



Ecosystem Blueprint "Powered By GalaChain"

V1.0

Intro Letter

Dear Galaxians,

Welcome to the Gala Blueprint.

We are all here because we have all invested our hearts and souls into developing Gala as a shared vision. There are, of course, people taking screenshots of the word “invested” right now, but the reality is that we ARE emotionally and ethically invested in what we are building. The dream that is Gala was born out of a collaboration among professionals in gaming and blockchain, driven by a shared frustration with the industry norms. Our team saw a need for change — from the way gamers invest their time in games with little return, to the struggles of game developers in acquiring users with minimal reward. Gala was conceived as an innovative solution to these challenges.

As we reflect on our origins in gaming and entertainment, it's crucial to recognize that our vision extends far beyond these domains. What we have built at Gala is not just about games, gaming, music, or film; it's about fundamentally reshaping and revolutionizing the blockchain industry. Our efforts culminate in the creation of our L1 blockchain, GalaChain, which is more than a technological innovation — it's a catalyst for ushering in a new epoch in technology. GalaChain isn't just an addition to our offerings; it's a pivotal milestone that positions us at the forefront of blockchain evolution. It embodies our commitment to pioneering a transformative era in blockchain technology, one that transcends traditional boundaries and paves the way for a future where blockchain is integral to various facets of digital interaction and creation.

As we advance toward new heights in this transformative journey, we again express heartfelt gratitude to our community, especially our Gala Gold members. Your unwavering support, insightful feedback, and active participation continue to shape Gala's trajectory every day. Your enthusiasm and belief in our vision propel us to new heights. Gala Gold members play a pivotal role in our development, offering valuable insights and fostering a vibrant, engaged community. Your dedication and commitment contribute significantly to our achievements and will drive us towards future innovations. As we venture into this new era of technology with GalaChain, we recognize and celebrate the contributions of our community, particularly Gala Gold, as integral to our success and evolution.

This document is intended to provide a background for new members and a vision for our long-standing community, guiding our future endeavors. Come along with us, and learn what is in store for the future.

Sincerely,
The Gala Team

It's Complicated...

"We will always do what is in the best interest of the ecosystem, no matter what." - Benefactor

Very few people who have not been part of a large-scale development effort truly understand the nature of development. This is why we want to put this here as a reminder that this document serves as a dynamic roadmap, guiding the future development of Gala and other parallel initiatives. It is important to note that the contents of this document are not set in stone. As technology advances and unforeseen circumstances arise, adjustments and adaptations may be necessary. The dates provided are estimations, reflecting our goals and targets. While we strive to adhere to these timelines, they are subject to change based on evolving project needs and external factors. This flexible approach ensures that we remain at the forefront of innovation, adapting efficiently to new challenges and opportunities that emerge along our journey.

Who are we?

First and foremost, at the heart of our endeavor lies our community, whose involvement and support are the lifeblood of our progress. However, it's equally important to acknowledge the robust leadership steering this ship. Our team is composed of experienced and battle-tested individuals, each bringing a wealth of knowledge and expertise to the table. This blend of seasoned leadership and community-driven insight forms the cornerstone of our approach, ensuring that every decision and innovation is both visionary and grounded in real-world applicability. As we move forward, the synergy between our committed community and our adept leadership team continues to be our greatest asset, guiding us through uncharted territories in the blockchain landscape. This harmonious balance is what sets us apart and drives our success.

While Gala encompasses diverse ventures like Gala Games, Gala Film, and Gala Music, each playing a significant role in our ecosystem and community, the true ambition of Gala extends far beyond the realms of entertainment. These sectors, while vital, are components of a much larger vision. The primary focus of Gala is on the expansive growth and development of the underlying protocol that powers our ecosystem. This broader objective is about leveraging the potential of blockchain technology to create a versatile, decentralized platform that transcends entertainment and impacts a variety of industries. It's about building a foundational technology that fosters innovation, community engagement, and a new wave of digital interaction across multiple sectors, not just confined to gaming, film, or music.

While there are some people who are seen as being key players in the management of Gala, including Benefactor, BitBender, SageMaker, Price, and many more, what makes Gala who we are is the whole community of builders and creators supporting the growth of the ecosystem.

Where (and why) we started: Entertainment Roots

While it is true that many of the founders and leaders at Gala are deeply integrated into the games industry, Gala's foray into the gaming industry was a strategic decision which was influenced by the unique demands that gaming places on blockchain technology. The gaming sector presents an unparalleled level of chain usage requirements, far surpassing many other industries. To put this into perspective, the port of Shanghai, one of the busiest in the world, processes an impressive 47 million container units annually. While this seems like a lot, the reality is that these requirements are absolutely dwarfed by gaming.

Take Fortnite as an example. This popular game boasts over 30 million monthly players and up to 1.5m concurrent users. Each of these players engages in multiple transactions per gaming session that could potentially be recorded on a blockchain. These transactions range from in-game purchases to character customization and more, each representing a potential "chainable" event. The volume of these transactions is staggering when multiplied across millions of players and daily interactions.

Another illustrative example is Zynga's Farmville, which, at its peak, saw up to 34 million daily active users (DAU). The sheer number of transactions and interactions within such a game presents a monumental challenge for any blockchain technology.

Most existing blockchains are not equipped to handle this magnitude of load. They were designed with different use cases in mind, ones that do not typically encounter the transactional volume generated by popular online games. Recognizing this gap, we developed GalaChain with a specific goal: to robustly support the demands of web2 gaming and all industries beyond. By creating a blockchain capable of handling the high transaction volumes and complex interactions of modern online games, we set a benchmark for scalability and efficiency.

GalaChain's design premise is simple yet ambitious: if it can seamlessly support the intensive requirements of web2 gaming, it can handle virtually any other application or industry demand. This approach ensures that GalaChain isn't just another blockchain solution; it's a versatile, high-capacity platform ready to tackle the most demanding challenges across various sectors. Our journey began with gaming, but the potential applications of GalaChain extend far beyond, offering a robust and scalable solution for a myriad of industries and use cases.

