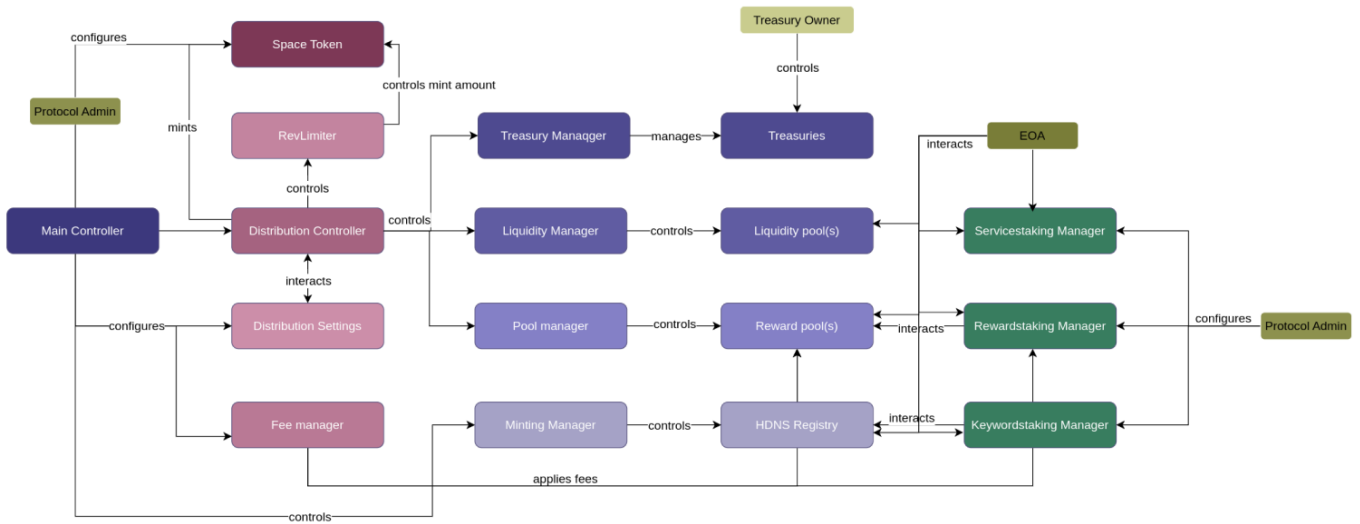
## Hashtag.Space vs traditional domains vs web3 domains

	DNS	DNS	DNS	HASHTAG.SPACE
Network	Web 2.0	Ethereum and Polygon	Ethereum	Optimism
Renewals	Annual	One time fee	Annual	One time fee, controlled by the dead man's switch (1.00 per year, can be paid for 5 years in advance)
Price	Generally, from \$10-\$20 a year, depending on the toplevel domain	From \$10 to \$25,000 and more, depending on the tier	3 characters = \$640 a year 4 characters = \$160 a year 5+ characters = from \$10+ gas fees	#domains for 3 letters are \$300.00 one time fee 4 letters are \$200.00 5 lettered #domains and above are \$100.00 one time fee
Top-level domains	gTLDs (.com, .org, .net, .edu, etc) ccTLDs (.uk, .ca, .au, .cn)	.crypto, .nft, .wallet, .x, .deco, .bitcoin, .888, .blockchain, .zil	.eth	Just a # prefixed with no "." e.x. #savethewhales
Supported browsers	All browsers	Opera, Brave, Chrome(extension), Firefox (extension), Unstoppable browser	Opera, Brave, Status (mobile), Puma (mobile)	Chrome, Brave, Firefox

	DNS	DNS	DNS	HASHTAG.SPACE
Token	No	No	\$ENS	#SPACE
Rewards	No	No	No	Yes (Keyword staking, Plugin Staking, Distributed Resolution rewards and more)
Ecosystem	No	Not of its own, partnered with Polygon	Yes, but the services are distributed on Ethereum network	Yes, one application with all of the services
SEO	No	No	No	+ ranking in. the decentralized Ecosystem via keyword staking
Resolvers	Centralized	Partially decentralized	Partially decentralized	Fully decentralized*

## Technical Architecture

The **Hashtag Domain Naming Service (HDNS)** is at the forefront of blockchain technology, utilizing smart contracts to streamline the domain registration process along with the management of records and keywords. Below you can find an overview of the smart contract protocol in its entirety. The Hashtag Domain service is defined by a set of contracts that facilitate the minting of domains, domain metadata **Hashtag.Space White paper 14** management, hashtag token distribution system, hashtag space token rewards system, hashtag staking.



