BIG BULLION

Whitepaper

Version 1.0

Introduction

Introducing a new era of rewarded data ownership for mobile gamers worldwide.

The gaming industry has grown into a multi-billion dollar global market, surpassing even the film and music industries in revenue. As technology advances, this economic impact is expected to grow, creating more jobs and driving innovations in related sectors. Online gaming fosters social connections and communities, allowing people from diverse backgrounds to interact, collaborate, and compete. This can build strong social networks and support communities of interest around the world.

BIG BULLION is planning to build a Player Network with Universal Player Profiles that unlock real data economies. This new paradigm empowers the next wave of innovative publishing applications and gaming experiences driven by rewards.

The BIG BULLION Player Network is developed by BIG BULLION Labs.

Billions of players everyday involves themselves in gaming. By playing different games they do not earn anything. But BIG BULLION Labs is planning to reward them with a monetary benefit, which will enable them to earn some money, while allowing the Game Developers to access their data with their consent and pay for what they want.

This scenario will bring a new era for data ownership in mobile gaming world.

Our Purpose

The BIG BULLION Player Network is a groundbreaking solution designed to tackle the significant challenges within the growing $120 billion mobile gaming market. At its core is a visionary approach recognizing the shift from centralized to decentralized game publishing. In this new paradigm, players are not just participants, but vital contributors to the success of gaming ventures. BIG BULLION is at the forefront, heralding an era where gamers are rewarded for their shared data contributions.

Empowering Players with Decentralized Data

BIG BULLION introduces "Universal Player Profiles" in a decentralized system, allowing players to own their cross-game and cross-chain engagement data. This ownership means their data's value increases as they play and engage more, empowering players in new and innovative ways.

Ownership & Control

With BIG BULLION, users have complete control over their data. This attribute is unique to gaming within a decentralized context. Their data is personally owned, private, secure, and exchanged, by choice, for rewards. Such a system naturally drives the collaborative growth of the Player Network.

Next-Gen Publishing Platform

A next-generation publishing platform for gaming apps would ideally address several emerging trends and needs in the gaming industry. Our Platform

Enable seamless development and deployment across multiple platforms (PC, console, mobile, VR/AR) with a unified codebase and tools. We aim to provide a suite of tools and services for game development, including engines, asset management, analytics, and testing frameworks. Out platform will offer real-time insights into player behaviour, in-game metrics, and monetization performance and Utilize AI to forecast trends, player churn, and in-game purchase behaviour, helping developers make data-driven decisions.

BIG BULLION enables applications to connect seamlessly to its ecosystem, providing an agile and open platform for anyone to interact and match with real-verified players. The Player Network provides a future-proof foundation upon which next-generation publishing tools are built, from engagement and retention to personalization, interoperability, and more.

Each user is issued with a Universal Player Profile (UPP), which unlocks user rewards and experiences across connected applications, in exchange for shared data.

What is a Universal Player Profile?

A Universal Player Profile is a dynamic and comprehensive identity for gamers, enriched by updates from cross-chain wallets, game progress, event participation, and a social reputation score, spanning all gaming activities associated with BIG BULLION.

It incorporates both on-chain and off-chain data points. The profile displays the user's social reputation score publicly, ensuring transparency. Meanwhile, it safeguards sensitive information through the encryption key that the user holds.

Rewards

Users with active Universal Player Profiles earn rewards for sharing data, making transactions, and using connected applications. Rewards at start include but are not limited to tokens, digital collectibles, and gift cards.

Modular integration

The Universal Player Profile SDK is designed for seamless integration, enabling easy access from any of the applications connected to the BIG BULLION Player Network. The first application powered by UPP module is Rewarded Play, developed by BIG BULLION Labs. This sets the stage for numerous publishing applications and games to leverage the UPP infrastructure for value-driven experiences.

Play Network Protocol

The Player Network Protocol is a player data layer that aggregates all issued Universal Player Profiles, while enabling applications to write, read, and interact with player data, at scale. It does this through a decentralized system that protects and preserves end-user privacy while facilitating data exchange between players and applications in exchange for rewards.

BIG BULLION Token

B2C is the native currency of BIG BULLION Player Network, acting as the primary medium of exchange between players, games, and applications.

Initially, it will serve as the gas token for data transactions, enabling the writing and reading of player data across the Player Network. Furthermore, the $B2C token will be distributed to all network participants, ensuring their interests are aligned with the expansion of the BIG BULLION Player Network. Lastly, $B2C will facilitate various transactions, including purchases and item synchronization, across connected applications to BIG BULLION.

Games Publication

To address the "cold-start" problem, BIG BULLION Labs is developing proprietary publishing applications that leverage the BIG BULLION Player Network and kick-start the distribution of Universal Player Profiles.

