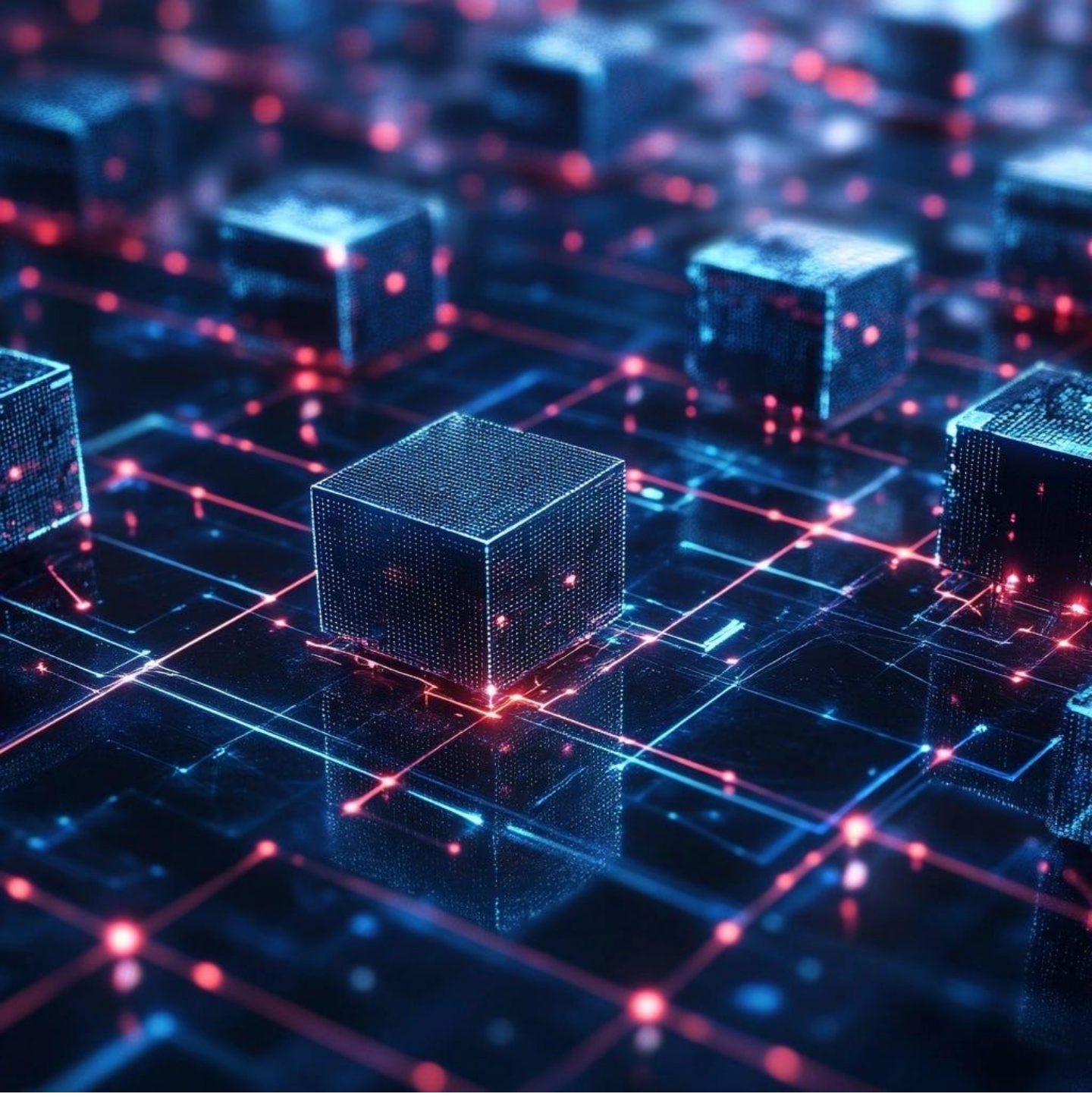
HASHCOW

HashCow Whitepaper

Contents

Abstract

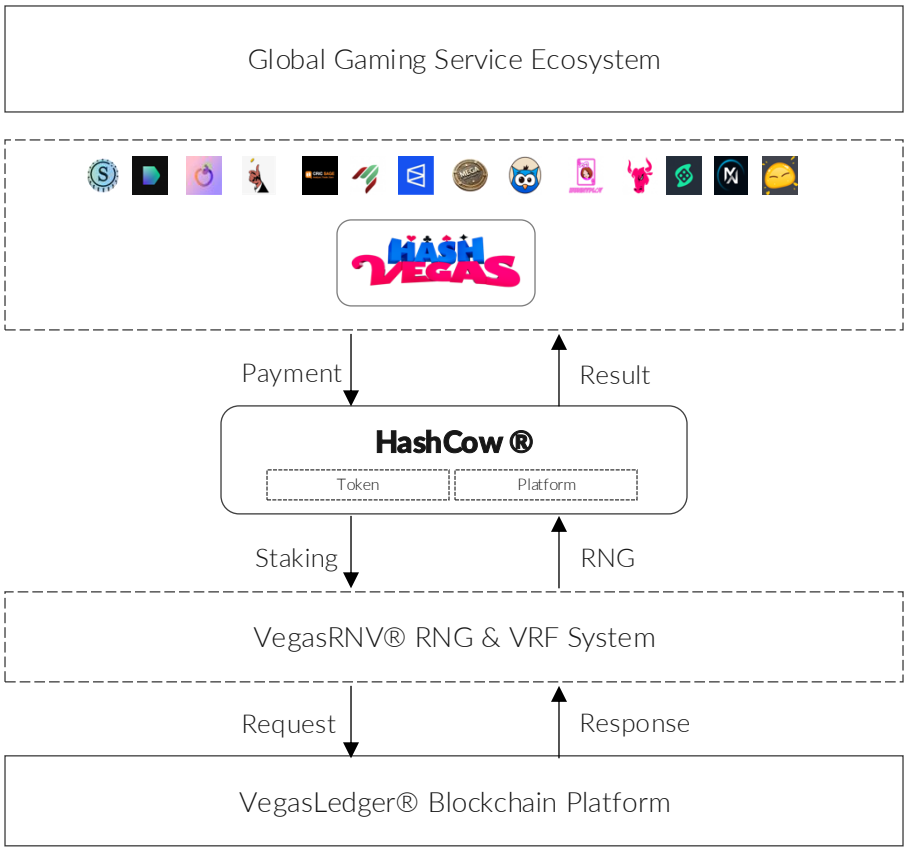
The HashCow® aims to revolutionize the blockchain gaming ecosystem by introducing blockchain-based cryptocurrencies as the primary means of transaction and expand it into a blockchain gaming platform that integrates a wide range of games. This white paper describes how HashCow®'s key features, RNG and VRF, can be leveraged to increase the reliability and transparency of blockchain-based gaming services. At the center of this ecosystem is the VegasLedger blockchain platform, with advanced cryptographic technology and user cheat prevention solutions from leading services such as HashVegas running on top of it. This paper presents a model of the evolution of the blockchain gaming ecosystem implemented on HashCow®, and present the core technology and new token economy model for its implementation.