In the following chapters we will break down each of the components of the protocol.

## Hashtag Minting

The "Hashtag Minting" process within the Hashtag protocol is ingeniously architected around two pivotal smart contracts: **the Minting Manager** and **the Hashtag Domain Registry**. These contracts form the backbone of the protocol's domain creation mechanism, ensuring a seamless and efficient minting experience for users.

Crucially, both of these contracts are designed to be upgradeable, allowing for continuous improvement and adaptation to evolving user needs and technological advancements. This flexibility underscores the protocol's commitment to longevity and relevance in the fast-paced blockchain domain environment.

**The Minting Manager** plays a central role in this ecosystem, equipped with access control to act as the minter on the registry. It operates under the directive of the main controller, **Hashtag.Space White paper 15** processing requests to mint domains directly on behalf of users.

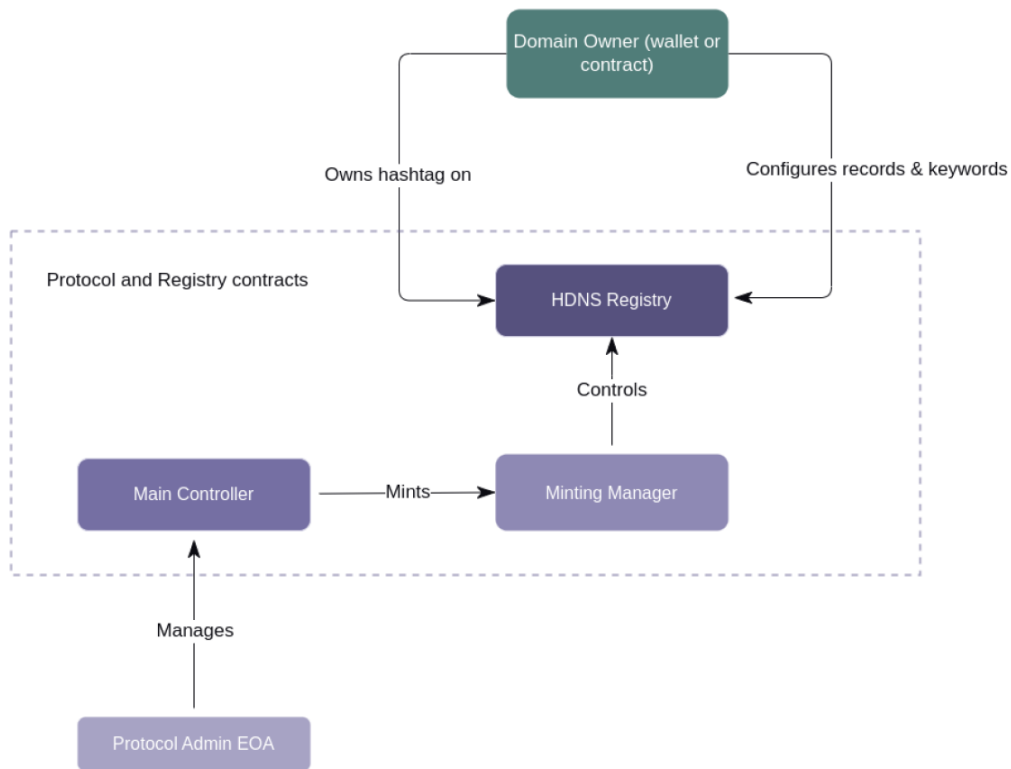
This system ensures a streamlined and user-friendly approach to domain registration, minimizing complexity and enhancing accessibility.