Where we are Going: The Coming web2 and web3 Synthesis

In our vision for the future of technology, we foresee a gradual but inevitable shift in the way we understand and refer to web3 and cryptocurrency. These terms, currently prominent in the tech lexicon, are likely to undergo a transformation, much like other technological innovations have in the past. We anticipate that the specific terminology of 'web3' and 'cryptocurrency' will gradually fade into the background, becoming integrated and indistinguishable from the broader scope of technological adoption.

This evolution will mirror the path taken by technologies such as TCP/IP, a foundational internet protocol that, while crucial, operates largely unnoticed by the average user. The rise and integration of TCP/IP into the fabric of internet technology offer a compelling parallel. Initially, TCP/IP was a distinct and notable advancement, but over time, it became an integral, almost invisible part of the internet's infrastructure. We envision a similar trajectory for web3 technologies. In the realm of gaming and entertainment, the current distinction made by the prefix 'web3' will eventually dissolve.

The future will see 'web3 gaming' and 'web3 entertainment' seamlessly merging into the broader categories of 'gaming' and 'entertainment', without the need for differentiation based on the underlying technology. This convergence of web2 and web3 is not just inevitable; it's a development that we believe will be tremendously beneficial for the industry. However, to realize this potential, the transition must be smooth and user-friendly.

The key to this transition is effective onboarding – ensuring that users can seamlessly integrate into this new technological paradigm without the barriers of complex jargon or intricate technical understanding. At the core of our efforts with GalaChain and the wider Gala Ecosystem is this very goal of facilitating a smooth transition into this new era. We are dedicated to creating a platform and an ecosystem where the transition between web2 and web3 is not just natural but also intuitive and effortless. Our focus is on building a framework where the advanced capabilities of web3 are harnessed to enhance the user experience, making the underlying technology an enabler rather than a barrier. This approach, we believe, will not only advance the industry but also accelerate the widespread adoption and appreciation of this next phase of technological evolution.

The \$GALA Token

The \$GALA token serves as the foundational digital utility token within the expansive Gala Ecosystem. Its introduction is aimed at facilitating a seamless, secure mode of payment, settlement, and incentivization among participants engaging within the Gala Ecosystem's network.

The ERC-20 \$GALA token operates under the governance of its designated contract, located at the Ethereum address 0xd1d2Eb1B1e90B638588728b4130137D262C87cae. In terms of management, the \$GALA token employs a Gnosis multisig safe, a secure arrangement ensuring that no single team member has unilateral access. This system reinforces the principle of collective oversight and enhances operational security. Furthermore, \$GALA is committed to maintaining the highest standards of governance and compliance. To this end, we actively collaborate with several esteemed international accounting and regulatory agencies. This collaboration ensures that \$GALA consistently aligns with internationally recognized best practices, cementing our commitment to good governance and adherence to global regulatory standards.

It is crucial to understand that \$GALA is not an indicator of shareholding, participation, rights, title, or interest in Gala Games or any of its affiliates, nor in any other entity. Holding \$GALA does not confer any entitlement to fees, dividends, profits, or investment returns, and should not be viewed as a form of securities. The primary purpose of \$GALA is its utility within the Gala Games and Entertainment ecosystem, and it does not bestow any rights, either explicitly or implicitly, upon its holders.

\$GALA acts as the vital driving force behind the Gala Games and Entertainment ecosystem. It serves as the primary reward mechanism for Founder's Nodes, accruing \$GALA daily subject to meeting the stipulated distribution requirements. \$GALA enables users to acquire NFTs and purchase licenses for various nodes, including Founder's Nodes, through the Gala Store.

The \$GALA token is designed for transferability, empowering users with full autonomy over its utilization. \$GALA is present across multiple blockchain platforms, such as Ethereum and GalaChain. Within the L1 GalaChain Blockchain, \$GALA functions as the network fee, facilitating fee payments for chain usage outside of the norms and bridging to other blockchains like Ethereum.

The GALA Tokenomics Model

The genesis of all \$GALA tokens occurs as a reward for the operation of Gala Games Founder's Nodes. This reward mechanism is structured such that it is evenly distributed, for the time being, with a 50:50 split between the Founder's Node Operators and the Conservatorial Entity. Gala, as the Conservatorial Entity, receives a portion of the distribution for their role in curating and maintaining the platform. While plans are in place for the eventual full decentralization of the network and reduction of this segment of the distribution, economic and legal review of this has not been completed and this plan will be released in the future.

As Gala does not maintain a large wallet in reserve or as a "premine" like many ICO-founded projects, the sole support for the Gala entity comes from this distribution. Common categories that are funded from this allocation include development costs, headcount, marketing, physical events, partnerships and licensing, sustainability initiatives, and anything else that helps support and grow the Gala Ecosystem.

The maximum total supply cap for \$GALA is set at 50 Billion tokens. The daily emission rate of \$GALA is dynamically adjusted based on the Circulating Supply. This Circulating Supply is subject to decrease when \$GALA is used as gas within the Gala ecosystem or when it's expended in ecosystem-supportive activities, like purchasing specific NFTs.

The current emission rate of \$GALA is determined by a variable daily emission formula, which takes into account the totalSupply of \$GALA on the blockchain. An increase in the totalSupply (indicating more \$GALA emission than burning) results in a reduced emission rate. Conversely, when certain milestones in totalSupply are achieved, a halving event is triggered automatically. If the totalSupply dips below a previously reached halving point, the emission rate may increase to align with demand. This interplay between emission rate adjustment and totalSupply reduction establishes a dynamic, responsive supply system. This system not only ensures long-term ecosystem rewards for the Founder's Nodes, instrumental in supporting the ecosystem, but also imposes a balancing effect on the totalSupply, exerting a downward pressure on the token quantity in circulation.

The basic Emission Tranches are as follows:

Total Supply (\leq)	Total Daily Distribution
25,000,000,000	68,493,150.6849315
37,500,000,000	34,246,575.3424658
43,750,000,000	17,123,287.6712329
46,875,000,000	8,561,643.83561644
48,437,500,000	4,280,821.91780822
49,218,750,000	2,140,410.95890411
49,609,375,000	1,070,205.47945205

...etc. This continues on forever.