1

Executive Summary

1 HashCow Token Economic Model Overview



<Figure 1. Diagram of the HashCow Token Economic Model>

The HashCow project is designed to transform the global gaming services ecosystem by leveraging blockchain technology, with a focus on creating a token economy model that improves fairness and transparency within the gaming industry, starting with native flagship services((in-house developed gaming product)) and expanding to a broader blockchain gaming platform in the future. The model has a unified structure centred around HashCow (HCOW), a utility cryptocurrency that fulfils multiple roles within the VegasLedger blockchain platform.

Unlike traditional gaming solutions, HashCow leverages blockchain-backed RNG and VRF technologies to provide verifiable transparency, faster transaction confirmation, and significantly lower costs, positioning itself as an innovative leader within the Web3 gaming industry.

HCOW token will be utilised as payment for gaming service providers to generate fair outcomes using technologies such as random number generators (RNGs) and verifiable random number functions (VRFs). This ensures the integrity and fairness of the game, and serves as a key utility asset in the HashCOW ecosystem.

VegasLedger, built upon Hyperledger Fabric, was specifically chosen for its enterprise-level capabilities, including superior transaction speeds, modular architecture, advanced scalability, and robust security. This makes it ideally suited to gaming projects and enterprise-level applications that demand provable fairness and high-performance transactions.

The HCOW token is used on the VegasLedger blockchain to operate the network and earn rewards for node participation. A consensus algorithm based on Delegated Proof of Stake (DPoS[1]) allows node operators to stake HCOW and earn rewards for maintaining network stability and security.

Within the HashCow ecosystem, HCOW functions as a utility token for a variety of purposes, including game outcomes, network validation and operation and is designed to achieve long-term scarcity and appreciation through a mechanism of decreasing circulation and burning.

1) Delegated Proof of Stake (DPoS): A consensus algorithm in blockchain networks where token holders elect delegates to validate blocks on their behalf instead of participating directly in network validation. Token holders stake their tokens and select a delegate based on their percentage. The elected delegate is responsible for creating blocks and validating transactions and is rewarded for doing so. The main advantage of DPoS is its high processing speed and efficiency, which allows for fast block generation because a small number of representatives perform network validation.

2 Key goal and vision for the project

The goal of the HashCow project is to leverage blockchain technology to significantly enhance fairness, transparency, and trust within the blockchain gaming ecosystem. To achieve this, we have developed the VegasLedger blockchain platform, which provides a secure and reliable system for both gaming service providers and end-users.
Additionally, HashCow plans to expand and integrate various game genres into the blockchain gaming platform, starting with our native flagship services. This strategic expansion aims to leverage blockchain technology to drive innovation across the broader gaming ecosystem.

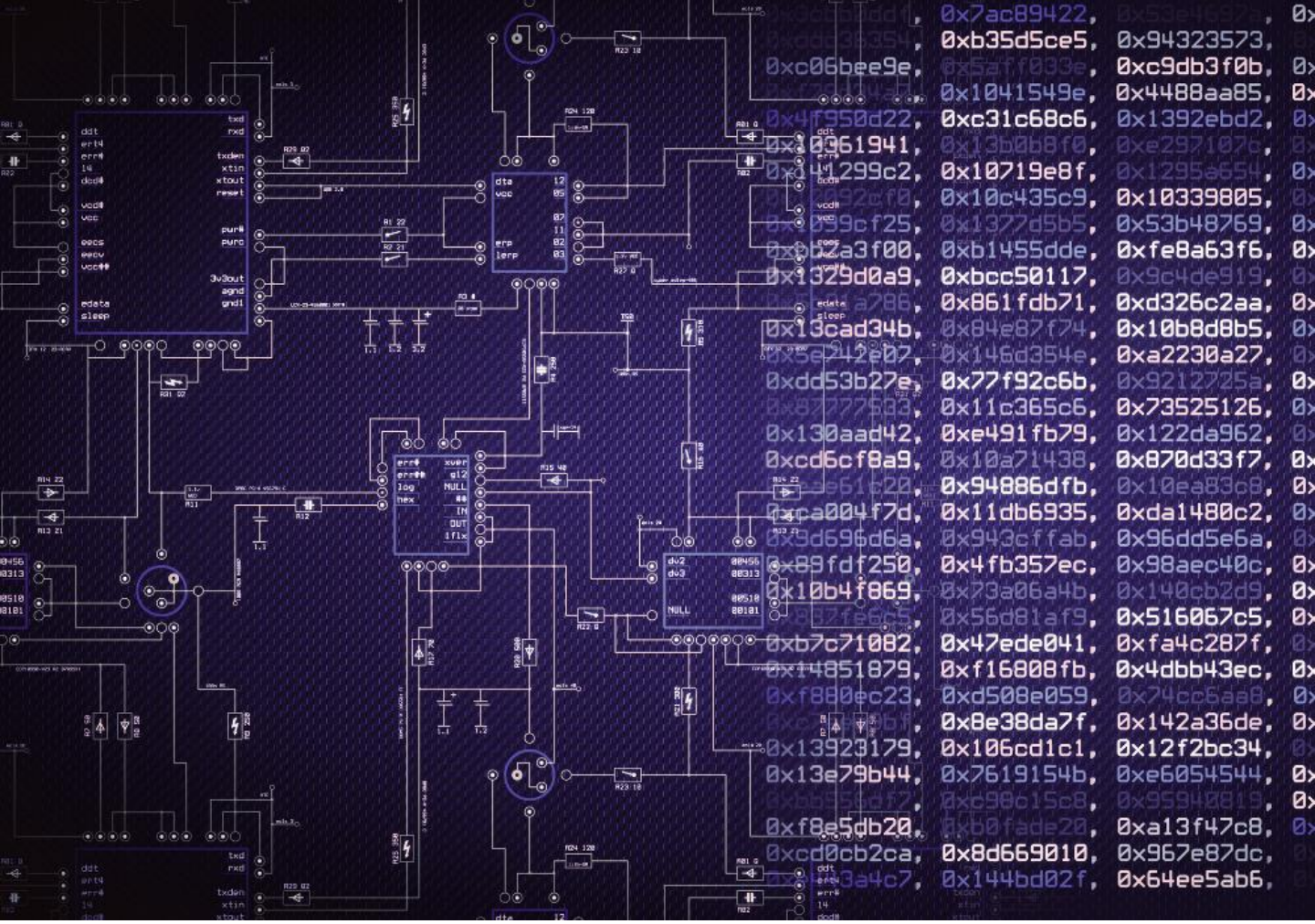
1) Key skill development goals
VegasLedger Platform: HashCow's proprietary blockchain technology provides a distributed ledger platform specifically tailored for blockchain gaming service providers. The VegasLedger platform incorporates the VegasRNV (RNG and VRF Modules), offering an integrated, verifiable, and unpredictable random number generation and verification system.