Furthermore, **the Minting Manager** is vested with the capability to update dependencies on **the Registry contract**. This feature is pivotal for maintaining the integrity and functionality of the minting process, allowing for adjustments and optimizations in response to the dynamic landscape of blockchain technologies and user requirements.

Upon receiving a minting request, the Registry contract springs into action, minting the domain and meticulously storing the associated metadata within a **Record Storage contract**. Additionally, a **Keyword Storage contract** is utilized to manage keywords related to the domain, encapsulating the essence of the domain's identity and enhancing its discoverability within the digital ecosystem.

This sophisticated architecture not only facilitates the minting of domains but also ensures that each domain is richly annotated with metadata and keywords, laying the foundation for a robust and dynamic domain naming system within the Hashtag protocol.





High level overview of the smart contract components that handle minting

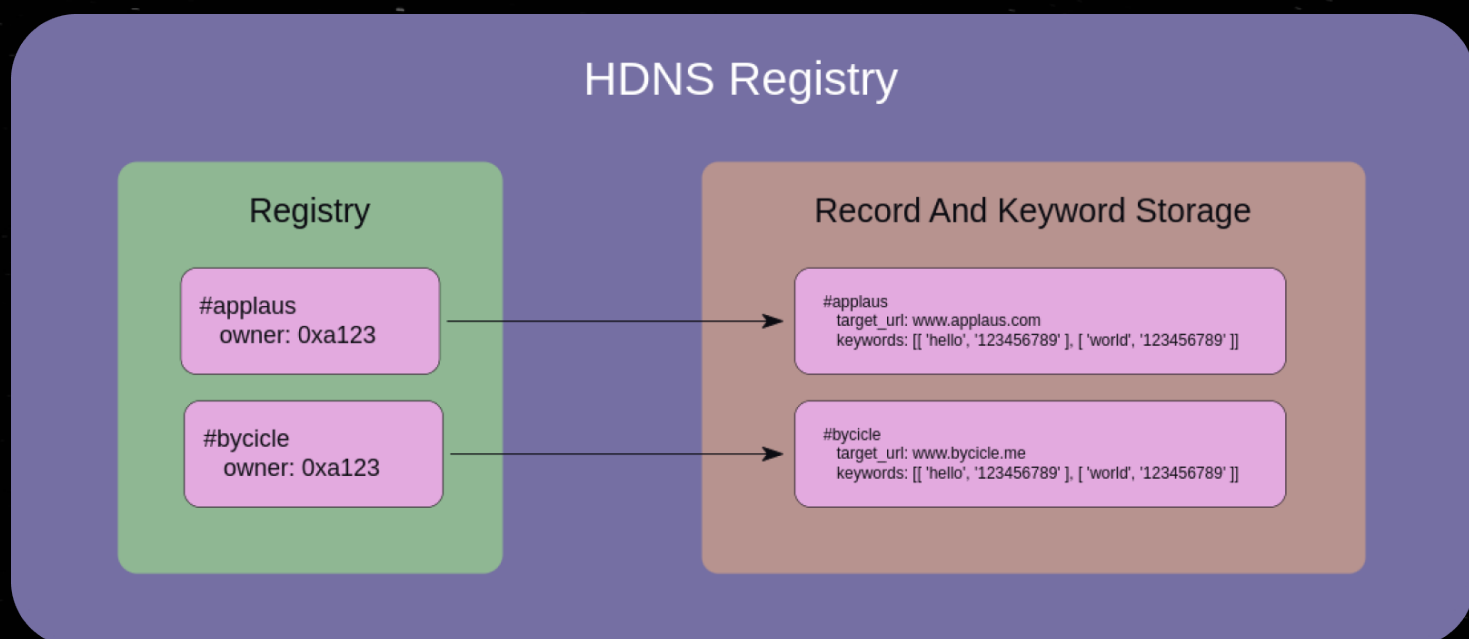
## Domain Management

At the heart of the domain management process within the Hashtag protocol lies a nuanced and innovative approach to domain identification. Each domain is uniquely marked by a **token ID**, generated through a modified version of the name hashing technique. This adaptation is crucial, as it accommodates the «#» character — a hallmark of Hashtag domains and a departure from conventional domain naming conventions. This bespoke hashing method ensures that each Hashtag domain is distinct and securely anchored within the blockchain infrastructure.

