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## **The World's First HTML5 Blockchain Engine and Platform**

Bring 200,000 developers and  
1 billion HTML5 terminals  
to the blockchain world

## **White Paper**

This White Paper is intended for  
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It is not a legally binding document.  
Developers are relieved of all liability.  
Detailed information will be released in later versions.

# Brief

## **Our vision:**

“Bring 200,000 Developers and 1 Billion HTML5 Devices to The Blockchain World.”

As a cross-platform solution, HTML5 technology has been globally recognized. It covers the Internet, mobile games, video, advertising and other industries, with the global market size of hundreds of billions dollars.

After blockchain game CryptoKitties became popular, Ethereum's smart contract applications added a new member - HTML5 games.

This project cooperating with Egret Technology, a globally well-known HTML5 technology service provider, set up Egretia Blockchain Lab, combining blockchain with HTML5 technology to create the world's first HTML5 blockchain engine and platform, aiming for applying blockchain to vertical industries. Bringing Egret Technology's existing 200,000 developers and 1 billion mobile terminal devices into the blockchain world, this project has practical and far-reaching significance.

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All contributions will be applied towards the advancing, promoting the research, design and development of, and advocacy for the world's first HTML5 blockchain engine and platform, combining blockchain technology with proven tools, communities and content of partners. The Foundation, the Distributor and their various affiliates would develop, manage and operate the Egretia Network.

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# Chapter 1



## **Background**

- 1.1 Introduction to HTML5
- 1.2 Blockchain Industry Background

# Background

## 1.1 Introduction to HTML5

In recent years, after many hardware upgrades and rapid development of Internet technology, some bottlenecks (such as performance, traffic and compatibility) that previously limited the operation of HTML5 games have now been eliminated. Due to the cross-platform nature of HTML5, this technology is widely used in games, marketing, video, media, etc. Using the power of mobile social networking, HTML5 content has been widely disseminated in mobile apps and created entirely new business models.



From their perspective, and due to the rapid pace of their lives and work, users would like to make use of "fragmented time" at each leisure opportunity and enjoy relaxation and entertainment. In terms of app operators, a new model is expected to enhance user stickiness, gaining more traffic.

Click-and-play, viral transmission, user stickiness, these characteristics of an HTML5 game make it a perfect fit for the current market demands.

Currently, users of HTML5 games already account for 47% of all mobile game users. In terms of the business model, in-game payment, instead of advertising, has become the main source of revenue accounting for 68%. Combined, HTML5 games already have an independent commercial profitability. In 2017, the market size of HTML5 games in China exceeded 10 billion Yuan and showed a growing trend. After more than four years of evolution and development, HTML5 games

have witnessed huge improvements related to business models, user numbers, and market size.

The domestic revenue of high-quality HTML5 games, has reached 200 million Yuan.

HTML5 technology has been globally recognised as a cross-platform and cross-terminal solution. It covers the Internet, mobile game, video, advertising and other industries, with a global market opportunity of 100 billion dollars.

## **Trend**

Due to the advantages of HTML5 technology, an increasing number of well-known enterprises have adopted this technology:

- Google launched PWA, advocating Android Instant Apps based on HTML5 technology.
- Baidu promoted "light-weight apps" based on HTML5 technology.
- Facebook released Instant Games based on HTML5 technology in Messenger with more than 1 billion daily active users and opened its advertising and payment service for Instant Games at the end of 2017.
- In January 2018, Tencent WeChat released a series of mini-games, some of those games gaining over 100 million daily active users.

Overall, HTML5 has become one of the global Internet technology trends.

## **Pain Points**

Despite the rapid development of HTML5 industry, there still remain many pain points:

- Lack of a global, unified and secure payment platform;
- Lack of solutions to securely store virtual assets of users;
- Lack of mechanisms to ensure "fairness" in games;

- Lack of solutions to rapidly respond to distributed back-end communications;
- Lack of mechanisms to effectively protect the intellectual property of HTML5 products;
- Need for effective mechanisms to motivate good teams to develop high-quality games and apps;
- Need for diversified approaches to monetise internet traffic.

## **1.2 Blockchain Industry Background**

In recent years, blockchain technology has gradually been understood and applied to related projects; advantages and disadvantages of the blockchain itself have become increasingly obvious.

Advantages:

- Distributed ledger mechanism: safe, transparent and tamper-resistant;
- Turing-complete smart contracts: fair-and-square;
- Decentralised data storage combined with smart contracts: responsive and reliable;
- Token system, unified payment and settlement.

Disadvantages:

- Poor development, testing, and upgrade process;
- Poor development tools and a small development community;
- User inconveniences, costs of learning are high;
- Security issues of accounts and wallets.

The Egretia team has joined hands with Egret Technology to create Egretia Blockchain Lab. By combining blockchain technology with proven HTML5 workflows, developers will be able to rapidly develop blockchain applications and truly apply blockchain to the vertical industries.

# Chapter 2



## **Our Mission**

- 2.1 World's First HTML5 Engine and Platform
- 2.2 Building a Decentralized HTML5 User Ecosystem
- 2.3 Creating an Ecosystem With True Token Circulation

## Our Vision

“Bring 200,000 Developers and 1 Billion HTML5 Devices to The Blockchain World.”

### 2.1 World's First HTML5 Blockchain Engine and Platform

In partnership with Egret Technology, the global leader in the HTML5 industry, the Egretia team is committed to building the world's first HTML5 blockchain engine and platform, combining blockchain technology with proven tools, communities and content of partners, aiming to bring 200,000 developers and 1 billion mobile devices into the blockchain world.

#### User Ecosystem:

- The content powered by Egret Engine has reached hundreds of millions of users. For every user, a unique cryptographic passport with digital encryption will be created.
- Users will be provided with a low-threshold, high-security digital wallet, serving as a safe payment platform for all HTML5 blockchain applications.
- A digital virtual currency token that potentially circulates in HTML5 projects all over the world will be created: (**Egreten**).
- An effective, sustainable ecosystem will be built for users.

#### Technical Aspects:

- Modularising blockchain functions, integrating them into the Egret Engine and its front-end development tools, will contribute to directly reach more than 200,000 developers. Integrating Egreten into hundreds of thousands of games and applications, will help to directly reach more than 1 billion users worldwide.
- Integrating blockchain technology into the backend service logic, using node servers around the world will provide HTML5 products with fast communication solutions and trusted smart contract server logic.