HCOW Utility Token: Introduce the HCOW token, which serves as a payment method and network participation incentive for blockchain gaming services. The HCOW token enables rewarding node operators and facilitates payments related to RNG and VRF transactions for generating verifiably fair game outcomes.

Native Flagship Service: Independently develop flagship gaming services, such as HashVegas®, and build robust integration mechanisms with the HashCow platform.
Each native flagship service can establish independent policies related to HCOW, aimed at increasing the token’s utility and overall ecosystem value. Such individual service policies are recognized separately and remain independent from the general policies outlined within this HCOW white paper.

2) HashCow Project Vision
HashCow aims to establish itself as a global leader in blockchain gaming platform services, fostering diverse gaming experiences and strategic partnerships. We strive to provide users with a safe, reliable, and fair gaming environment while ensuring efficient operations and stable profitability for gaming service providers.

Specifically, HashCow addresses prevalent issues in existing gaming ecosystems, such as a lack of fairness, transparency, and limited token utility. By implementing blockchain-based RNG and VRF technology across various gaming genres—including casual, RPG, and strategic games—HashCow aims to establish a comprehensive and sustainable Web3 gaming ecosystem.



2

Core Concept of HashCow®

1 HashCow Token Definition

HashCow (HCOW) is a digital payment method used by blockchain game service providers to invoke RNG and VRF systems necessary for producing fair and unpredictable game results.

The HCOW token is not only utilized to derive game results within the HashCow (HCOW) token economy model, but also serves as the foundational currency for multiple ecosystem services, including information exchange, data collection and analysis, and marketplace payments within the HCOW platform. Initially introduced through native flagship services, the HCOW token is strategically designed to broaden its utility to a wider array of gaming applications in the future, enabling integration with diverse use cases such as marketplace transactions, cross-platform data sharing, and enhanced analytics.

The HCOW token is the exclusive native token of the HashCow ecosystem—a multifunctional digital asset fulfilling a variety of roles including network participation, node operation, service access, and reward earning. HCOW operates on the VegasLedger blockchain and possesses the following key features and purposes.

2 The Primary Purpose of the HashCow Token

1) Ensuring fairness and transparency in games through RNG and VRF Functionality

HCOW is a consumable asset for random number generation (RNG) and verifiable random function (VRF) systems, which play an essential role in ensuring fairness and transparency within gaming environments.

Game service providers can utilize RNG and VRF systems by depositing HCOW token, enabling the creation of unpredictable and tamper-proof gaming services on the HashCow platform.

This protects game users from potential random number manipulation and probability distortion, allowing operators to deliver stable and trustworthy gaming experiences.

2) Ensuring the sustainability of the VegasLedger blockchain network

The VegasLedger network leverages HCOW staking to validate transactions and generate new blocks, safeguarding the network against external attacks and manipulation.

The increased amount of staked HCOW contributes directly to the sustainability and stability of the network, thereby enhancing the long-term credibility and growth potential of the VegasLedger blockchain.

This sustainability sets the stage for future expansions into diverse gaming ecosystems and supports cross-platform integration and scalability.

3) Node System Operations and Staking Rewards

HCOW holders can participate in node operations through staking. By staking HCOW token, users contribute directly to maintaining network security and data integrity, earning regular rewards in return.

Representative nodes operators can earn additional revenue through validation and transaction processing activities on the network.

This reward model provides incentives for operators to participate actively over the long term, contributing to mechanisms that reinforce the long-term value appreciation and scarcity of the HCOW token.

Such mechanisms enhance HCOW's intrinsic value and lay the groundwork for broader adoption across other blockchain-based gaming platforms.

4) Sustaining the HashCow Ecosystem

HashCow leverages cryptographic technology to guarantee the randomness of game outcomes and ensure data immutability, fundamentally eliminating the possibility of unfair gaming practices or manipulation.

HCOW plays a pivotal role in maintaining ecosystem integrity by securing game fairness and building trust between operators and users.

As the ecosystem evolves, HCOW's utility is expected to expand further into additional gaming services, supporting functionalities such as cross-game asset management, marketplace transactions, and diverse platform integrations. These developments reinforce HCOW's central and strategic role within the blockchain gaming landscape.

3 Functions and features of the HashCow Token system

The HCOW token-based system maintains the following core functions and features for participants within the gaming services ecosystem.

1) Unpredictability Random Number Generation

To ensure fairness and unpredictability in games, the HashCow token system utilizes Random Number Generation (RNG) and Verifiable Random Function (VRF) technologies. This allows game service providers to reliably base game outcomes on genuinely unpredictable random numbers.

The RNG system generates completely random stochastic elements for every game, while the VRF validates the accuracy and integrity of these random numbers, eliminating any possibility of outcomes being tampered with or predicted.

This process is explicitly designed to prevent external manipulation or interference, ensuring each game remains entirely fair and trustworthy.

This method of generating random numbers gives players confidence that game outcomes are calculated fairly, and it represents a critical component of fairness assurance. In the future, this technology may be extended beyond gambling games to support fair game mechanics across various gaming genres, thereby expanding the HashCow platform's utility.

2) Fair Probability-Based Outcome Generation

The HashCow system enables users to invoke RNG functionality by paying with HCOW token, thereby generating random numbers used to determine game outcomes based on fair probabilities.

As both the random number generation and outcome determination processes occur directly on the blockchain, the entire operation is managed transparently and securely without any potential for manipulation.

This transparency establishes trust between game providers and players, ensuring all participants receive results determined by fair and equal probabilities. Moreover, these fairness mechanisms can be effectively adapted to reward systems, in-game loot distributions, and other scenarios within broader blockchain gaming ecosystems.

3) Ensure immutability of random results

Gaming service providers use HCOW token to guarantee that once random outcomes are determined, they cannot be altered. This immutability reassures players that the game results have not been manipulated.

All random results are permanently recorded on the blockchain, using HCOW tokens to facilitate this immutable recording process, thus maintaining the integrity of game outcomes.

Random results recorded on the blockchain cannot be manipulated, and HCOWs are used to accomplish this process.

4) Transparent Game Log Records

The HashCow system records all game transactions and outcomes transparently and permanently on the blockchain, enabling participants to fully verify gameplay processes independently.

For instance, players can access their complete history of random results directly on the blockchain, independently verifying the fairness of each game outcome. This ensures transparency throughout the gaming experience, allowing users to participate with confidence and trust.

4 HCOW Issuance Network: VegasLedger Blockchain Platform

1) The Role of the VegasLedger

The VegasLedger blockchain platform serves as the core infrastructure for operating HCOW, managing token supply, burning mechanisms, network security, fairness, and economic sustainability.

VegasLedger maintains the value and utility of HCOW token through its DPoS-based structure and RNG/VRF technology, forming a crucial foundation that ensures trust and stability within the HashCow ecosystem.