"Rewarding Play" is the first application from BIG BULLION Labs. It harnesses the BIG BULLION Player Network to amplify user acquisition for mobile games. By integrating the Universal Player Profile, this application builds player identities and motivates players to share their data and engage with games, rewarding them for their participation.

BIG BULLION Player Network is creating the most interconnected mobile gaming ecosystem with Universal Player Profiles. As the network expands with real, verified players, it transforms into an open and decentralized publishing platform. This platform hosts innovative tools, from player-

targeted testing tools to reward-driven user acquisition and engagement engines, along with cross-game interoperable experiences.

Below are several potential verticals, though this is not an exhaustive list:

Esports Identity & Reputation: Utilizes verified achievements from esports events to help players build their esports careers through reputable Universal Player Profiles.

User Acquisition: Innovative user acquisition tools provide targeted, rewarding experiences based on Universal Player Profiles, such as Rewarded Play.

Bot Prevention & Security: In the era of advancing AI, BIG BULLION supports bot prevention tools and authentication methods for games and dApps to counteract reward farming.

Engagement: Tools for retention and engagement help mobile game publishers overcome scalability challenges by offering rewarded gaming experiences directly within games or through standalone experiences.

Personalization & Monetization: Leveraging Universal Player Profiles allows for personalized content and pricing strategies.

Feedback & Testing Tooling: Facilitates game early access and testing to a targeted audience of verified Universal Player Profiles, employing matchmaking and rewards for feedback.

Cross-Game Interoperable Identity: Offers a synchronized player identity across all gaming experiences and blockchains through a unified

data layer, enabling interoperable player experiences through Universal Player Profiles.

The architecture of our decentralized data layer is designed to revolutionize how data is managed, accessed, and utilized across publishing applications, with a particular focus on delivering rewarded data ownership. This architecture overview outlines the core components, technologies, and processes of the Player Network Protocol.

Components

Universal Player Profile (UPP): The UPP component acts as a comprehensive digital identity for players, aggregating their achievements, preferences, and game histories across multiple platforms. Stored on the blockchain, UPP ensures that player identities are securely managed and seamlessly portable between games. Read more here.

Data Attestation: Attestations are key to verifying player achievements and data authenticity. Generated through smart contracts, they provide a secure and immutable record of player milestones, game events, and other significant data points. Attestations link directly to a player's UPP, enhancing the credibility and value of their gaming accomplishments. Read more here.

BIG BULLION Messaging Protocol: The secure messaging component facilitates private communication within the ecosystem, employing a Messaging Smart Contract to manage data exchanges through trusted intermediaries. This ensures that messages remain confidential and that sender and receiver identities are protected, supporting a secure environment for collaboration and interaction. Read more here.

Universal Player Profile

The Universal Player Profile (UPP) is a groundbreaking feature deployed on the blockchain, representing a pivotal shift towards a more integrated and user-centric rewarded user experience. The UPP is not merely an identifier but a sophisticated data structure encapsulated by a Merkle tree hash. This design conceals the specifics of profile associations, thereby ensuring privacy while enabling users to verify the authenticity of their cross-chain & cross-game progress, achievements, and interactions across applications.

Roles and Permissions

The UPP categorizes account roles into Admin, Reader, and Writer, each with specific permissions:

Admin : This role is endowed with comprehensive control of the user, including adding new accounts, accessing the list of accounts, viewing all attestations across accounts, and generating proofs. It's the cornerstone of the UPP, ensuring maximum flexibility and control.

Reader : Assigned to accounts that need visibility into the types of attestations a user holds, this role, however, does not have access to the raw attestation data, maintaining a balance between transparency and privacy.

Writer : This role goes a step further by having access not only to the list of attestations but also to the raw data itself, enabling them to contribute to the data pool while ensuring data integrity and privacy.

Integration with Social Accounts

The UPP seamlessly integrates with federated accounts, allowing users to create a UPP profile through familiar login methods (e.g., Google, Apple, or email sign-ins). This integration facilitates a smooth transition for users new to the blockchain space, providing a bridge between traditional online identities and blockchain-based profiles. Once a wallet is added, it can assume the Admin role, with the federated account transitioning to a specific role as determined by the user.

Additional features

Recovery Account: A failsafe mechanism allowing users to regain control of their UPP in case of lost access, safeguarding against potential lockouts.

Inbox Account: An automated account that can redistribute incoming messages to all associated accounts under the same profile, streamlining communication and information distribution.

Revoking Account: In alignment with privacy standards, users can revoke an account, which involves key changes and data re-encryption, ensuring that their digital footprint remains under their control.

Secure Key Management: each connected account will use their own public/private key pair, while information what is shared between accounts are using symmetrical key.

Encryption and Data Handling: each key can be replaced without possibility of data loss.

Data Attestations

Our platform leverages Ethereum Attestation Service to provide a nuanced approach to handling user data, empowering players with privacy choices while ensuring transparency and verifiability.