\$GALA commenced its emission to Founder's Nodes in 2020, notably without any preceding token sale or premint phase. The project embarked on its journey with self-funding, completely independent of any external investment rounds.

As of now, the Gala Games team holds approximately 2 billion \$GALA in a reserve, securely managed through a multisig contract located at the Ethereum address `0xaB4a1fF6B3C029F47baAe511d304050787E77521`.

It's essential to highlight that, apart from this modest reserve, the Gala Team does not possess any additional \$GALA tokens. In a significant move on May 15th, 2023, the Gala Games team executed the burning of approximately 20.9 billion tokens from the Total Supply. This burn, which included all \$GALA revenue previously received and nearly the entirety of reserve \$GALA initially designated as Founder's Node rewards, was valued at an estimated \$660 million at that time. This decisive action was taken as a part of the team's renewed commitment to transparency and sustainability within the Gala Games community, a pledge that was reiterated following the introduction of the new \$GALA contract on May 15th, 2023.

It is important to note that due to the function of burning bridges and the way the tokenomics system is structured, burns do not impact maxSupply, but only impact totalSupply.

Understanding Supply: The Different Types of Supply

There are three different supply numbers which are relevant to the distribution of \$GALA and which are, generally speaking, poorly understood by the blockchain world. In the three definitions below, these numbers get smaller as they go down, with maxSupply being the largest and circulatingSupply being the smallest.

maxSupply: This is the total number of tokens that can ever exist at any given time. In the case of \$GALA, this number is 50,000,000,000 tokens, and this number is not impacted by burns. This is tracked as "cap" on the \$GALA contract on Ethereum.

totalSupply: This is the number of tokens existing at any given moment, including locked tokens or tokens not in circulation. This number is tracked as "totalSupply" on the \$GALA contract on Ethereum. Indexing from the Ethereum side only does not take the GalaChain supply into account.

circulatingSupply: This is the number of tokens in circulation. It does not include any tokens that are locked and not immediately part of what is moving easily. This number can be found by going to the Circulating Supply API Endpoint at <https://links.gala.com/circulatingSupply>. It is important to note that unlike the other contract calls on the Ethereum blockchain, which will only pull data from Ethereum, this is an aggregated data source that shows GalaChain and Ethereum, so there may be instances where the totalSupply as seen on Ethereum is lower than the circulatingSupply as seen on both chains combined depending on usage.

Understanding these three numbers is critical to understanding how the whole tokenomics structure of the GalaChain ecosystem works.

Understanding Emissions: Burn-and-Mint

In this diagram, there are three primary processes to understand:

1. End User Burn Transaction:

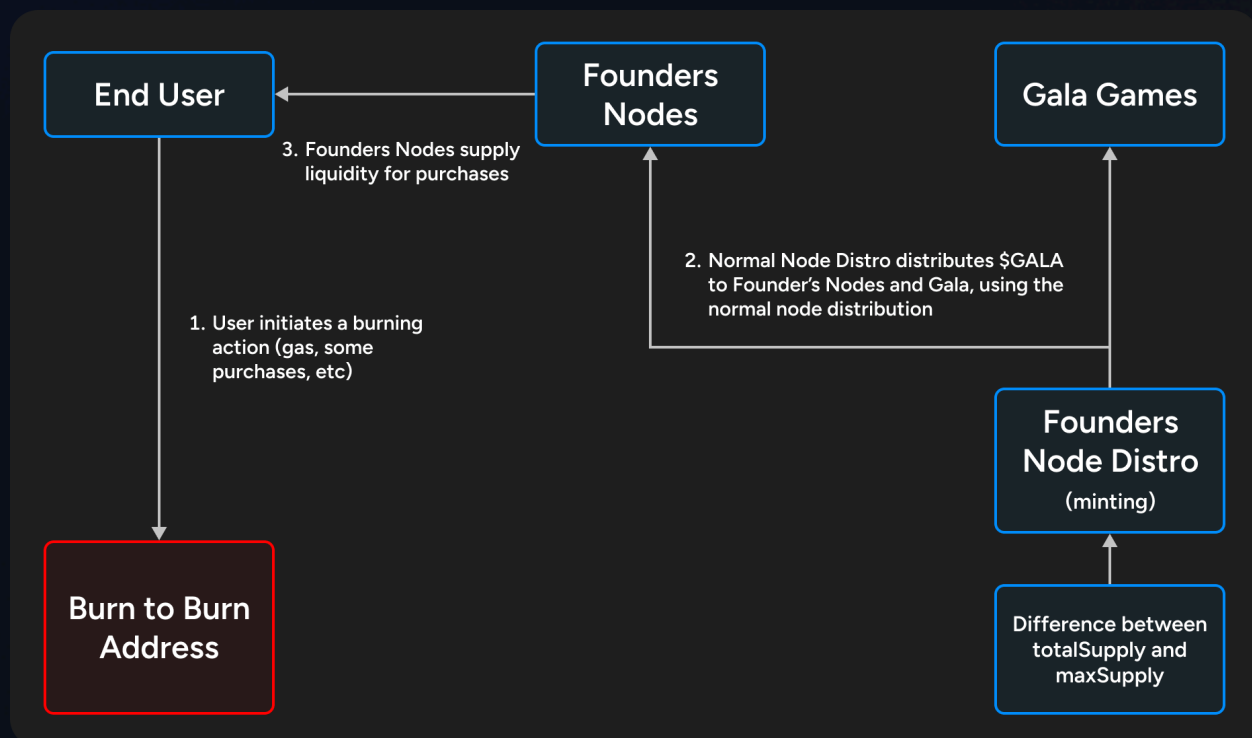
Here, an end user interacts with the platform, initiating a burn transaction by sending GALA tokens to a general burn address. The Gala Platform Indexer records this transaction as an ecosystem-supporting action. Once executed, these tokens are irretrievable and permanently removed from circulation, which is the essence of a token burn. Again, as this is a commonly misunderstood function, it is important to note that due to the function of burning bridges and the way the tokenomics system is structured, burns do not impact maxSupply, but only impact totalSupply.