VegasLedger performs the following core functions within the HashCow platform ecosystem.

2) Core Features of VegasLedger

VegasLedger's core features provide enhanced transparency and trust compared to existing blockchain platforms. Its technological advantages address the unique issues of fairness and probability manipulation within the gaming industry, setting a new global standard.

i. Transaction Processing and Validation

Recording game transactions: VegasLedger processes and records all game outcomes and related transactions, ensuring integrity and transparency for both participants and operators.

Transaction validation and consensus: Transactions are reviewed and recorded in blocks by validating nodes through a DPoS consensus algorithm, ensuring high-performance, real-time verification, and reliability.

ii. HCOW Token Management

VegasLedger manages the burning, and reward distribution of HCOW token. It provides a reliable digital asset management system, enabling token holders to securely manage their assets.

iii. System for Ensuring Fairness and Transparency of Game Outcomes: VegasRNV®.

The VegasLedger blockchain platform includes the VegasRNV® (RNG and VRF Modules), a dedicated module allowing game service providers easy access to RNG and VRF functions.

The VegasRNV® module ensures fairness and transparency by generating and verifying immutable random numbers. This system can also support broader gaming scenarios, such as fair item distribution and Play-to-Earn (P2E) mechanics.

Detailed information about VegasRNV® is provided in Chapter 4.

iv. Node Rewards and Incentive Distribution

Validator reward distribution: Validators receive HCOW rewards for maintaining the network and validating transactions. Nodes selected through DPoS receive rewards automatically distributed by VegasLedger for block generation and transaction processing.

Node operator and general staker rewards: VegasLedger implements an incentive model rewarding users who participate in node operations or regular staking activities. The system automatically manages reward distributions according to the staked amount.

Detailed policies regarding node operation and reward acquisition mechanisms are further outlined in Chapter 3, "3) HCOW Reward Acquisition Mechanism and VegasLedger Node Operation Policy".

3) Computing Architecture: Hyperledger Fabric

VegasLedger utilizes the Hyperledger Fabric architecture with a DPoS consensus algorithm to achieve high transaction processing speeds and robust data security required in the gaming ecosystem.

Hyperledger Fabric's modular, flexible framework allows for customized configuration, enabling an optimized architecture tailored specifically to VegasLedger's requirements. For example, independent data sharing between network participants can be securely implemented through distinct channels, beneficial for restricting data access based on individual games or services.

As the HashCow ecosystem expands across diverse gaming platforms, Hyperledger Fabric's modularity facilitates seamless adaptation to evolving use cases and network demands.

Technical details and mechanisms of the architecture are thoroughly discussed in Chapter 4.

3

HashCow(HCOW) Token Economic Model

1 Token Issuance and Distribution Plan

1) HCOW Token Issuance Process Overview

The HashCow (HCOW) token is a native utility token initially issued as an token during the initial token sale phase by the HashCow Foundation.

i. Token issuance and initial sale

To increase accessibility to the project for early investors, HCOW will be issued as tokens and distributed via smart contracts. The initial distribution will be through a private and public sale process, allowing early investors to acquire HCOW tokens without directly affecting the circulating supply.

2) Token sale process

Overview: HCOW's token sales are publicized on HashCow's official website or through token issuing partners.

Eligibility and Conditions: The token sale is available to all investors interested in the HashCow project. Participation may be subject to restrictions based on the token sale platform's regulations or applicable local laws and regulations in the participant's jurisdiction.

Public Sale Transparency: The public token sale process is transparent and equitable, allowing broad participation under clearly defined terms and conditions.

Engagement Process:

What to do	Contents
Open a Token Sale Platform Account	Token sale participants open an account on the token sale platform (dedicated website) that will be made public by the Foundation.
Register to purchase tokens	Token sale participants register to buy based on their token purchase reservation or the announced start of the purchase.

Buying tokens	When the token sale begins, you can purchase HCOW token from the designated sale site. Purchases follow the guidelines on the sale site and are available until the sale ends.
Token distribution	Purchased HCOW tokens are distributed based on predefined criteria, which may include lock-up conditions. All distributions are automated via smart contracts to maintain transparency and fairness.

<Table 1. Token Sale Engagement Process >

Sale period: The specific sale schedule will be determined through consultation with each issuing platform, and details will be clearly announced on HashCow's official website and partner exchanges. Upcoming token sale schedules will be publicly announced in advance to allow ample preparation time for investors.

3) HCOW Token Distribution Plan

Distribution Items	Quantity	Ratio	Description.
Total issuance	200 million	100	No additional issuance
Public Sales	100 million	50	Volume circulating through the trading market after TGE There will be an allocated amount of tokens in the public sale, which will be detailed on the public sale sales page and announcement.
Private Sales	60 million	30	Supply in circulation to investors at the time of TGE[2)] transfer
Ecosystem & Marketing	20 million	10	Use for marketing campaigns and more to revitalize your ecosystem
Strategies	10 million	5	It is a strategic token allocated for the continuation of the HashCow project.
Liquidity	10 million	5	It is used to provide liquidity for stable HCOW trading.

<Table 2. HCOW Token Distribution Plan Table >

2) Token Generation Event (TGE) is the process by which tokens are created and distributed for the first time in a blockchain project. This is typically a critical step for cryptocurrency projects to raise funds and issue tokens and can be associated with methods such as Initial Coin Offerings (ICOs), Initial Exchange Offerings (IEOs), and Initial DEX Offerings (IDOs). The TGE is one of the key events in a project's roadmap, marking the moment when the project's tokens are first created and distributed to investors.

2 Other ways to acquire HCOW Token

1) Acquisition Through Trading Markets After Exchange Listing

HCOW token will be listed on major global exchanges following the Token Generation Event (TGE), allowing users to trade freely.

After listing, investors can easily buy and sell HCOW tokens on various exchange platforms, significantly enhancing liquidity and accessibility within the ecosystem.

The most up-to-date information about exchange listings will be available on the HashCow official website.

2) Rewards for Participating in VegasLedger Node Operations

HCOW token can be earned as rewards for participating in node operations within the VegasLedger network.

Users stake HCOW tokens to become node operators, thereby contributing to network validation and block generation, and receive regular rewards in return for their efforts.

Details on participating in node operations and staking rewards are further described in the relevant sections below.

3) Additional Acquisition Methods

Besides trading on exchanges or participating in node operations, HCOW token can be acquired through several other methods provided within the HashCow ecosystem

Marketing Campaigns and Airdrops: Users actively supporting marketing initiatives to expand and promote the HashCow ecosystem can earn HCOW tokens as rewards. For example, tokens are distributed to users who contribute via social media outreach, content creation, and community engagement activities. Additionally, during significant events or ecosystem updates, HCOW token may be distributed to new and existing users through airdrop events.

Eligibility criteria and participation details for airdrops will be announced through HashCow's official website and social media channels.

Community and Ecosystem Events: HashCow regularly organizes various community events, providing users opportunities to earn HCOW tokens.