Central to the management and utility of these domains is **the Record Storage implementation**. This component is meticulously designed to store arbitrary data associated with a hashtag, enabling a versatile and rich domain information repository.

From High level overview of the smart contract components that handle minting **Hashtag.Space White paper 17** ownership details to domain-specific metadata, **the Record Storage** serves as a critical node in the domain management ecosystem, ensuring data integrity and accessibility.

Complementing the Record Storage is **the Keyword Storage** implementation, a system dedicated to managing keywords and their associated expiration dates. This feature not only enhances the discoverability of domains within the Hashtag ecosystem but also introduces a dynamic layer of interaction and engagement, allowing domain owners to strategically align their domains with relevant keywords over time.



Interaction Between the Registry and Record and Key Storage

**The Registry contract** stands as a pivotal mechanism for data resolution within the domain management process. By leveraging appropriate getter functions on the contracts, users and applications can query and retrieve domain-related information with precision and efficiency. This functionality underscores the Registry contract's role as not just a repository of domain registrations but as a gateway to a wealth of domain-specific data and insights, facilitating a seamless and integrated user experience in the management and utilization of Hashtag domains.

# Hashtag Token Distribution System

The Hashtag Token Distribution System is a sophisticated ecosystem powered by a suite of upgradeable smart contracts, designed to foster engagement and reward participation within **the Hashtag protocol**. This subsystem includes several key components: **The Space Token Contract**, **The Distribution Controller**, **The Liquidity Manager**, **HLiquidityPool** (also known as **the Hashtag Bonding Curve**), **The Distribution Settings**, and **the RevLimiter**, each playing a pivotal role in the token distribution and liquidity management process.

At the core of this system is **The Space Token contract**, an **ERC20 contract** for the **\$SPACE** token, which features a meticulously designed minting functionality. This functionality is exclusively controlled by the Distribution Controller and adheres to a minting schedule that implements a multiplier effect.

**The Distribution Controller**, vested with the Minter access control role on **the Space Token**, orchestrates the distribution of Space token rewards to designated reward pools in alignment with the reward distribution schedule. This ensures a systematic and equitable allocation of rewards across the ecosystem.

To mitigate extreme price volatility and maintain economic stability within the Hashtag protocol, **the RevLimiter** plays a crucial role. It tempers the minting of Space tokens by adjusting exchanges from the bonding curve based on a calculated safe inflation rate, preventing abrupt fluctuations in token value.

**The Hashtag Liquidity Pool**, or the Bonding Curve, stands as the primary marketplace for Space tokens. It facilitates the exchange of tokens by distributing Ether from domain purchases to the Liquidity Pool, with the Liquidity Manager overseeing the management and future iterations of bonding curves within the protocol. This arrangement not only ensures liquidity but also aligns with the protocol's aim to incentivize and reward community participation through a dynamic and responsive economic model.

# Hashtag Staking System

The Hashtag Staking System introduces a robust framework for engagement and contribution within the protocol, centered around three critical contracts: **the Service Staking Manager**, **the Reward Staking Manager**, and **the Keyword Staking Manager contract**. Designed with flexibility and future growth in mind, these contracts are all upgradeable, ensuring that the staking mechanisms can evolve alongside the protocol itself.

The Service Staking Manager is designed to facilitate staking on plugin services, such as **#STAKEGOOGLE** and **#STAKEWEB2**, empowering users to support and enhance the visibility and functionality of these essential services within the Hashtag ecosystem. This mechanism allows participants to directly contribute to the efficiency and reach of the services they value, fostering a community-driven approach to service improvement and reliability.

Meanwhile, **the Reward Staking Manager** broadens the scope of user engagement by enabling staking in various pools, including the node pool and browser plugin pool, along with any designated reward pool incorporated into the rewards system. This versatility allows users to diversify their staking activities, aligning their contributions with their interests and the needs of the Hashtag community, while also earning rewards for their participation.