- A complete development suite, documentation and development community will be built, to provide a most complete and convenient developer ecosystem.

### **Operational Aspects :**

- Through the existing Egret game platform with 40 million monthly active users, the Egretia Network already has a professional global team of game and app distributors. They are operating the content and there are plans to integrate the Egreten token payment system, thus promoting actual utility and circulation of Egreten.
- Together with strategic partners such as Facebook and Google, the Egretia Network has a well-established advertising platform to promote Egreten-based games and products.

## **2.2 Building a Decentralised HTML5 User Ecosystem**

Powered by the Egret Engine, HTML5 content has over 75% marketing penetration in the HTML5 industry, covering more than 1 billion mobile devices and users.

The blockchain of the Egretia Network will be combined with Egret HTML5 workflows. Using a token mechanism, every player will have a unique ID in games powered by the Egret Engine. This will build a solid foundation for a stable user ecosystem.

- Every user worldwide has a unique token passport in any game or application which is developed based on the blockchain of the Egretia Network.
- The anonymity and encryption mechanism of the token passport effectively ensures the privacy of users.
- Using unique, anonymous, secure tags, the identity of a user is not limited to one application or one game. By using a unique, virtual identity, every user can enjoy a life in the virtual world based on the Egretia Network.

- Due to the transparency and irreversibility of blockchain, as well as the unique passport of each user, available throughout the content system built by the Egretia Network, users can be accurately identified and rated for their trustworthiness. Users can also safely communicate with other users around the world using the Egretia Network, making friends, exchanging virtual assets, etc.

## 2.3 Creating an Ecosystem With True Token Circulation

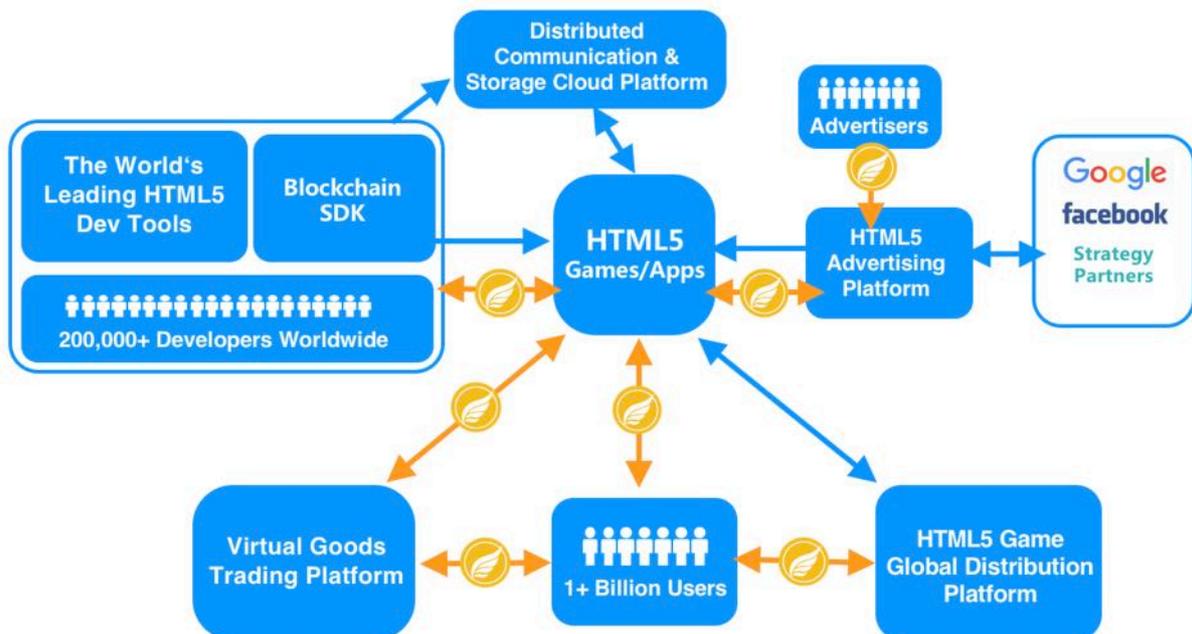
Based on the user ecosystem of the Egretia Network, there is the aim of forging a new virtual currency token that can be used in all content powered by the Egret Engine: **Egreten**.

- The ecosystem will provide well-established tools + SDKs for the blockchain community and developers to design and build applications and products.
- Users can use Egreten as the currency to buy in-game items, pay for content, etc.
- Users can use Egreten to take part in lotteries, discounts, and other promotions on the Egretia Network across the world.
- Through the Egretia Network, users can participate in crowdfunding of games which they support through the usage of Egreten, and potentially receive Egreten incentives.
- Developers and content publishers can use Egreten to advertise their products and services on the advertising platform of the Egretia Network.

- Distributors of content and users from the media industry can obtain Egreten through content distribution, advertising, etc.
- An Egreten digital wallet is created based on the unique token passports of users, in order to ensure safe storage of the virtual assets, goods, crowdfunding rewards, platform incentives, etc of each user.

Throughout the ecosystem, it is envisaged that more than 200,000 developers worldwide would be able to use the Egretia Blockchain SDK to rapidly develop HTML5 blockchain games and applications. This will increase the reach of Egreten to over a billion users, the token will be circulating in all areas of HTML5 content, virtual goods platforms, advertising platforms, and communities.

(  represents the flow of tokens )