Events such as trivia contests, AMA (Ask Me Anything) sessions, and feedback surveys allow participants to earn HCOW as rewards.

3 HCOW Reward Earning Mechanism and VegasLedger Node Operation Policy

1) Node Operations Policy Overview

The sustainable and reliable operation of VegasLedger is supported by the HCOW Foundation, which provides critical technical management and policy guidance. The Foundation is responsible for network security, regulatory compliance, software updates, and other essential operations to maintain system stability.

Node operators play a vital role by maintaining network reliability and decentralization through validating transactions and generating new blocks. Operators are classified into representative nodes and regular node participants, each contributing differently to the network's stability.

2) Representative nodes (supernodes)

Eligibility Requirements: To become a representative node (supernode) operator, a candidate must stake a minimum of 500,000 HCOW token. After meeting this requirement, the candidate must be approved by the Foundation to become a core validator responsible for transaction validation and block generation.

Restriction: HCOW tokens staked by representative node operators cannot be unstaked for a period of one year from the initial staking date.

Steps	Activities
Nominate	Eligible candidates submit an application through the Node Operator Registration Platform provided by the Foundation.
Foundation Review	Submitted applications undergo a compliance and technical eligibility review by the Foundation's team.
Final Authorization	Candidates meeting all criteria will be approved by the Foundation as node operators and subsequently provided technical training and installation support to join the network.

* At the beginning of the network's launch, the Publishing Foundation will operate the representative node for a limited time.

3) Regular users(Delegates)

Eligibility requirements and roles: Regular participants (delegators) indirectly contribute to network operations by delegating their HCOW token to representative nodes, helping enhance network stability and earning rewards. The minimum delegation required is 5,000 HCOW tokens.

Restriction: Tokens delegated by regular users are locked and cannot be unstaked for 6 months from the delegation date.

Delegation and Reward Procedures: Through the following set of procedures, a general user can delegate HCOW to a supernode operator to obtain delegator status and participate in node operations

Steps	Activities
Select a representative node	Users select a representative node to delegate their HCOW token.
Apply and register for delegation	Users stake a minimum of 5,000 HCOW to their chosen representative node, freezing the delegated tokens on the platform.
Managing smart contract-based delegation	Delegation status and amounts can be monitored through the user's wallet and platform interface. Delegated HCOW token remain locked until the user initiates a release request, subject to applicable release conditions.
Reward distribution	Regular participants periodically receive HCOW token rewards proportionate to their representative node's network contributions, automatically distributed via smart contracts. Rewards can be viewed directly on the user's wallet and platform dashboard.

<Table 4. Delegation and Reward Procedure for Regular Users>

4) Operating Expenses and Billing Policies

To ensure the network's stability and security, node operators may delegate node management to specialized operators, incurring operational fees in the process.

Operational billing: Representative nodes are billed quarterly for essential operational costs, such as network connectivity, server maintenance, and administrative expenses.

Payment Method: Operational expenses are payable in HCOW token, ensuring liquidity and supporting economic sustainability within the network.

Exemption for Regular Users: Operational fees are charged exclusively to representative nodes; regular delegators do not incur any operational costs.

5) Compensation and Contribution-based Incentives

Node operators receive HCOW token rewards based on their contributions to transaction validation and block generation.

The reward structure is determined by the total amount of HCOW token staked

i. Delegators contribute 10% of their earned rewards to their representative nodes in exchange for node management services.

ii. Representative nodes earn increased rewards proportional to the number of users delegating to them, incentivizing active node promotion and effective community management.

6) Rewards Payout Process

HCOW rewards are calculated daily and distributed through an automated smart contract (Balancing_Contract), ensuring transparency and efficiency.

Operators can verify their real-time contributions and reward allocations directly on the blockchain, maintaining accurate records of their earnings.

4 Deposit and Settlement Process for HCOW Tokens

As mentioned in the HCOW definition, gambling service providers utilize HCOW token to access RNG and VRF functionalities provided by VegasLedger.

Below is a detailed description of key economic interactions and examples based on HCOW tokens within the VegasLedger platform ecosystem..

1) Deposit of HCOWs for RNG, VRF usage

Game service providers must acquire and deposit a certain amount of HCOW token to access RNG and VRF functionalities for generating game outcomes.

Initially, Service providers are required to deposit a minimum amount of HCOW tokens that corresponds to the policies of each native project. This deposit is gradually deducted based on the amount of RNG consumed during gameplay.

2) Deposit debits and Replenishment

Deposited HCOW token are automatically deducted according to the RNG usage rate via the dedicated Deposit_Contract, and subsequently transferred to the designated contract address.

As deposits are consumed, game service providers must acquire additional HCOW tokens through various distribution channels such as public exchanges or peer-to-peer trading markets. These tokens can then be re-deposited to maintain uninterrupted service.

3) Settlement of paid HCOW token and the VegasLedger Node Operator

The Deposit_Contract conducts a regular settlement process, automatically transferring HCOW tokens according to a predefined allocation table. This settlement ensures accurate and transparent payments for RNG services rendered.

Ranking	Account name	Distribution rate	Contents
1	Node operators and staking	70	Rewards for running nodes
2	System operator	10	HashCow Platform Operating Costs
3	Burn address	20	Burning with a full deflationary policy

<Table 5. HCOW Payment Quantity Settlement Allocation Table >

4)The difference between Deposit and Staking in HCOW

i. Deposit HCOW

Purpose: Depositing HCOW token provides users access to specific services or platform functionalities (e.g., RNG, VRF).

Usage: Deposited tokens are consumed as a fee to access these functionalities.

Compensation: Deposits do not provide direct financial rewards or interest; they are solely consumed to use platform services.

ii. Staking HCOW

Purpose: Staking involves locking HCOW tokens to support network stability and security by enabling node operators and participants to engage in transaction validation and block generation activities.

Usage: Staked tokens serve as the foundation for validating network activities and are used to measure participants' contributions to network security.

Compensation: Stakers regularly receive HCOW token rewards as incentives for contributing to network operations and stability.

Separation	Deposit	Staking
Main purpose	Pay for network features	Network operations and compensation revenue
Lockout period	Flexible withdrawals	Stay locked for a period of time
Compensation structure	No additional rewards for deposits	Receive regular HCOW rewards proportional to your staking volume
Liquidity	Provides liquidity (easy to withdraw as needed)	Liquidity restrictions (requires unlocking process)
Network contributions	Not applicable	Key contributions to network reliability and validation
Key use cases	Deposits, service access for RNG/VRF functionality	Participate in node operations, generate long-term revenue, and contribute to network operations

<Table 6. Differences between Deposit and Staking in HCOW >

5 HCOW Token Valuation Policy

The HashCow ecosystem employs multiple mechanisms to ensure the long-term value appreciation of the HCOW token. The token's burn mechanism and fully deflationary model effectively increase HCOW's value by continuously reducing supply and enhancing token scarcity.