2. Founder's Node Distribution:

This distribution is conducted using the unminted supply of GALA (calculated as $\text{maxSupply} - \text{totalSupply}$). Importantly, this distribution quantity is not affected by any prior burns. The supply that was burned does not impact the normal distribution process and only factors into the supply calculations as per the scheduled halvings. Or, to put it simply, tokens that are burned are not immediately reminted via the Founder's Node Distribution. Only nodes that meet the minimum requirements on any given day are eligible to receive a portion of the distribution.

3. Market Liquidity from Founder's Nodes:

After receiving GALA, Founder's Nodes have the freedom to utilize these tokens as they see fit. Over time, a portion of this GALA naturally flows into the open market, becoming available for purchase by end users who wish to use it on the platform. This process contributes to the overall liquidity and availability of GALA in the market.



Note:

The term "burn" in the blockchain space is often misunderstood, particularly due to its misleading use by projects originating from Initial Coin Offerings (ICOs). In an ICO scenario, the maxSupply and totalSupply of a token are initially the same, as all tokens are minted up to the maxSupply at the start. Post-ICO, it's common for projects to burn any unsold tokens, which reduces the totalSupply but not the maxSupply – the latter remains unchanged as per the original contract. While projects often publicize such burns with statements like "we burned 50% of all tokens!" and receive much acclaim for it, it's important to note that these actions do not alter the maxSupply. This distinction is crucial for understanding the true impact of token burns in the context of ICOs.

The Gala Founder's Nodes

Founder's Nodes are the backbone of the Gala Ecosystem, pivotal in supporting and facilitating a multitude of workloads. These nodes are not limited to singular functions; instead, they are dynamic components that adapt to the evolving needs of the ecosystem. As of the time of publication, they are instrumental in providing storage solutions and play a crucial role in the global IPFS Distributed Hash Table Routing, collectively accounting for approximately 85% of the IPFS ecosystem's routing footprint. This is important because the GalaChain ecosystem is quite literally supporting a large percentage of the decentralized internet. Without the GalaChain Founder's Nodes, IPFS would not be nearly as performant as it is currently.

The scope of Founder's Nodes operation is also set to expand considerably. In the near future, Founder's Nodes are expected to undertake critical responsibilities in bridge transactions and chain security, among other key functions. This expansion will not only enhance the efficiency and capabilities of the Gala Ecosystem but also solidify the position of Founder's Nodes as integral, multifunctional pillars that sustain and drive the entire network. Their versatility and capacity to adapt to various roles make them essential to the robustness and agility of the ecosystem, ensuring its readiness to meet both current and future challenges.

One key responsibility the Founder's Nodes have in the GalaChain Ecosystem is a gating of the token minting process. If fewer than 20,000 Founder's Nodes are online and meet requirements during any given distribution period, then the distribution does not happen. The work performed by the Founder's Nodes is critical to the long-term viability of the network, both in terms of scale of the network for performing ecosystem supporting functions and individually for the operation of what are currently termed GalaChain "Isochains."

In this network, the consensus vote is a key feature, offering Founder's Node operators the chance to participate in decision-making processes. These votes often pertain to the distribution of \$GALA or other significant ecosystem decisions. Operators can access information about ongoing and historical votes through their Gala Node Dashboard. While these voting opportunities are currently curated by Gala, there is a roadmap towards greater decentralization. This progression will enable groups of Founder's Node operators to propose items for collective consideration, fostering a truly decentralized decision-making process.

In the evolving landscape of GalaChain, the role of a Founder's Node License is set to expand significantly. It is designed to empower license holders with the right to operate a peer within the GalaChain ecosystem. This development marks a notable progression in the utility and importance of Founder's Nodes, transitioning from their current function to a more integral role in the blockchain network. Operating a peer on GalaChain, however, comes with increased responsibilities and requirements, particularly in terms of computational capabilities, as peers support the primary channels of GalaChain.

The total supply of these Founder's Nodes is capped at 50,000 licenses - any increase or decrease would be subject to a governance vote. The majority of these licenses are held by the community. All voting is transparent and captured in a publicly digestible format in our Discord.

Note:

It is essential to understand that owning a Founder's Node is not an investment in Gala as an entity. These nodes are designed to be the foundation of the upcoming decentralized revolution. This means that in scenarios where Gala is faced with a choice between bolstering the platform or enhancing node owners' earnings, our commitment firmly lies with supporting and advancing the platform. The ethos behind a Founder's Node is to prioritize the integrity and development of the platform, ensuring its role as a cornerstone in the landscape of decentralized technology.

GalaChain

Gala's purpose-built L1 Blockchain, GalaChain, represents a significant leap in blockchain innovation, crafted to cater to a wide range of industries. This versatility is evident in its design, which is geared towards meeting the needs of various enterprise-level projects, encompassing sectors from gaming and finance to healthcare and supply chain management. GalaChain stands out for its efficiency, delivering near-real-time settlement with low gas fees and sub-second latency, ensuring rapid and cost-effective transactions.

At its core, GalaChain is built on the robust foundation of Hyperledger Fabric (HLF), which places emphasis on a secure and scalable blockchain environment. In the web2 world, companies like Honeywell, Walmart, Bosch, and others utilize HLF for their permissioned private blockchains. This stability is coupled with the flexibility for customization, allowing the platform to be tailored specifically to the unique requirements of each project, without burdening them with superfluous features. Moreover, GalaChain is environmentally conscious, designed to consume significantly less energy than other platforms while offering superior computational capabilities. This is complemented by its developer-centric nature, where contracts and tokens can be efficiently created using TypeScript, reducing the onboarding friction for developers not conversant in Solidity. The platform further simplifies the development process with a newly-released public SDK and custom chaincode templates, making it more accessible for developers. Security is a paramount focus in GalaChain's development, and the platform is currently undergoing a comprehensive security audit and certification process.

The Node Ecosystem of GalaChain is another cornerstone of its architecture, offering versatile computing capabilities. Beyond standard computations, GalaChain Ecosystem Founder's Nodes support complex, decentralized tasks that can be custom-built to specific project needs. These nodes offer a unique approach to project monetization, avoiding the complexities of traditional ICOs and reducing central costs. The effectiveness of these node workloads is not theoretical; they are proven, serving as the backbone for existing applications and top-tier games. Developed by experts who have built some of the largest gaming networks globally, the Node Ecosystem offers unparalleled experience and scalability, allowing projects to expand their node network to the desired size, potentially eliminating datacenter and cloud hosting expenses.