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# Chapter 3



## **HTML5 Blockchain Engine & Platform**

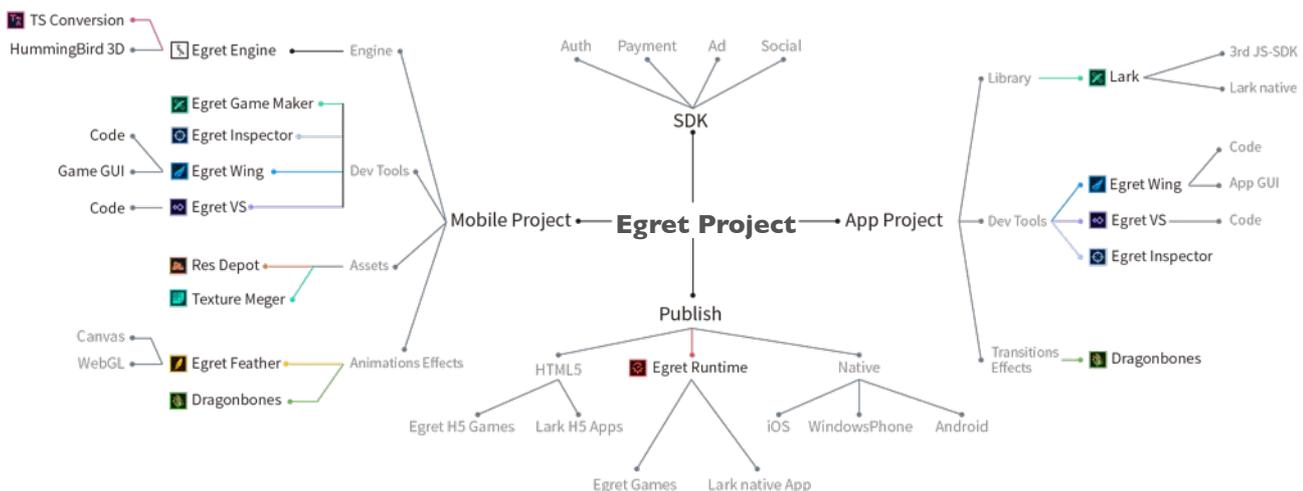
- 3.1 Key Products and Services
- 3.2 Egretia Features
- 3.3 Egretia Core Product Architecture
- 3.4 Egretia DApp Case

# HTML5 Blockchain Engine and Platform

## 3.1 Key Products and Services

### The World's First HTML5 Blockchain Game Development Workflow

Egret Technology, the strategic partner of the Egretia team, have spent four years focusing on HTML5 workflow development. The workflow includes 14 products such as the engine itself, an IDE visual editor, animation tools, cross-platform packaging tools, etc. All tools are cross-platform and support both Windows and Mac.



For more information, please visit the Egret Technology website: <https://www.egret.com/products/>

Existing development workflows allow developers and designers to:

- Efficiently edit and debug code,
- Visually adjust UI interface,
- Easily create cross-platform animations and interactive media content,
- Publish HTML5 content as iOS or Android apps via the packaging tool.

The existing development suite will be used to tightly integrate the blockchain interface layer, such that all HTML5 games can easily support the blockchain. Through the proven development workflows, developers can quickly create HTML5 games and applications that provide blockchain features such as unified digital wallet passports, smart contracts, and transactions.

### The World's Largest HTML5 Blockchain Platform: Egretia

The platform of the Egretia Network includes a development workflow based on blockchain technology, four core products and an incubator, providing comprehensive blockchain solutions and services for players, content providers, channels and advertisers, allowing for creation of an inter-connected ecosystem.

Not only can developers create blockchain applications quickly with the development suite of the Egretia Network, but they will also receive complete services through the platform, such as game distribution, advertising, trading, storage, and communication service.



Egretia Blockchain Platform Architecture

**Blockchain Game Dev Workflow:** The world's first complete HTML5 blockchain engine and development kit, will give developers the power to quickly and efficiently develop blockchain games and applications.

**Distributed Communications and Storage Platform** : The platform will leverage the node model of blockchain, providing decentralised data communications and storage solutions.

**Game Distribution Platform** : This platform is the official DApp of the Egretia Network: Players can obtain Egreten through the app, play HTML5 games on this platform, make payments via Egreten. Through the Proof-of-Game (POG) mechanism, players can obtain Egreten incentives through playing or sharing games with friends. Users of the Egretia Network and/or holders of Egreten which did not actively participate will not receive any Egreten incentives.

**Virtual Goods Trading Platform** : Using Egreten, all players in the games of the Egretia Network can trade their virtual goods on this platform.

**Egretia Ad Platforms** : A precision advertising system, based on blockchain KYC principles, smart contracts, and platform digital tokens.

**Egretia Incubator** : The incubator on the Egretia Network supports game development teams and individuals, creating a bridge between players and developers.

## 3.2 Features of the Egretia Network

### Self-developed Public Chain

The Egretia Network will include a self-developed, efficient public chain based on the DPoS (Delegated Proof of Stake) consensus mechanism, aimed at optimising HTML5 game performance. Through the blockchain interface layer, in combination with the Egret engine tools, developers can quickly create blockchain-based DApps.

### Consensus Mechanisms

The public chain of the Egretia Network will be using a DPoS (Delegated Proof of Stake) as consensus mechanism.

The DPoS mechanism is similar to a board vote, where holders of coins cast a certain number of nodes, using the mechanism for verification and bookkeeping. DPoS can significantly reduce the number of participating nodes for verification and bookkeeping, it is designed to be able to achieve consensus verification in a second. For the avoidance of doubt, token holders which have delegated block verification and bookkeeping to the nodes would not receive incentives based on their token holdings only and without further contributing resources to the network; only participating nodes which have contributed computing resources for block verification and bookkeeping would be entitled to receive token incentives.

The stability of DPoS mechanism has been verified in BTS, EOS and other projects.

## **High-performance**

The public chain of the Egretia Network is a public chain with high concurrent processing power, where performance is optimised for the needs of the game industry. It is designed to have a fast TPS (Transaction Per Second) rate. Nonetheless, in blockchain technology, an "impossible triangle" exists, meaning that scalability, decentralisation, and security cannot be achieved at the same time.

Using a DPoS mechanism to greatly increase scalability, more than 2,000 transactions per second could be supported in the initial test chain. In the future, the TPS will be increased according to business needs.

## **Real-time Parameter Adjustment**

The Egretia Network can modify system parameters without bifurcation: Instead, the Egretia Network will be able to change blocktime, blocksize, transaction fee etc. via voting.

The Egretia Network can modify the system parameters without bifurcation: Instead, the Egretia Network will be able to realise a dynamic adjustment of parameters such as blocksize, output speed, and handling fee through voting method based on consensus.

For example: A current blocktime of 3 seconds, can be dynamically adjusted to 1 second; or a current blocksize of 2M, can be dynamically adjusted to create larger blocks, such as 8M.

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## **Convenient and Efficient Development Suite**

The proven tools of Egret lays a solid foundation for the blockchain project of the Egretia Network, making blockchain application development simple, convenient and efficient.

### **Support Mainstream Languages and Frameworks**

The development suite integrates the support for JavaScript, TypeScript, HTML, CSS, Node.js, through the extensions, it can easily support more languages and frameworks, such as C #, Go, C++, AngularJS, React and so on.