Complementing these two is **the Keyword Staking Manager**, which introduces an innovative approach to domain resolution and visibility. Users can stake on specific keywords associated with their domains, influencing the ranking and discoverability of these domains when resolved via keywords. This feature not only enhances the utility of domains within the Hashtag protocol but also introduces a competitive layer to domain management, allowing domain owners to strategically boost their presence in the ecosystem.

Together, these three staking contracts form the backbone of the **Hashtag Staking System**, creating a dynamic and participatory environment where users can stake on services, rewards, and keywords. This system not only incentivizes active participation within the Hashtag ecosystem but also ensures that the protocol remains adaptive, responsive, and aligned with the needs and priorities of its community.

## Tokenomics

In the heart of the **Hashtag protocol** lies a carefully designed **Tokenomics framework**, a cornerstone for driving engagement, fostering growth, and ensuring a sustainable ecosystem. This framework is anchored by the Space Token, an integral component that powers transactions, rewards, and governance within the Hashtag ecosystem.

Accompanying the **Space Token** are innovative mechanisms for **Referral Rewards** and **Staking Rewards**, each designed to incentivize community participation and bolster the network's value proposition.

Together, these elements weave a comprehensive **Tokenomics strategy** that balances immediate incentives with long-term value creation, ensuring the Hashtag protocol remains vibrant, competitive, and aligned with the interests of its diverse stakeholder community.

## Space Token

The Space Token represents a pivotal element within the Hashtag protocol's Tokenomics, underpinned by a well-structured framework governing its supply, distribution, and pricing mechanisms. This section delves into the intricacies of the Space Token, exploring its supply dynamics, distribution strategy, and the factors influencing its price.

## Space Supply

The total supply of Space Tokens is intrinsically linked to domain purchases on the Hashtag platform, adhering to a unique formula that ensures a responsive and dynamic token economy.

Each time a domain is acquired, the Space Token supply increases in accordance with the formula: **multiplier \* domain token price**. This multiplier is set to decrease annually by a factor of **1,000**, commencing at **10,000x**. After a decade, this reduction stabilizes, and the multiplier remains constant ad infinitum, creating a predictable yet flexible supply mechanism. The domain token mint amount is determined by the domain's character length, with a tiered minting strategy of **100** tokens for domains containing five or more characters, **200** tokens for four characters, and **300** tokens for three-character domains.

## Space Distribution

The distribution of minted Space Tokens is orchestrated according to a predefined token distribution schedule integral to the token rewards system. This schedule ensures a balanced allocation of tokens, supporting the protocol's long-term sustainability and rewarding participants across various ecosystem activities. By aligning token distribution with the protocol's strategic objectives, the Hashtag protocol fosters an engaging and incentivized environment for users, contributors, and stakeholders alike.

## Space Price

An integral aspect of the Space Token's pricing mechanism within the Hashtag protocol is its innovative integration with a custom bonding curve. This bonding curve not only facilitates the transfer of **Ether (ETH)** spent on domain purchases but also serves

a dual purpose as an exchange platform for acquiring Space Tokens on the open market. This sophisticated approach provides a seamless and dynamic pricing model for the Space Token, closely tied to real-world utility and market demand.

### **Bonding Curve as an Exchange Platform**

The custom bonding curve acts as a pivotal exchange point, where users can purchase Space Tokens using ETH. This feature introduces a novel way for participants to engage with the token economy, offering a direct path to invest in the ecosystem's growth and potential. By leveraging the bonding curve, the Hashtag protocol ensures liquidity and accessibility for Space Tokens, making it an attractive proposition for users and investors alike.

### **Integration with Domain Purchases**

A distinctive characteristic of the Space Token's economic model is how it interlinks with domain purchases. All ETH collected from domain acquisitions is channeled into the bonding curve, effectively tying the token's value to the protocol's adoption and usage rates. This direct correlation ensures that as the platform grows and more domains are purchased, the intrinsic value and demand for Space Tokens are likely to increase, reflecting the ecosystem's health and vitality.