GalaChain transcends the realm of buzzwords, focusing on delivering practical, refined tools that meet the dynamic demands of the decentralized landscape. It's a platform designed for real-world applications, providing solutions that align with varying levels of expertise. For those seeking a blockchain platform that truly understands and addresses their needs, GalaChain represents an ideal choice. With GalaChain, the next phase of decentralized applications is not just a possibility; it's an imminent reality.

Speaking of buzzwords...

Transactions Per Second: Measuring the performance of a blockchain solely based on Transactions Per Second (TPS) can be misleading, as this metric is susceptible to distortion by including a high volume of trivial or non-meaningful transactions. It's a simplistic measure that often overlooks the quality and complexity of the transactions being processed. In contrast, GalaChain is designed to manage far more intricate business logic compared to other chains, showcasing its advanced capabilities beyond just

transaction speed. The speed of transactions on GalaChain is tailored to the specific requirements of each channel, allowing for optimal resource allocation based on the unique needs of different applications. Furthermore, GalaChain's architecture is engineered for a great deal of scalability, both horizontally and vertically. This scalability means that in practical terms, the TPS on GalaChain is virtually limitless. This capacity to scale endlessly, coupled with its ability to handle complex transactions, positions GalaChain as a robust and versatile blockchain platform, transcending traditional performance metrics like TPS.

Validators: In the blockchain world, the role of a validator is crucial for maintaining the integrity of the network. Validators are tasked with verifying transactions, ensuring their legitimacy before they are recorded on the distributed ledger. In Proof of Work (PoW) systems, such as Bitcoin, these validators are often referred to as miners. Their job involves solving intricate computational problems, a process through which they earn the opportunity to verify transactions. Successfully doing so not only contributes to the network's security and reliability but also earns them rewards for the computational "work" they have performed. This mechanism is a fundamental aspect of PoW blockchain systems, underpinning their operation and security.

However, GalaChain, based on Hyperledger Fabric, sets itself apart from many distributed blockchains like Ethereum and Bitcoin, which are non-permissioned and rely on probabilistic consensus algorithms, susceptible to ledger forks due to discrepancies in transaction order. In contrast, GalaChain employs a specific type of node called an orderer, part of an ordering service, and utilizes deterministic consensus algorithms. This approach guarantees that any block validated by a peer is final and accurate, thus eliminating the risk of ledger forks inherent in many other distributed, permissionless blockchain networks.

This architectural choice not only guarantees finality but also enhances GalaChain's performance and scalability. By separating the endorsement of chaincode execution, which occurs at the peer level, from the ordering process, GalaChain avoids the bottlenecks that can arise when both tasks are handled by the same nodes.

Looking ahead, the long-term vision for GalaChain involves Founder's Nodes rotating the role of orderers within the network. This rotation will be supported by a network of trusted partners responsible for maintaining the peer nodes, ensuring a balanced and efficient system.

Understanding Burning Bridges

The GalaChain Ecosystem has been designed with a unique approach to counter the systemic risks associated with wrapped assets, particularly those risks that are inherent in traditional bridging mechanisms. This design philosophy stems from a careful analysis of several incidents within the industry, where the vulnerabilities of conventional bridges have been starkly highlighted. In response to these vulnerabilities, GalaChain employs a method known as "Burning Bridges," a strategic measure to enhance security and integrity within the ecosystem.

"Burning Bridges" in this context refers to a specific process employed during bridging transactions. Unlike traditional methods where tokens are collateralized and "wrapped" during the bridging process, in

the GalaChain Ecosystem, the tokens intended for bridging are irreversibly burned by sending them to a null address. This approach has significant security implications. By burning the tokens, rather than temporarily storing them or using them as collateral, the system effectively eliminates the risk of these tokens being compromised in the event of a security breach.

The GalaChain Ecosystem's approach to bridging transactions represents a thoughtful and proactive stance towards asset security. By opting for token burning over traditional collateralization methods, GalaChain sets a new standard in safeguarding assets during cross-chain transactions, reflecting a deep understanding of the industry's past challenges and a strong commitment to mitigating similar risks in the future.

In the near future, GalaChain plans to evolve its approach to bridging transactions by leveraging the capabilities of the Founders Node ecosystem. This significant development will enable the approval and distribution of bridging transactions across the network of Founders Nodes, harnessing their collective power and efficiency. Alongside this, there is an ongoing discussion about the potential requirement for a lock of GALA for processing financial transactions. This consideration is part of our continuous effort to enhance security and stability within the ecosystem. While this feature is still under deliberation, it reflects our commitment to exploring innovative solutions that align with the evolving needs and safety of our users and the integrity of the GalaChain network.

The Triumvirate of Gala Greatness

The Gala Ecosystem is a multifaceted structure, technologically segmented into three distinct areas: Chain, Nodes, and Platform, each with its own unique set of responsibilities and objectives. Despite operating with individual roadmaps and Key Performance Indicators (KPIs), these segments are united by a common mission: to collaboratively and comprehensively develop the Gala Ecosystem.

The Chain Team is focused on the development and refinement of GalaChain, preparing it for public use. Their primary task is to ensure the blockchain is robust, scalable, and secure, ready to support the diverse needs of users and developers. The Chain Team's roadmap is dedicated to advancing the underlying technology, optimizing performance, and ensuring GalaChain remains at the forefront of blockchain innovation. Items connected to the Chain Team are flagged on the roadmap below as **(CHAIN)**.

In parallel, the Node Team is tasked with the development of workloads and tools necessary for users to deploy their own projects and applications. This team is instrumental in creating an environment that is not only user-friendly but also powerful and versatile, enabling users to leverage the full potential of GalaChain. The Node team works diligently to ensure that deploying and managing applications on the GalaChain is accessible, efficient, and secure, catering to a wide range of use cases. Items connected to the Node Team are flagged as **(NODE)** on the roadmap below.