1) HCOW Burn Mechanism

Burn Policy: HCOW token are continuously burned at a defined rate as they are utilized for various network functions. This systematically reduces the circulating supply, thereby increasing token scarcity.

Conditions for burning: When game service providers use RNG/VRF functionalities or access specific network services, a certain percentage of the utilized HCOW tokens is permanently burned. This burning represents a consumption fee for services that ensure the fairness and transparency of game outcomes.

Economic impact of burning: Burned HCOW token are permanently removed from the total supply rather than transferred to a specific account or temporarily locked. This permanent reduction of circulating supply effectively increases the value of remaining tokens. As network activity grows, demand for HCOW naturally increases while the supply continues to decrease, driving sustained token appreciation.

2) Fully Deflation Model

Design of the deflationary model: HCOW tokens have a fixed total supply, with a portion continuously burned from circulation, following a fully deflationary economic model. This design allows for consistent token appreciation over time without minting additional tokens.

Enhanced deflationary effect: As the network expands and the user base grows, the frequency and scale of token burning increase, causing the circulating supply to decrease at an accelerated rate. This dynamic maximizes token scarcity and supports stable, long-term appreciation of HCOW's value, benefiting all token holders.

3) Burning Mechanism of Native Flagship Services

The HCOW ecosystem includes native flagship services such as HashVegas®, which integrate HCOW tokens into their business models.

Native flagship services plan to burn the HCOW tokens utilized under their own policies.

The specific details of the burn policy are individually defined by each native flagship service.

4) Aligning network growth with HCOW value

User activity and value growth: HCOW's burn mechanism and deflationary model operate continuously as network utilization grows. Increased use of HCOW by game participants and service providers leads directly to increased token burning, further reducing supply and enhancing token scarcity and value.

Long-term rewards and investment incentives: HCOW's valuation policy provides not only short-term usage incentives but also significant long-term investment value, rewarding token holders who maintain their holdings over extended periods. This policy promotes stable and ongoing benefits for both HCOW holders and network participants.

The HashCow ecosystem's HCOW burning and full deflation model aims to increase the token's scarcity and value over the long term. HCOW is naturally burned as the network activates and users grow, and the decreasing supply and increasing demand continuously drives the value upward. This ensures that HCOW maintains a high investment value over the long term and provides economic benefits to network participants.

6 HashCow Ecosystem Sustainability and Development Model

1) overview

The HashCow ecosystem is designed to ensure long-term sustainability, transparency, and fairness. The network's operations, development, and future enhancements are managed by the HashCow Foundation, which ensures compliance, stability, and efficient management without relying on decentralized governance models.

2) Structure for Stability and Growth

i. HashCow Foundation's Role

The HashCow Foundation oversees the strategic direction, operational policies, and ecosystem compliance, ensuring stable and reliable network operations. It manages critical tasks such as network security, software updates, regulatory adherence, and other essential ecosystem activities.

ii. Representative Nodes
Representative node operators (Supernodes) support network reliability and efficiency by validating transactions and generating blocks, under the Foundation's policy guidelines.

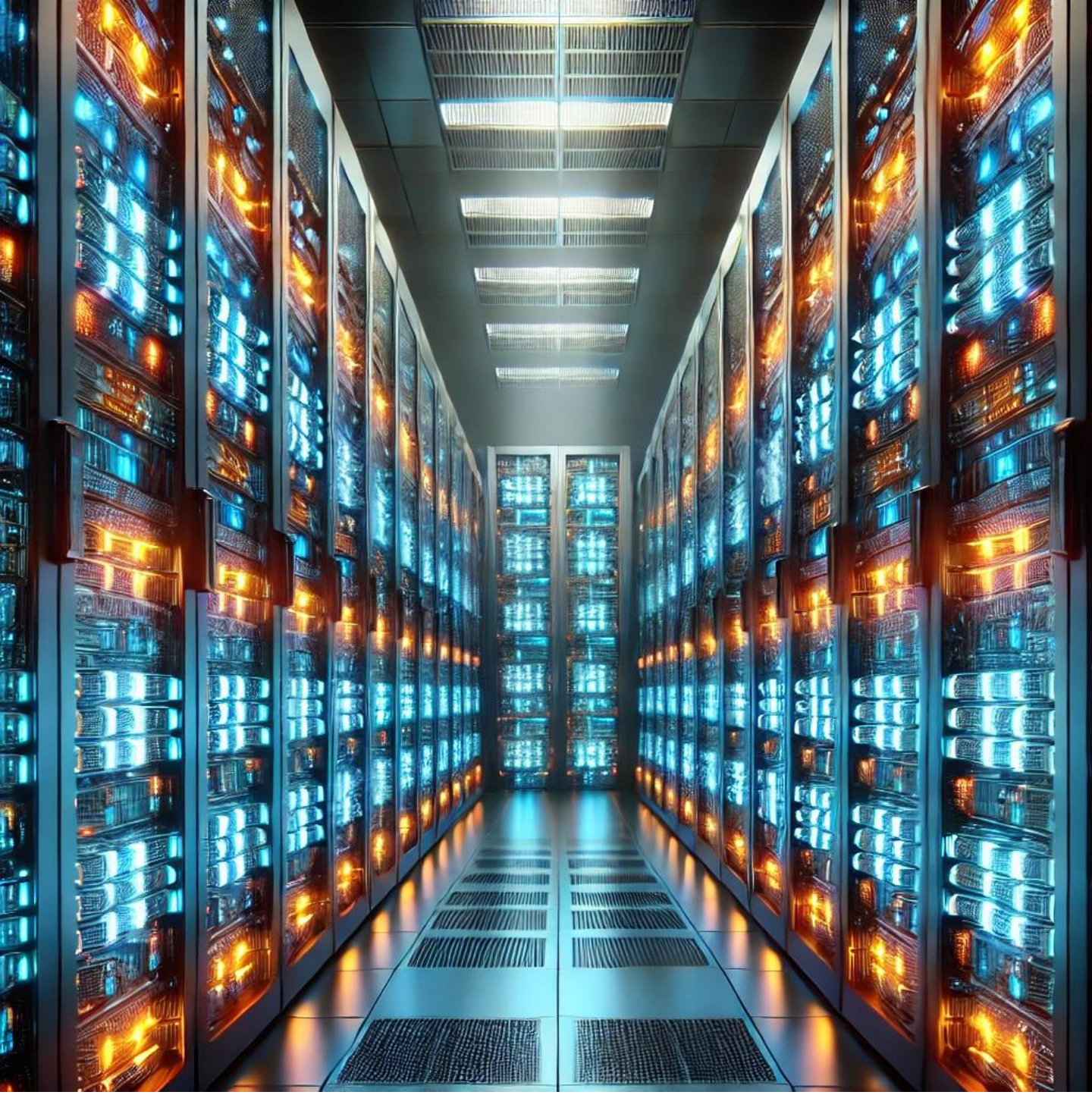
iii. Regular Participants:
Regular participants contribute to the network's stability through staking, thereby enhancing overall ecosystem health. Participants receive regular rewards based on their contributions.