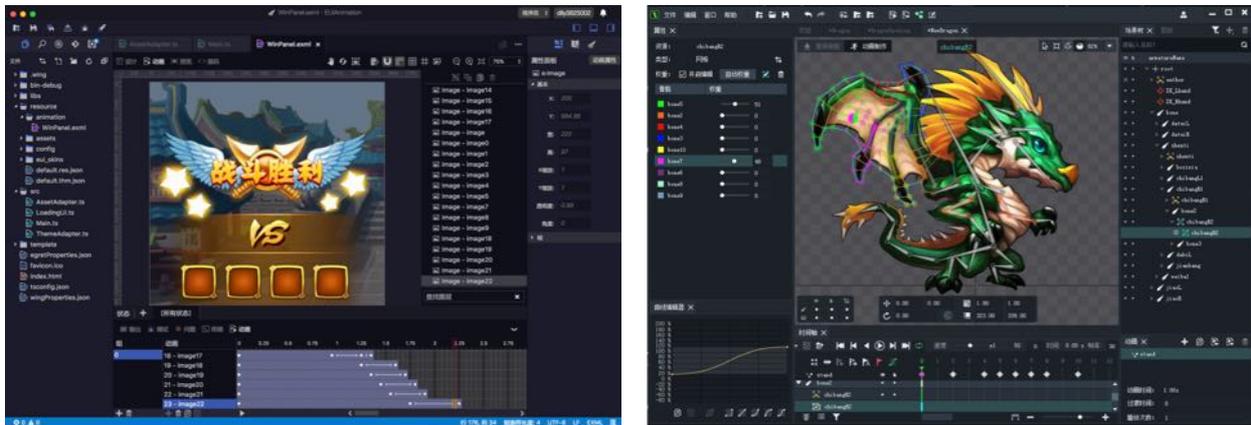
### **Smart Coding Assistance**

Smart Coding Assistance will provide major languages with intelligent code completion, real-time error feedback, reference search, jump to definitions, and other functions, to help developers more quickly program.

### **Built-in Complete Game Development Workflow**

Integration of visual game development environment; covering the entire development process (developing, debugging, publishing, packaging); in addition, resource management, particle editing, animation editing, cloud publishing and other

extensions are available, thus making the experience of developing games friendlier and smoother.



The interfaces of Egret Wing IDE and DragonBones animation tool

## Egretia SDK

The Egretia blockchain SDK will be provided with engine and tools, which will allow all HTML5 games to easily access the blockchain. Developers can quickly create HTML5 games and applications that provide blockchain capabilities such as digital wallet, smart contracts, etc.

- Accessing the blockchain through a few lines of code,
- Storing the key information of users on the blockchain with KYC (Know Your Customer) certification,
- Providing data storage, data communication and authentication services,
- Easy access to digital wallet and create smart contract,
- Using digital token SDK for virtual goods trading in games.

## Digital Virtual Currency Token: Egreten

The global gaming market size in 2017 is over 100 billion dollars, but there isn't a way to connect different games, each game is connected to its own independent economy.

The native digital cryptographically-secured utility token of the Egretia Network (**Egreten**) is a major component of the ecosystem on the Egretia Network, and is designed to be used solely as the primary token on the network. Egreten will initially be issued by the Distributor as ERC-20 standard compliant digital tokens on the Ethereum blockchain, and these will be migrated to tokens on the Egretia blockchain when the same is eventually launched.

Egreten is a non-refundable functional utility token which will be used as the unit of exchange between participants on the Egretia Network. The goal of introducing Egreten is to provide a convenient and secure mode of payment and settlement between participants who interact within the ecosystem on the Egretia Network. Developers can easily combine Egreten with their own games, and players can safely and efficiently conduct virtual goods trading.

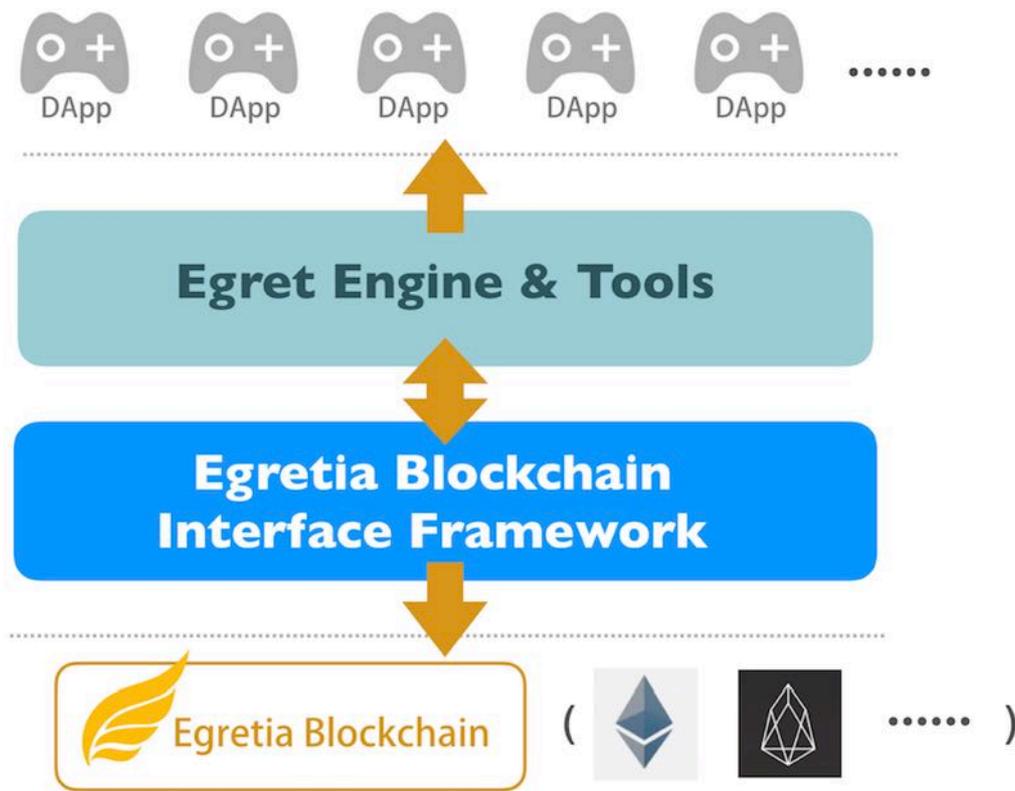
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## **Wallet**

Both game developers and gamers will be able to manage Egreten through their wallets. Users will be provided with a low-threshold, high-security digital wallet, making the Egretia Network a safe payment platform for all HTML5 blockchain applications. Currently, PC, mobile, and browser versions of the wallet are being developed.