### **Minting and Distribution via the Bonding Curve**

Complementing the direct transfer of ETH into the bonding curve, a portion of the Space Token rewards, as outlined in the distribution schedule, is also minted directly into the bonding curve. This process not only enriches the liquidity pool but also aligns the availability of Space Tokens with the achievement of specific milestones and activities within the protocol.

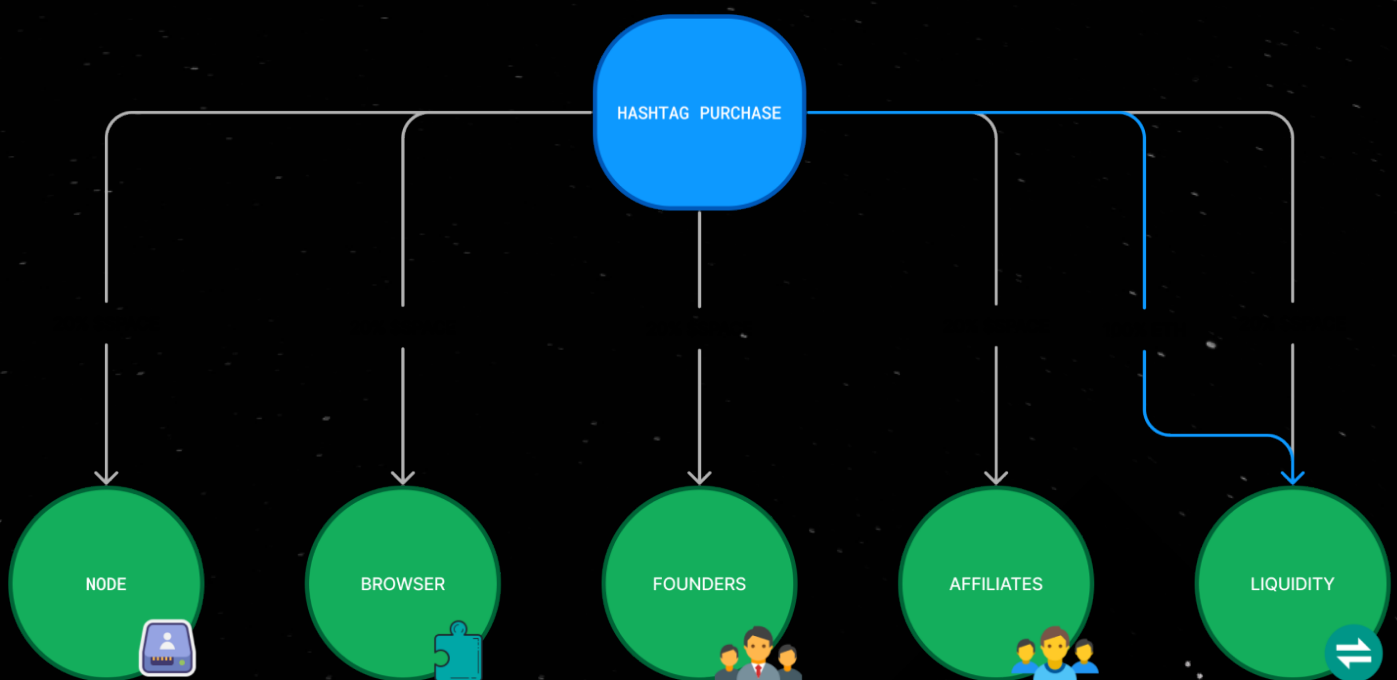
As domains are purchased and rewards are distributed, the bonding curve adjusts, influencing the price of Space Tokens in terms of ETH per space.

This dynamic pricing mechanism ensures that **the Space Token's value** is a transparent reflection of the ecosystem's current state and projected growth, offering a fair and market-driven approach to token valuation.

Through the innovative use of a custom bonding curve, the Hashtag protocol establishes a robust framework for **Space Token pricing, liquidity, and distribution**. This system not only enhances the economic stability of the Space Token but also aligns it closely with the protocol's overall success and adoption, paving the way for a sustainable and thriving decentralized ecosystem.