3) Foundation led decision making and transparency

The HashCow Foundation maintains transparency by publicly disclosing key decisions, ecosystem developments, and operational changes through official announcements. Regular audits and transparent records ensure trust among ecosystem participants.

3) Long-term Ecosystem Goals

The primary goal of the HashCow ecosystem is to foster sustainable growth by maintaining network stability, transparency, and operational efficiency. Through strategic planning and effective management by the Foundation, the HashCow ecosystem aims to provide long-term value and consistent benefits for all stakeholders.



4

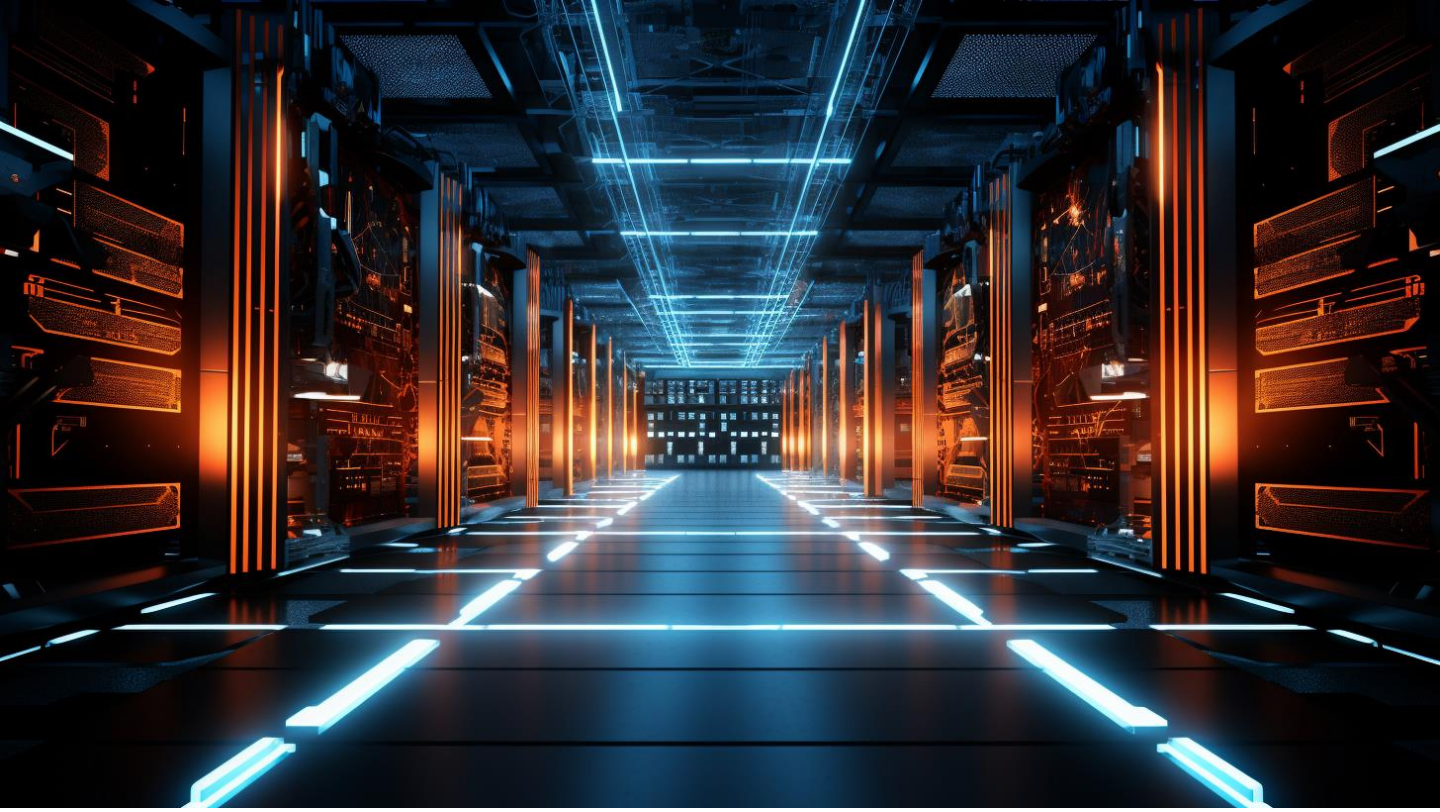
VegasLedger® Core Components and Architecture

1 VegasLedger Technology Overview

VegasLedger® is a blockchain gaming platform based on Distributed Ledger Technology (DLT), specifically designed to guarantee fairness, transparency, and security within gaming environments. It permanently records all gaming transactions—such as bets, outcomes, and settlements—as well as RNG-generated random numbers on a decentralized ledger. This distributed structure ensures data immutability, prevents manipulation, and maintains service continuity even in cases of partial network failure.

Built upon an optimized Hyperledger Fabric framework, VegasLedger offers exceptional transaction speeds, scalability, and user-friendly integration through APIs and SDKs. Its advanced multi-layer security architecture employs cryptographic hashing and algorithmic consensus to ensure data reliability and safeguard against unauthorized access or external threats.

Detailed technical specifications will be fully disclosed in the forthcoming VegasLedger Yellow Paper.



5

Service Ecosystem of HashCow and VegasLedger

1 Service Ecosystem Overview

1) Service Ecosystem Overview

The HashCow project is designed to set a new standard within the global blockchain gaming ecosystem by harnessing blockchain technology and cryptocurrency.

HashCow aims to create an innovative platform that significantly elevates transparency, fairness, and trust within the blockchain gaming market.

The core technical foundation of the HashCow ecosystem is VegasLedger, a high-performance distributed ledger technology specifically developed to ensure trust across gaming services. VegasLedger utilizes blockchain's inherent decentralization to deliver game outcomes based on true randomness, establishing trust among players and service providers alike.

To maintain scalability and flexibility, VegasLedger is strategically designed to easily integrate with diverse gaming genres and applications in the future.

To highlight these innovations and provide a clear vision for the blockchain gaming ecosystem, HashCow has partnered with leading global game developers and publishers to introduce flagship services coinciding with the platform's launch.

These flagship services not only demonstrate HashCow's core capabilities within the blockchain gaming industry but also form the foundation for HashCow's growth into a multi-genre blockchain gaming platform.

These initial flagship services will represent the primary applications of the HashCow platform, showcasing the platform's unique features, technological strengths, and long-term vision.

i. HashVegas

HashVegas provides an extensive selection of casino games, including slot machines, blackjack, baccarat, and more. Utilizing VegasLedger's RNG and VRF technologies, HashVegas ensures unparalleled fairness and integrity across all game offerings.

Users can seamlessly place bets and settle winnings through HashCow's blockchain-based wallet and platform, ensuring superior reliability, security, and efficiency compared to traditional online casino platforms.

HashVegas also emphasizes responsible gaming practices and provides robust mechanisms for user protection and fair gameplay to foster a sustainable gaming community.