Meanwhile, the Platform Team concentrates on the management and expansion of the ecosystem's self-service functionalities. This involves developing and enhancing the interfaces and systems through which users interact with the Gala Ecosystem. The Platform team's goal is to streamline the user experience, making it intuitive and seamless for users to engage with the various aspects of the ecosystem, whether it's for gaming, content creation, or other blockchain-based applications. Items relating to the Platform Team are flagged as **(PLATFORM)** on the roadmap below.

Together, these three teams form the backbone of the Gala Ecosystem, each contributing its expertise and innovation towards a shared vision of a comprehensive, user-centric, and technologically advanced ecosystem. Their collaborative efforts ensure that Gala remains not just a leader in the blockchain space, but a pioneer in shaping the future of decentralized technology applications.

The Roadmap

As we embark on this journey together, it's important to remember that our roadmap is an outline of our aspirations and goals. While our dedicated teams of engineers are working tirelessly to bring this vision to life, it's essential to understand that this roadmap is a 'best guess' estimate and is subject to change. In the complex world of development, some milestones are interdependent; a shift in one area can sometimes lead to adjustments in others. However, we are committed to transparency and clarity in our progress. To this end, we are exploring the possibility of publishing a live roadmap, complete with work percentages, to provide you with real-time insights into our development journey. This will offer a more dynamic view of our progress and the exciting developments we have in store.

Quarter 1, 2024:

- **(RELEASED) SDK:** Produce an SDK to allow developers to work and build on GalaChain without needing special support from the GalaChain Development Team. **(CHAIN)**
- **Public GalaChain Analytics Dashboard:** The planned creation of a Public GalaChain Analytics Dashboard is set to offer comprehensive insights into the network's performance and activities, enhancing transparency and data accessibility for users and developers within the GalaChain ecosystem. **(CHAIN) (PLATFORM) (NODE)**
- **Founder's Node NFTs:** This transformation will allow for greater flexibility and innovation in how these nodes are utilized and managed, further empowering node operators within the Gala ecosystem and facilitating the decentralization of risk across the ecosystem. **(CHAIN) (PLATFORM) (NODE)**
- **(RELEASED) Public Indirect Query API for GalaChain:** The creation of a Public Indirect Query API for GalaChain aims to enhance accessibility and interaction with the blockchain, allowing users and developers to perform complex queries with greater efficiency and convenience. The v1 of this is available currently, but a much more performant version will be released in the first quarter of 2024. **(CHAIN) (PLATFORM) (NODE)**
- **(RELEASED) Hackathons:** Hold hackathons throughout the year allowing people to join the GalaChain Ecosystem to build on both Chain and Nodes. Initial hackathons will be focused on GalaChain, with Node Hackathons coming later in the year. **(CHAIN) (NODE)**
- **Bridge Validators:** The development and deployment of a Founder's Node workload responsible for maintaining and securing the bridge between different blockchain networks, increase security and decentralization. This approach not only bolsters network integrity but also aligns with requirements for decentralized frameworks. **(CHAIN) (NODE)**
- **Infrastructure API:** The Infrastructure API, complemented by a Command Line Interface (CLI), streamlines the process of deploying channels and chaincode, facilitating seamless integration of these components into the platform's infrastructure. **(CHAIN) (PLATFORM)**
- **[REDACTED]**

Quarter 2, 2024:

- **Web3 Authorization:** This will empower users to interact with GalaChain through both platform and dapp-style interfaces, utilizing MetaMask-like tools for seamless connectivity and enhanced engagement with the ecosystem. **(CHAIN) (PLATFORM)**
- **Chaincode Verification via Nodes:** Nodes will validate Chaincode deployments for GalaChain by testing to make sure that the chaincode runs correctly. Faulty chaincode that does not run will not receive the approval of the Founder's Node ecosystem and will not be able to be deployed on GalaChain. **(CHAIN) (NODE)**
- **GalaChain Gateway:** The GalaChain Gateway serves as a pivotal public endpoint, enabling developers and users to effectively call chaincodes, thereby facilitating streamlined interactions within the GalaChain ecosystem. **(CHAIN) (PLATFORM)**
- **GalaChain Explorer:** The GalaChain Explorer is designed as a specialized tool for users to view and analyze the current state of the chain, offering transparency and insight into the ongoing transactions and activities within the GalaChain ecosystem. Opening it up to a community bounty first will also test to make sure all information is available and transparent to the community. **(CHAIN) (PLATFORM)**
- **Gala Creators Platform Launch:** Everything that happens in the GalaChain Ecosystem is initially deployed through the Gala Creators Platform, whether this is a new chaincode deployment, a new music artist, or a content creator deploying special content for their community. This will all happen through a single interface. **(CHAIN) (PLATFORM) (NODE)**
- **Gala Platform Unity SDK:** The development of a Unity SDK for the GalaChain ecosystem marks a significant advancement for game developers building on Unity, offering them robust tools for creating immersive and interactive experiences within the GalaChain gaming universe. **(CHAIN) (PLATFORM)**
- **\$GALA (and other token) Purchases within Games:** The optional integration of \$GALA purchases within games is anticipated to play a pivotal role in the Gala ecosystem. Such an integration will not only enhance the gaming experience but also align with the long-term vision of the Gala Games ecosystem, reinforcing its utility and economic stability. **(CHAIN) (PLATFORM)**
- **Node Bonus Vote Implementation:** The allocation of bonus points in the Founder's Node Ecosystem is anticipated to bring a new level of engagement and decision-making power to node operators, further democratizing the network's operational dynamics. **(CHAIN) (PLATFORM) (NODE)**

Quarter 3, 2024:

- **Node Workload Development SDK:** The future release of an SDK for node workload development is a crucial step in the evolution of the Gala Games ecosystem. This SDK will enable the creation of game-specific nodes, as well as nodes to perform other activities for those entering the ecosystem. **(CHAIN) (PLATFORM) (NODE)**
- **Chaincode Template Bounty Program:** The establishment of a Chaincode template bounty program within the GalaChain ecosystem signifies a proactive step towards encouraging innovation and collaborative development among the community developers. **(CHAIN)**
- **GalaChain Open Source Initiative:** The open sourcing of GalaChain is expected to enable greater community involvement in development, foster innovation through collaborative contributions, and enhance the overall robustness and diversity of the GalaChain ecosystem. GalaChain will be open sourced and added to Github for anyone to use and edit commercially, provided they retain \$GALA as a gas fee for the ecosystem. **(CHAIN)**
- **AWS-style Setup and Configuration of Infrastructure:** The implementation of an AWS-style setup and configuration system for channels and chaincode on GalaChain is aimed at simplifying custom development, while simultaneously enhancing the decentralization of network components across nodes, thereby strengthening the network's robustness and efficiency. **(CHAIN) (PLATFORM) (NODE)**
- **Android SDK:** The future integration of the GalaChain SDK for Android is a forward-looking initiative aimed at broadening the scope of development within the \$GALA ecosystem. **(CHAIN) (PLATFORM)**
- **iOS SDKs:** The future creation of GalaChain SDKs for iOS is a significant step in expanding the \$GALA ecosystem and is intended to provide enhanced tools and resources for iOS developers. **(CHAIN) (PLATFORM)**
- **Platform Unreal SDK:** The future creation of an SDK for Unreal Engine for GalaChain will empower developers with advanced tools and capabilities, fostering the creation of visually stunning and technically sophisticated games within the GalaChain Ecosystem. **(CHAIN) (PLATFORM) (NODE)**

Quarter 4, 2024 and beyond:

- **Other Ecosystem Bridges:** Gala will be both building bridges to other prominent blockchain ecosystems, as well as leaning into community support to allow users to build some of their own bridges. This initiative is aimed at fostering interoperability and enhancing the utility of the Gala Games Ecosystem. **(CHAIN) (PLATFORM) (NODE)**
- **Custom Isochain Deployment on the Founder's Node Ecosystem:** Developers deploying Isochains on GalaChain will have the ability to spin up their own Isochain or channel based on the GalaChain's Founder's Nodes, with the option to select the number of Founder's Nodes for

deployment to achieve desired levels of resiliency. These nodes will receive a portion of the payments for both the establishment and the ongoing use of that Isochain, thereby incentivizing and rewarding their contribution to the network. **(CHAIN) (PLATFORM) (NODE)**

Non-Roadmap Items

There are some items that, while they are being worked on, are not directly under our control in terms of when milestones are met and announcements are made because we generally are not the ones doing the work. We are assisting with this work, but not directly in control of timelines. As such, we don't want to give a date for when they will be released.

- **Centralized Exchange Support of GalaChain:** This integration is designed to enhance liquidity and accessibility of the \$GALA token and other tokens on GalaChain by providing users with more options for trading and utilization within the Gala Games ecosystem. By connecting GalaChain with established centralized exchanges, Gala Games aims to bridge the gap between traditional financial systems and blockchain technology, thereby expanding the reach and impact of its innovative gaming, music, and film platforms. Individual exchange teams are working on this integration. **(CHAIN)**

Gas Fees

Note:

Presently, the gas fee structure is under active development, with the aim of optimizing efficiency and user experience. It is important to note that this structure is still evolving. As development progresses, the community can expect further updates, ensuring that the gas fee structure aligns with the dynamic needs of the GalaChain ecosystem and its users.

GalaChain, like all blockchains intended for public use, incorporates a gas fee structure. This structure plays a crucial role in managing network resources and preventing undesirable behaviors at both user and channel levels. In traditional public blockchains such as Ethereum, gas fees serve dual purposes: they incentivize miners and help manage network congestion.

Before going any further, it is important to note that in the GalaChain ecosystem, it is intended that average users conducting standard transactions within normal usage parameters should not be required to pay any gas fees. This policy ensures that typical interactions within the ecosystem are accessible and cost-effective for all users, fostering a user-friendly and inclusive environment. Channel owners are able to set their own fees for their specific channels, but by default there is not a flat fee applied to normal usage with the exception of [REDACTED].

The objectives of introducing a fee structure to GalaChain are multifaceted. Primarily, the fee structure aims to allocate network resources more efficiently, ensuring that the network operates smoothly and effectively. Additionally, the fee structure is designed to deter spamming and other forms of undesirable behavior, maintaining the integrity and security of the network. Another critical objective is to encourage optimal usage of the network, promoting responsible and efficient use of resources. Lastly, the fee system provides a sustainable source of income for node operators, contributing to the long-term viability and health of the network.

There are two main types of fees within the GalaChain ecosystem:

1. GalaChain Fees: These fees are specific to GalaChain and encompass both channel-level and user-level fees based on a variety of factors determined by actual chain usage.
2. Bridging Fees: These fees are associated with bridging out of GalaChain and involve costs to Gala, as the minting fee on the other side of the bridge is currently covered by Gala. For these transactions, Gala is reimbursed for the bridging costs, and any remaining amount is burned. This approach not only covers the operational costs but also contributes to the burning mechanism, aligning with the overall economic model of GalaChain.

The gas fee structure in GalaChain is designed to optimize network performance, deter undesirable activities, and support node operators, all while aligning with the broader economic principles of the GalaChain ecosystem.

Gas Fee Components

The gas fee structure in GalaChain is composed of several components, each contributing to the final fee calculation. This multifaceted approach ensures that the fees are accurately reflective of the various operational and network demands. Factors such as the computational power required for a transaction, the current network congestion, and the data storage needs are all taken into account. The basic components are:

1. **Base Fee:** A constant base fee for processing transactions, aimed at covering the costs incurred by the network nodes.
2. **Usage Weighted Fee:** A variable fee that scales with the frequency of transactions (specifically bridging transactions) based on a per-user and per-channel basis
3. **Dynamic Fee:** A variable fee that scales with the computational complexity of the transaction.
4. **Storage Fee:** Fee for the storage space utilized by a transaction on the blockchain.
5. **Channel Fee:** An additional fee incurred when transactions span multiple channels, or for using channels frequently identified for undesired activities.

User-Level Fees

1. **Transaction Fees:** Every user will incur a transaction fee when they submit a transaction to the network, calculated as:

$$\{Transaction\ Fee\} = \{Base\ Fee\} + (\{Computational\ Complexity\}) + \{Storage\ Fee\}$$

2. **Spamming Fee:** Users whose transaction rate crosses a certain threshold within a specified time window will be subjected to an additional fee.