## **Scalability, Supporting Mainstream Public Chains**

From a long-term view, the blockchain framework will not only support the native chain of the Egretia Network, but will also be extended to support Ethereum, EOS and other public chains, so that all HTML5 developers can efficiently create blockchain-based games and applications.



## Open Source

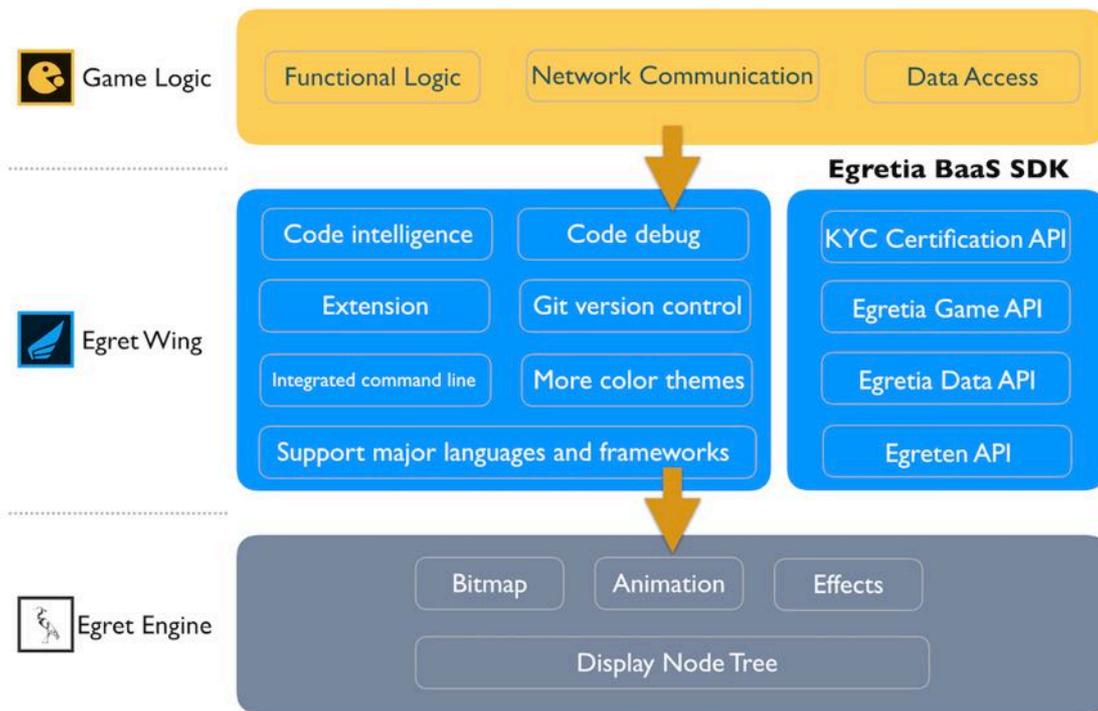
All Egretia-related code will be completely open source on Github.

## 3.3 Egretia Core Product Architecture

### HTML5 Blockchain Engine

The content powered by Egret Engine accounts for 75% of the HTML5 market in China, with more than 200,000 developers worldwide.

The Egret Engine will provide the Egretia BaaS SDK, which will allow easy access to blockchain for all Egret games. Through the Egretia BaaS SDK, developers can create blockchain games or migrate existing Egret games to blockchain games in an easy way.



HTML5 Blockchain Engine Architecture

As shown above in the diagram, the bottom part represents the Egret Engine. Using the Egret IDE tool “Wing”, developers can quickly develop HTML5 games. As long as developers add the Egretia BaaS SDK while creating a new project, blockchain-related APIs will be easily accessible.

The Egretia BaaS SDK and the included APIs are as follows:

### Egretia Game API

With blockchain popularity rapidly increasing, many developers are eager to “blockchain-ise” their games. However, as a matter of fact, blockchain technology is fairly complicated. At the same time, not all developers have sufficient time to fully leverage the underlying technology. The Egretia Game API is a solution through which developers can obtain easy access to blockchain.

Through the Egretia Game API, HTML5 games can be “blockchain-ised” with just a few lines of code. As you can see from the image above, by adding the Egretia BaaS SDK into games, and then calling the API interface in accordance with official

documentation tutorials, developers will be able to combine HTML5 games with blockchain technology.

### **KYC Certification**

With the help of KYC (Know Your Customer) information, user information is encrypted and stored on the blockchain. Due to the anonymity and traceability of blockchain, it is safe and reliable to store user information on the Egretia Network. Using the KYC blockchain ID, users will only have to sign up once for all games built by HTML5 Blockchain Engine.

### **Egretia Data API**

The game industry has been criticised because of opaque data, some developers control the falling probability of virtual goods in order to increase their revenue. Although the entire industry has put a lot of effort into solving the problem, for example, a group of developers has made public the falling probability of virtual goods, game players still feel sceptical about game developers.

Through the Egretia Data API, developers can store the core data logic of games and applications in the Egretia Network, thus realising data storage account disclosure and process verification: this is making the data open, fair, and transparent.