2 3rd Party Service Applications Expansions

The HashCow Foundation is committed to showcasing the reliability and technological superiority of its blockchain gaming ecosystem through the VegasLedger blockchain platform and the VegasRNV system.

To achieve this goal, the Foundation plans not only to onboard a diverse range of games alongside existing native flagship services but also to explore integrating various gaming genres, thus expanding the ecosystem's reach.

This strategic vision positions HashCow as a leader in blockchain gaming services and as a scalable platform supporting diverse and innovative gaming experiences. To realize this vision, HashCow will actively pursue the following strategies:

1) Strategic Collaborations with Global Game Distributors and Content Providers (CPs)

i. Global Partnerships: HashCow collaborates strategically with international gambling game distributors to integrate their successful applications onto the VegasLedger platform, ensuring fairness and integrity through blockchain technology.

ii. Exploration of New Gaming Genres: HashCow aims to partner with developers across various gaming genres, laying the groundwork for future expansion of diverse gaming applications within the ecosystem.

iii. Collaboration with Leading Content Providers (CPs):By partnering with renowned multinational content providers, HashCow attracts a wide variety of developers, acquiring diverse intellectual properties (IPs) that maximize user experience and enhance the ecosystem’s attractiveness.

2) Comprehensive Onboarding Support for Game Service Developers

i. Technical Integration Assistance:The VegasLedger platform offers technical infrastructure, including smart contract APIs and VegasRNV middleware, to facilitate seamless onboarding for game service developers. This allows existing applications to smoothly transition to blockchain-based operations.

ii. Dedicated Support Programs:HashCow will operate specialized teams to provide tailored technical support, comprehensive training, and detailed integration assistance to app developers, ensuring frictionless integration into the ecosystem.

iii. Future-Proof Design for Flexibility: HashCow's onboarding tools and infrastructure are built to accommodate diverse gaming applications, enabling the ecosystem to flexibly adapt to future market developments and evolving trends.

3) Marketing Investments and Global Expansion Strategy

i. Market-Specific Targeted Campaigns: HashCow will initiate targeted marketing campaigns in major global gaming markets, including the United States, Europe, and Asia, promoting VegasLedger's technological strengths. Region-specific marketing strategies will encourage broader global participation.

ii. Promotion of Expanding Ecosystem: As the ecosystem expands into new gaming genres and services, specialized marketing efforts will attract developers and users seeking advanced blockchain-based gaming experiences.

iii. Community Development and Support: HashCow will establish and nurture a global community to enhance communication among developers, service providers, and users within the VegasLedger ecosystem. Active community engagement will foster autonomous growth and strengthen long-term sustainability.

6

Disclaimer

Disclaimer

This whitepaper is intended to provide information about the HashCow project, the VegasLedger platform, the VegasRNV® system, and related technologies. The contents of this document are for informational purposes only and should not be considered financial, legal, or investment advice.

1) This is not financial or investment advice.

The information contained in this document is not a solicitation or offer to buy or sell any tokens, securities, or financial instruments. Readers should conduct their own independent research and consult their financial, legal, or tax advisors before making any decisions about the HashCow project or its components.

2) Forward-looking statements

Some statements contained in this white paper are projections based on assumptions about future events, which are subject to risks, uncertainties and external factors that could cause actual results to differ materially. The HashCow Foundation does not guarantee the results or projections provided in this whitepaper.

3) Regulatory risk

Blockchain and cryptocurrency technologies are subject to various laws and regulations in different countries. The legal and regulatory environment is constantly changing, and HashCow Foundation cannot guarantee compliance with applicable laws in all jurisdictions. Readers and participants are responsible for acting in accordance with their own local legal requirements.

Particularly, HashCow continuously monitors regulatory changes in jurisdictions related to the use of RNG and VRF technologies in blockchain gaming, and will promptly inform ecosystem participants of any relevant compliance adjustments.

4) Technical risks

The VegasLedger platform and its components, including the VegasRNV® system, are complex systems that are under continuous development. Technical issues, bugs, or vulnerabilities may exist that could affect the functionality of the system. While the HashCow Foundation is committed to ongoing maintenance and security, it is not possible to eliminate all risks associated with blockchain technology.

5) No guaranteed value or return

The HCOW token referred to in this whitepaper is a utility token intended for use within the VegasLedger ecosystem. The value or usability of HCOW token is not guaranteed, and there is no promise of revenue or profit. The HashCow Foundation does not encourage speculative trading of tokens or behavior contrary to the principles of the project.

6) Limitations of liability

The HashCow Foundation and its affiliated organizations are not responsible for any direct, indirect, or consequential losses arising from the use or interpretation of this whitepaper. Participation in the HashCow ecosystem or related activities is at your own risk.

7) Changeability

This whitepaper reflects the current state of the HashCow project as of the date of publication. The HashCow Foundation reserves the right to revise, update, or withdraw any part of this whitepaper without notice to reflect ongoing developments, changes in strategy, or regulatory requirements.

Note: By referencing or accessing this whitepaper, you are deemed to have understood and accepted the terms of this disclaimer. If you have any additional questions, please contact the HashCow Foundation directly.

8

#Appendices

References

Arjun Bhamra "Randomness and Pseudorandom Number Generators" November 7, Non-Deterministic Georgia Institute of Technology

Arun Mishra, "Non-Deterministic Pseudorandom Generator for Quantum Key Distribution" arXiv:2311.03024v1 [cs.CR] 6 Nov 2023

R. L. Rivest, A. Shamir, and D. A. Wagner, "Time-lock puzzles and timed-release Crypto," 1996. [Online]. Available: https://people.csail.mit.edu/rivest/pubs/RSW96.pdf

B. Wesolowski. "Efficient verifiable delay functions." In Advances in Cryptology-EUROCRYPT 2019: 38th Annual International Conference on the Theory and Applications of Cryptographic Techniques, Darmstadt, Germany, May 19-23, 2019, Proceedings, Part III 38. Springer International Publishing, 2019.

K. Pietrzak. "Simple verifiable delay functions." 10th innovations in theoretical computer science conference (itcs 2019). Schloss Dagstuhl-Leibniz-Zentrum fuer Informatik, 2018.

D. Boneh, B. Bünz, and B. Fisch. "A survey of two verifiable delay functions." Cryptology ePrint Archive (2018).

Attias et al., "Implementation Study of Two Verifiable Delay Functions," Tokenomics 2020

K. Choi, et al. "Bicorn: An optimistically efficient distributed randomness beacon." Cryptology ePrint Archive (2023).

randao.org "Randao: Verifiable Random Number Generation" September 11, 2017

https://hackernoon.com/securing-the-unpredictable-random-number-technology-in-web3-games

https://ethereum.org/en/developers/docs/blocks/

https://crypto.stackexchange.com/questions/12652/random-number-generation-with-a-entropy-pool-versus-seed

https://www.spydra.app/blog/architecture-of-hyperledger-fabric-an-in-depth-guide