## Rewards Distribution Schedule

The Hashtag protocol introduces a comprehensive **Rewards Distribution Schedule**, meticulously designed to incentivize participation and growth within the ecosystem. This schedule is segmented into two primary categories: **Referral Rewards** and **Staking Rewards**, each tailored to foster engagement and reward the community's contributions.



Space Distribution Schedule



## Referral Rewards

Referral Rewards are a cornerstone of **the Hashtag protocol's engagement strategy**, encouraging users to facilitate the expansion of the ecosystem through the referral of new domain purchases. To be eligible for Referral Rewards, users must own a domain within the Hashtag protocol, leveraging this asset to participate in the referral program. A distinctive feature of this program is the allocation of rewards; referrers benefit from a dedicated rewards pool that allocates **20% of the Space Tokens** minted from each domain purchase. This mechanism ensures that users are directly rewarded for their efforts in promoting the Hashtag ecosystem, enhancing its visibility and adoption.

## Staking Rewards

Staking Rewards within the Hashtag protocol are designed to offer users multiple avenues for earning rewards, specifically through **Browser Plugin Staking** and **Node Staking**. Users engaging in Browser Plugin Staking can allocate their Space Tokens to the browser plugin rewards pool, earning a share of the rewards proportional to their staked amount. This direct reward system incentivizes users to contribute to the ecosystem's stability and accessibility.

Node Staking, on the other hand, targets users operating resolution clients, offering them the opportunity to stake in the node rewards pool. The rewards for Node Staking are calculated based on the staked amount and the availability of the resolution client, aligning incentives with the network's performance and reliability. However, it's important to note that the Node Staking feature is currently under development, with its release planned for future stages of the project.

In total, approximately **40%** of the Space Tokens minted are earmarked for Staking Rewards — equally divided with **20%** allocated to the Browser Rewards Pool and **20%** to the Node Rewards Pool. This distribution strategy underscores the Hashtag protocol's commitment to rewarding its community, ensuring a balanced and equitable allocation of incentives for both referral and staking activities, thereby promoting a robust and engaging ecosystem.

# Summary

**The Hashtag protocol**, as delineated throughout this white-paper, stands at the forefront of blockchain innovation, offering a comprehensive suite of services that redefine the landscape of domain name services and digital asset management. Through the strategic implementation of decentralized technologies, Hashtag introduces a groundbreaking approach to domain ownership, management, and utility, distinguished by its unique tokenomics model.

At the core of Hashtag's offering is the **Decentralized Domain Name Service (HDNS)**, which leverages smart contracts to facilitate the seamless minting, management, and resolution of domains. This service not only empowers users with unparalleled control over their digital assets but also enhances the domain's utility by incorporating metadata and keyword functionalities. The integration of the Hashtag Token Distribution System further enriches the ecosystem, providing a dynamic and responsive economic model that rewards participation and fosters community growth.

**The Space Token**, pivotal to the Hashtag protocol's tokenomics, underpins transactions, rewards, and governance within the ecosystem. Its supply, intricately tied to domain purchases and governed by a unique multiplier formula, ensures a dynamic and responsive token economy. This economy is further supported by an innovative bonding curve mechanism, which serves as a platform for token exchange and liquidity management, directly correlating the token's value with the protocol's adoption and success.

**The Rewards Distribution Schedule**, encompassing Referral and Staking Rewards, exemplifies the protocol's commitment to incentivizing community engagement. Referral Rewards encourage ecosystem expansion through domain referrals, while Staking Rewards offer multiple avenues for earning, including Browser Plugin Staking and Node Staking, aligning user contributions with network performance and reliability.

**In summary**, the Hashtag protocol emerges as a unique and revolutionary platform within the blockchain domain, characterized by its innovative tokenomics model. It not only provides a decentralized and user-empowered approach to domain name services but also establishes a robust and equitable rewards system that incentivizes community participation and growth. As the protocol continues to evolve, it promises to unveil new services and features, further cementing its position as a leading force in the decentralized digital landscape.