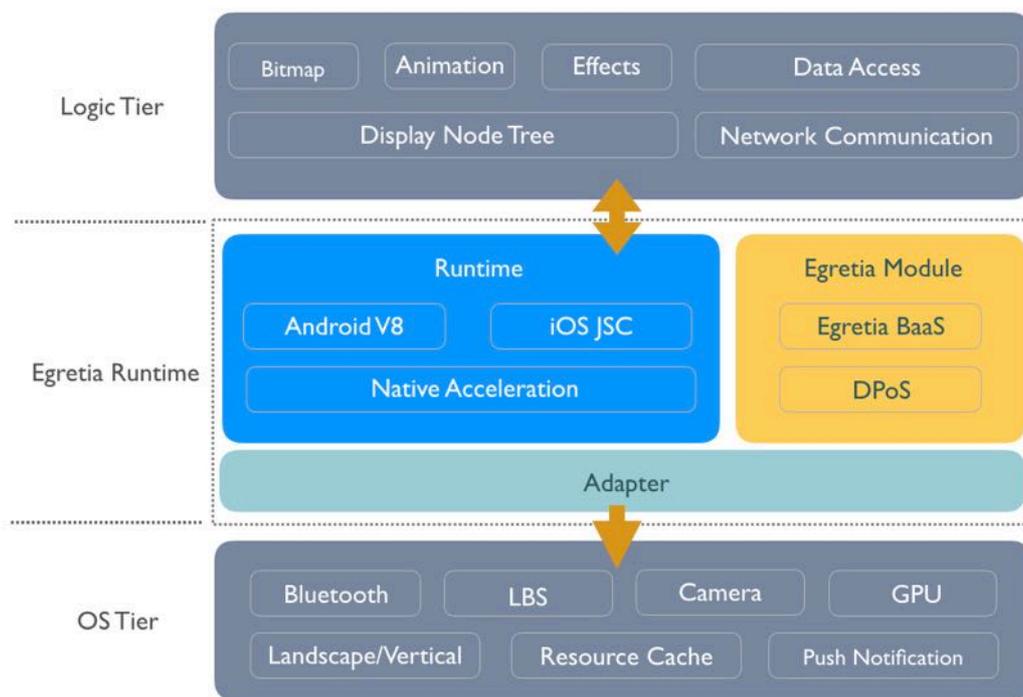
For example, game developers write the core data logic, game transaction information, and game equipment values onto the blockchain, so that players can view the game numerical information at any time. This helps solving the mutual trust problem between game developers and players.

### **Egreten API**

As the API for the virtual currency ecosystem on the Egretia Network, virtual in-game items can be placed on the trading platform.

### **Egretia Runtime**

Egret Runtime is an accelerator component developed by Egret team to enhance the HTML5 game performance and can be embedded as a seamless extension into a browser or other applications on mobile devices. By using Egret Runtime, game developers can ignore the differences between diverse operating systems, browsers, and terminals so that HTML5 games can run more efficiently with amazing performance. In addition, runtime also has access to mobile device hardware, improving the gaming experience. By the end of 2017, Egret Runtime has been installed 1 billion times.



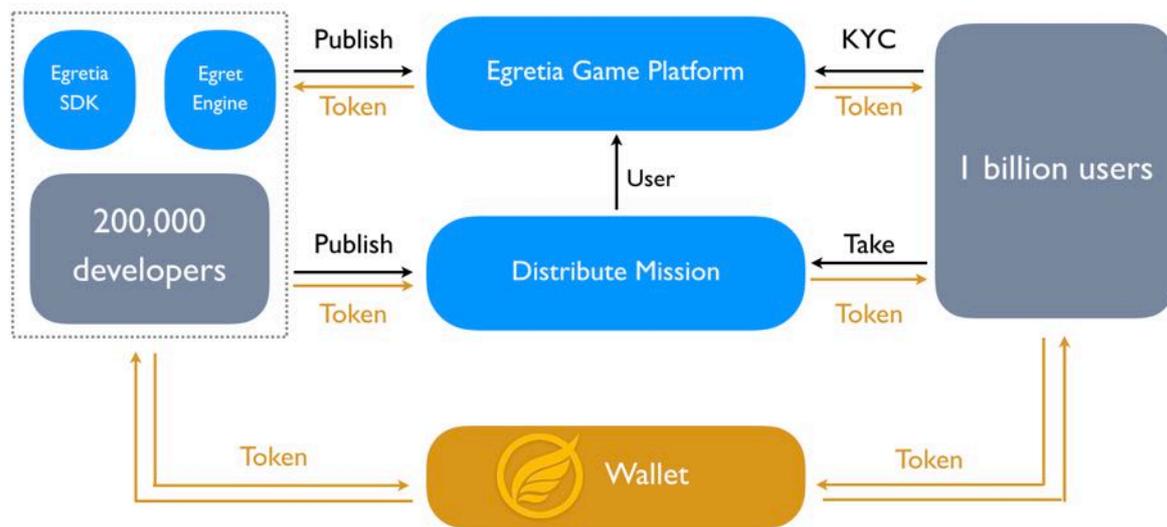
Egretia Runtime Architecture

The Egretia Runtime is a completely upgraded version of the Egret Runtime. Not only does it fully support the functions of the original runtime, it also integrates the Egretia blockchain modules to make for more secure core functions at the lower layer of the application. The Egretia BaaS Module, which allows developers to easily call the blockchain interface of the Egretia Network, also fully supports the DPoS mechanism, realising ledger and data exchange on the basis layer of the Runtime.

## Egretia Game Global Distribution Platform

The Open Platform of the strategic partner of the Egretia team, Egret Technology, is the largest HTML5 gaming platform in the world. It has more than 2,000 distribution

channels and more than 65,000 HTML5 games, with 40 million monthly active users. Leveraging the new business mode revolution brought by blockchain technology, the Egret Open Platform will be fully upgraded to a decentralised HTML5 gaming distribution platform, supporting HTML5 developers and reaching HTML5 players worldwide.



Egretia Game Platform Architecture

### Egretia Game Platform

As shown above, with the Egret Engine and the Egretia BaaS SDK, game developers have easy access to blockchain. Players can obtain a unique ID through KYC, and use it when playing all the games on the platform of the Egretia Network.

Since the Egretia Network adopts DPoS and PoG to implement distributed ledger and data exchange mechanisms, the longer the players will stay in games, the greater the PoG values will be. Depending on the duration of the game and the level of experience, players can obtain various amounts of Egreten, which will enable them to buy virtual goods in the game.