Data Control: Private and Public Attestations

Private Attestations: For sensitive data, we utilize private attestations built on a schema incorporating a Merkle tree root hash and a column list. Attestations are stored on IPFS and broadcasted to the blockchain, providing proof of existence and integrity, while the data itself remains confidential.

Public Attestations: They operate on a similar technical foundation but are designed for openness. These attestations utilize different schemas, with all data explicitly written into the attestation for public access. This openness allows for a transparent ecosystem where data, such as in-game achievements or milestones, can be openly shared and verified, fostering trust and engagement within the community.

Proof Mechanism: Uncompromising Data Integrity

A crucial aspect of our attestation framework is the proof mechanism that allows users to demonstrate the authenticity of their data. As players may have multiple accounts linked to their Universal Player Profile, this mechanism enables them to verify that their data remains unchanged and that all associated accounts are part of the same UPP. This is particularly important in environments where data integrity and authenticity are paramount for trust and verification purposes.

The Right to be Forgotten: User-Driven Privacy

In alignment with privacy regulations and user rights, our platform incorporates the "Right to Be Forgotten." Users can request to revoke any single public attestation, leading to the unpinning of the attestation from our IPFS node. This process ensures that users maintain control over their data, allowing them to remove it from public access and delete it permanently, should they choose to. This feature is essential for providing users with the peace of mind that their digital footprint can be managed and erased upon request.

The B2C Games Messaging Protocol

The BIG BULLION Messaging Protocol introduces an innovative approach to secure communication between applications and players, leveraging trusted intermediaries to ensure privacy and prevent direct tracing of messages between senders and recipients.

Multi-Layer Encryption for Anonymized Messaging

The protocol employs a multi-layer encryption process designed to anonymize the path of communication between the application (sender) and the player (receiver). This process involves several key steps:

Initial Encryption: The sender encrypts the message with the receiver's public key, ensuring that only the intended recipient can decrypt and read the message.

Intermediate Encryption: The encrypted message is then further encrypted with the public keys of one or more intermediaries (middlemen) in a pre-defined sequence. This creates an encryption chain that masks the message's origin and intended destination.

Decryption by Intermediaries: Each intermediary in the chain decrypts the message with their private key, revealing instructions on where to forward the message next. This step-by-step decryption ensures that each intermediary only knows the immediate source and destination of the message, preserving the anonymity of the communication chain.

Secure Storage and Temporal Message Handling

To enhance privacy and security, messages are stored on the InterPlanetary File System (IPFS) and linked to the blockchain. This approach provides several advantages:

Decentralized Storage: IPFS offers a resilient and distributed storage solution, reducing the risks associated with centralized data repositories.

Blockchain Verification: By adding root node of message tree, we know where to search for new messages in IPFS, and by the same time - who is controlling these messages.

Temporal Storage: The protocol incorporates mechanisms to remove the last block from the message tree after new messages are added, ensuring that messages are not stored indefinitely. This temporal aspect of message handling increases privacy by forgetting and reduces storage costs.

Transforming data into value for users

Our approach extends beyond offline attestations to utilize blockchain signatures for transparency and data retrieval from IPFS. This framework not only secures data but also emphasizes its value within the publishing ecosystem.

Players monetizing their data: By enabling data auctions, players can directly monetize their data, creating a value loop within our network.

Demand for specific data - not all data has the same price: Our platform acknowledges the varying value of different data types. Data auctions allow market forces to determine the true value of specific player data.

Player Network Data Explorer

The Player Network Data Explorer tool offers visibility into:

Statistical data ▪ what you could expect from players to prove: Existing attestations provide statistical insights into player behaviour and achievements. This data is valuable to game developers, publishers, and application developers.

Demand for specific data: The data explorer showcases ongoing auctions, highlighting specific data sets that are in high demand, offering the highest rewards.

Conclusion

In conclusion, the introduction of our Gaming Token represents a transformative leap forward in the gaming industry, merging the realms of digital innovation and immersive gameplay. Our token aims to redefine the way players interact with games, offering a decentralized and secure method of managing in-game assets, rewards, and transactions. By leveraging blockchain technology, we provide a robust framework that ensures transparency, ownership, and value within the gaming ecosystem.

The integration of our Gaming Token addresses the growing demand for true digital ownership and a more equitable distribution of rewards. Through its unique capabilities, our token not only enhances player engagement and

satisfaction but also creates new opportunities for developers and content creators to monetize their work more effectively.

We are committed to building a vibrant, inclusive, and sustainable gaming community, where players, developers, and stakeholders can thrive together. As we move forward, we will continue to innovate and adapt, ensuring that our Gaming Token evolves alongside the dynamic landscape of the gaming industry.

We invite you to join us on this exciting journey as we pave the way for a new era of gaming, where the possibilities are limitless and the experience is truly extraordinary. Thank you for your interest and support in making this vision a reality.