Channel-Level Fees

1. **Cross-Channel Fees:** Transactions spanning multiple channels will incur an additional fee to discourage network-wide spamming.
2. **Behavior-Based Fee:** Channels frequently identified for hosting spam or undesired activities will have a higher base fee.

Fee Distribution

Fees should be automatically burned except where bridging fees are involved. In the case that users are using a channel established by a user, there may be channel fees as specified by that user. Users which have established channels can retain up to 50% of the fees in their channel as a means of generating revenue. The rest is burned. This is a significant incentive for projects to adopt GalaChain.

Other Fees

Channel Establishment and Node Ecosystem Establishment Fees will exist for standing up new segments of the ecosystem. These portions, still in testing, have not been fully established and cannot be shared at this time. These, however, will likely constitute a significant portion of the burn of \$GALA within the ecosystem.

Decentralization Plans

Since its inception, Gala has harbored a fundamental aspiration to fully transfer control of its ecosystem to the Founder's Nodes and the broader community. This vision aligns with the core principle of decentralization, striving to create an ecosystem that is driven and governed by its users. The plan outlined for this transition, while representative of Gala's target and intent, remains adaptable. It is crafted with the understanding that the regulatory landscape is dynamic and ever-evolving, and as such, the plan may undergo modifications to align with these changes. However, the underlying goal remains steadfast – to establish an ecosystem where decision-making and governance are in the hands of the Founder's Nodes and the community, reflecting Gala's commitment to a decentralized future.

The Decentralization Spectrum

In the evolving landscape of blockchain technology, the journey towards decentralization varies widely across different platforms. Understanding this progression is crucial in assessing the true nature and potential of a blockchain project. To illustrate this spectrum, we can consider a decentralization scale ranging from traditional web2 businesses to the future vision of GalaChain. This scale not only highlights the current state of various projects but also maps out the path of GalaChain's development and its commitment to achieving full decentralization. Each point on this scale represents a distinct stage in the journey from centralized control to a decentralized, community-driven ecosystem.

- **-3 - Every Traditional web2 Business:** Operates on a closed database, offering no transparency to users or the public.
- **-2 - Many "web3" Projects:** Utilize a private blockchain fully controlled by a single company, lacking decentralization.
- **-1 - Some "web3" Projects:** Run on a public blockchain, yet keep all assets within a closed ecosystem or 'walled garden'.
- **0 - GalaChain Q1 and Q2 of 2023:** Initially starts as a permissioned blockchain, with plans for decentralization and a publicly visible ledger.
- **1 - GalaChain Q3 of 2023:** Remains a permissioned blockchain but introduces processes to progressively decentralize authority.
- **2 - GalaChain Now:** Offers public access through a provided Software Development Kit (SDK), enhancing accessibility.
- **3 - GalaChain H2 2024:** Features governance decisions that are proposed and voted on directly on the blockchain.
- **4 - GalaChain Future:** Envisions a system where funding for developers to execute decisions in the service of the network is controlled and distributed on-chain, embodying true decentralization.

Currently positioned at a "2" on the Decentralization Spectrum, GalaChain is making strides towards a future where the network's operations and development work are predominantly managed by the Founder's Nodes. This progression towards a higher level of decentralization is a critical aspect of GalaChain's long-term strategy. The vision is to transition from a partially decentralized state to one where the Founder's Nodes take a more central role in running the network. This shift entails not just the technical management of the blockchain but also a significant portion of the developmental

responsibilities. By empowering the Founder's Nodes in this way, GalaChain aims to create a more distributed, resilient, and community-driven network. This evolution is a testament to GalaChain's commitment to decentralizing not just in theory but in practical, tangible ways, progressively entrusting the community with greater control and responsibility over the ecosystem.

Regulatory Compliance

At Gala, adherence to regulatory compliance is a cornerstone of our operations. We recognize that our unique approach sometimes prompts questions and even expressions of frustration, especially regarding why we do not have features like native staking or do not permit discussions about price speculation in our official channels.

To provide clarity, below is a summary of key points that underscore our commitment to regulatory compliance. We view regulation in the industry as an inescapable reality and are dedicated to aligning our practices with all applicable guidelines and directives. Our goal is to navigate the regulatory landscape proactively and responsibly, ensuring that our operations not only meet but anticipate the standards set forth in this evolving field.

- **No Token Sale or ICO:** Gala does not conduct token sales or initial coin offerings (ICOs) for \$GALA.
- **No Facilitating Speculation:** Gala does not permit speculation or “price chat” in any of our chats.
- **Limited Token Holdings:** Gala does not maintain a significant percentage of tokens with the hope of increasing their value.
- **No Staking Program:** Gala does not offer a staking program for its tokens.
- **No Promised Returns:** GALA tokens are intended solely for use within the Gala ecosystem, and Gala does not promise any form of financial return.
- **No Direct Trading of GALA:** Gala does not facilitate direct trading of GALA tokens.
- **No Custodial Control:** Gala does not hold or control users' tokens, ensuring users have full control over their GALA tokens.
- **Collaborative Development:** Gala recognizes its reliance on a network of developers and emphasizes its role as a curator rather than asserting exclusive authority over the project.

Conclusion

In conclusion, this document presents a visionary framework for the future of blockchain technology, with GalaChain and the Founders Nodes at its heart. GalaChain, a purpose-built layer 1 blockchain, stands as the cornerstone of this ecosystem, designed to power a new era in Web3 Gaming, Entertainment, and beyond. It exemplifies innovation with its adaptable transaction speed, infinite scalability, and capability to handle complex business logic, transcending traditional performance metrics.

Together, GalaChain and the Founders Nodes create a synergistic relationship that drives the ecosystem forward. This blueprint is not just a roadmap for Gala's future but a testament to the potential of blockchain technology to revolutionize industries and redefine the digital landscape. As GalaChain continues to evolve and integrate into more platforms, and as the network of Founders Nodes expands, the Gala Ecosystem is poised to set new benchmarks in the blockchain world, offering a flexible, secure, and user-centric platform for the next generation of decentralized applications.

Change Log

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