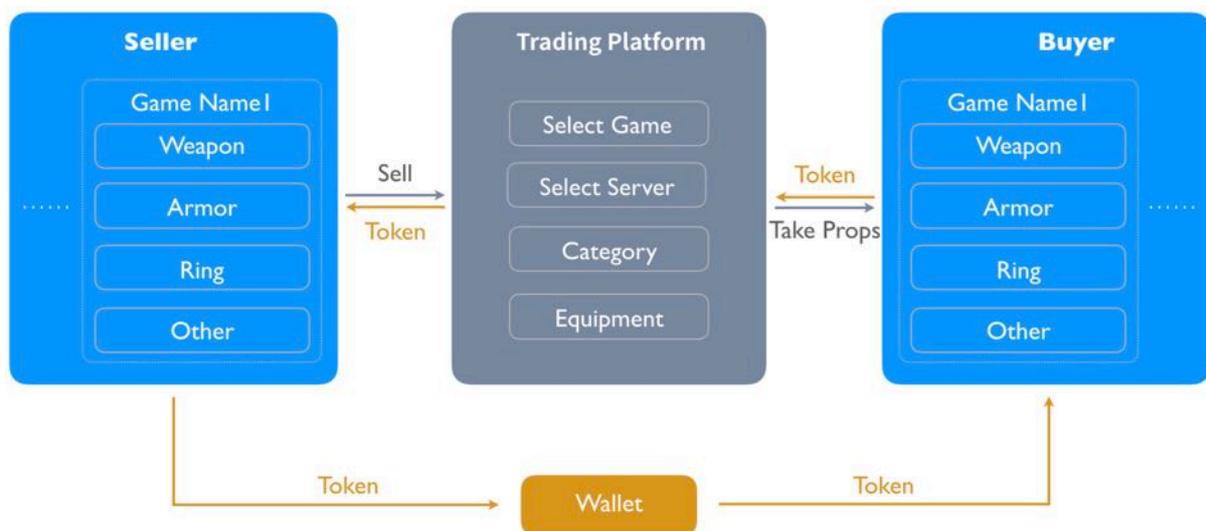
Game developers may obtain Egreten by operating games.

### Egretia Game Distribution Mechanism

The game platform on the Egretia Network is a decentralised HTML5 game distribution platform. Developers can independently launch HTML5 games and offer tasks encouraging players to spread games. After completing the promotion tasks, players will obtain some Egreten as an incentive. This way, developers will be able to attract many players, and those players are able to obtain virtual currency, thus forming a healthy ecosystem.

## The Virtual Goods Trading Platform

Players have always faced the problem how to ensure the value of virtual goods and the security of personal information in virtual goods transactions. The Egretia virtual goods trading platform can help to solve this problem.



Trading Platform Architecture

As pictured above, players can sell virtual goods of a certain game on the trading platform. After selecting the game, a game server, the virtual goods category, and specific items, virtual goods can be sold in exchange for Egreten.

On the other hand, players can spend Egreten buying virtual goods on the trading platform.

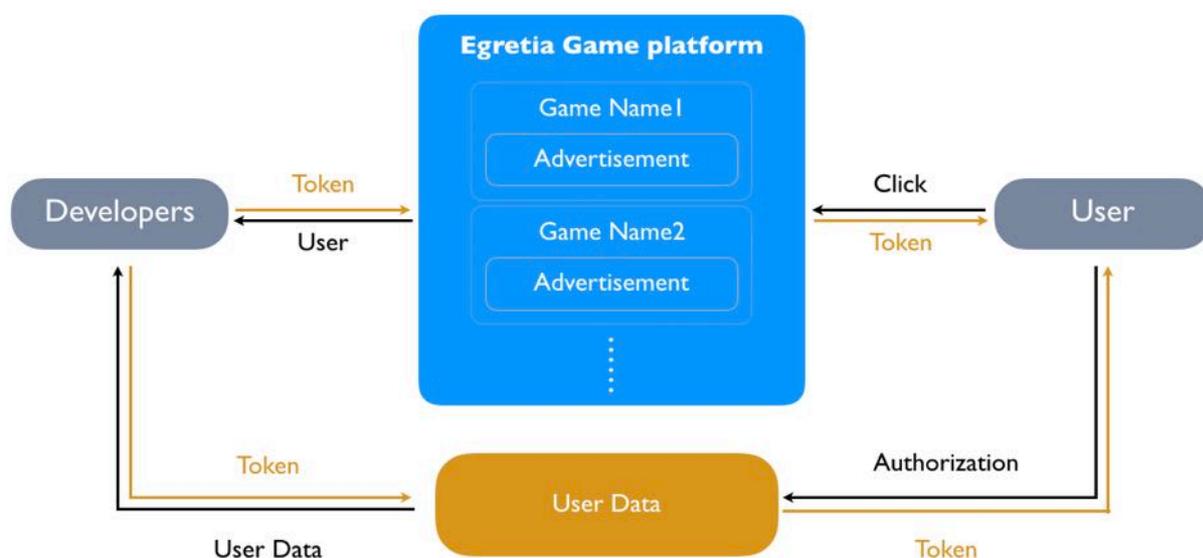
HTML5 games connect the in-game virtual goods to the trading platform via the Egretia BaaS SDK. Traditional virtual goods and account trading model are lacking

mutual trust at its foundation. Based on the smart contract mechanism of blockchain, both buyers and sellers can conduct transactions without concerns and will not need any guarantee from a third party.

Based on the traceability feature of blockchain, traders can view historical transaction records of virtual goods at any time. Besides, the anonymity of blockchain can well protect the privacy of buyers and sellers.

## Decentralised Advertising Platform

An advertising platform based on the Egretia Network will be created. Based on KYC principles, the Egretia Network is capable of capturing user profiles accurately so that ads that users are interested in can be delivered. On the other hand, the token-based advertising platform will be helpful to Egreten circulation.



Blockchain Advertising Platform

As shown above, decentralised blockchain-based advertising is a good solution for the shortcomings of traditional advertising.

- Advertisers can serve ads using the Egreten virtual currency on the Egretia Network.
- Developers integrate ads with content through the tools and SDK on the Egretia Network, which will allow them to obtain Egreten.

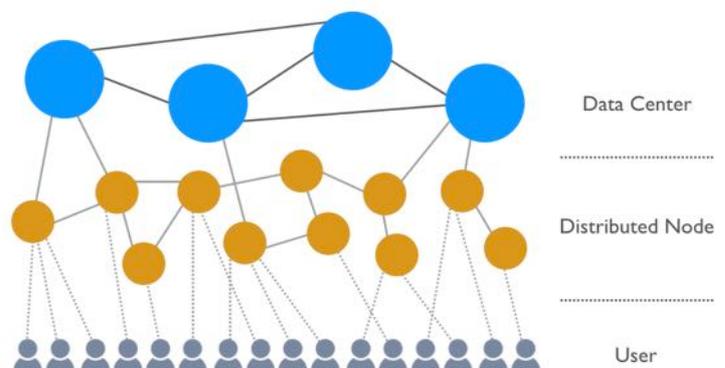
- Developers can also spend Egreten paid by users upon delivering ads in order to attract more users.
- Based on KYC principles, the advertising platform can protect the privacy of users while getting user data, effectively pushing content that users are really interested in, greatly reducing the costs for advertisement.
- Players can obtain Egreten by forwarding ads.

As the first HTML5 blockchain platform, the Egreten team is also actively communicating with overseas partners such as Facebook, in order to jointly embrace the future of blockchain together.

## Distributed Communication & Storage Cloud Platform

The HTML5 Distributed Communication and Storage Service is powered by blockchain technology to provide the decentralised server-side, distributed communication and storage.

The Egretia Network will cooperate with more third-party public chains as well as technology service providers, offering developers more comprehensive distributed communications & storage services.



The more developers and content, the more widely distributed server nodes. The faster storage of data and files being read, the quicker the client and server-side communications.

By calling the SDK provided, developers can simply access communication services on the Egretia Network, realising online multiplayer, data & file storage, back-end

game logic customisation. Usability, low latency, high availability, expansibility, customisability, are its characteristics.

In addition to helping developers create a game from its concept, it is easy to migrate a single-player game into a cross-regional, cross-server, low-latency online game based on the technology of the Egretia Network, thus greatly reducing the cost of game development.

### **Multi-nodes, low latency**

Decentralised worldwide server nodes and the original "server frame synchronisation" technology, will make for a quicker and more stable transmission of game data. In the meantime, to meet the needs of large multi-player online games, full advantage will be taken of the rich experience the Egretia team has with building platforms and adopting a "deep coupling" approach. Information that does not affect fairness will be managed in a traditional manner and core data will be processed through smart blockchain-based contracts. Seamless coordination ensures fairness and a smooth gaming experience.

### **Quick Match**

Based on distributed back-end communications, a flexible matching mechanism will be meeting the majority of the matching requirements under different customisable rules. This will help in enriching the gameplay, helping more players build connections, and truly achieving the state of "global players using the same server".

### **Quick Access**

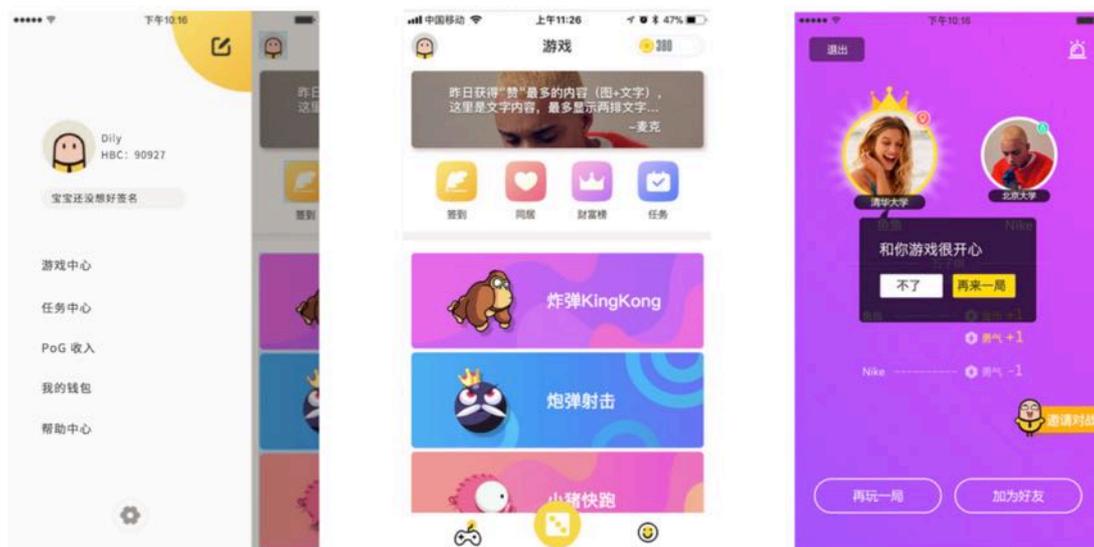
Modularising the game lobby, room and interactive processes, the needs of developers will be taken into consideration, combining front-end engine and tools for developers to quickly access and develop games.

### **The Server-Side Logic of "Smart Contract" Management**

Aside from basic networking capabilities, game developers will also be provided with a server-side framework based on smart contracts, the Egretia Backend Logic Framework. Developers will be able to extend server networking capabilities to implement the customised server-side game logic. Because the server-side logic is based on the blockchain of the Egretia Network and managed through smart contracts, the game logic is open and fair, which can effectively prevent plug-ins.

### 3.4 Egretia DApp Case

#### Decentralized HTML5 Game Distribution Platform



The decentralised game distribution platform is currently under development, all the games are developed based on the blockchain of the Egretia Network, accessing the KYC authentication system, the digital tokens, the data storage module and other functions of the Egretia Network.

On this game platform, players can not only play all HTML5 games, but also obtain digital virtual currency tokens through playing games, while at the same time gaining token incentives through completing the tasks in games. The assets of all players are securely stored in an Egretia wallet.

Because each user on the game platform has a unique passport, accurate user profiles can be obtained based on historical data, thus matching players according to

their interests. Thus the platform of the Egretia Network is not only a game platform, but also a social platform.

### Professional Operation Team and Incubator

The professional gaming operations team of the Egretia Network, with its outstanding global promotion capabilities in mobile games and applications, will focus on global promotion of premium games and applications based on the blockchain of the Egretia Network. Cooperative agreements have been made with a number of content providers worldwide to develop quality games and apps based on the Egretia Network. At the same time, the native incubator will support outstanding content or technical teams, jointly growing with them together.



# Chapter 4



## Team and Partners

- 4.1 About Egretia BlockChain Lab
- 4.2 About Egret Technology
- 4.3 Lab Core Members
- 4.4 Advisors

# Team and Partners

## 4.1 About Egret Blockchain Lab

The strategic partner of the Egretia team in China, Egret Technology, is the world's leading provider of HTML5 industry solutions, and the development partner of the Distributor. As a technology-driven company, Egret Technology has always embraced cutting-edge technology with an open mind and is committed to improving the industry.



Egretia Blockchain Lab, with core members from Qualcomm, Adobe, NVIDIA, is devoted to combining blockchain technology with the leading HTML5 engine and tool technologies of Egret, aiming for applying blockchain technology towards its vertical industry. Through the existing global developer ecosystem, promoting the popularisation of blockchain applications, covering over 1 billion users, it has practical and far-reaching significance to pushing forward the development of the industry.

## 4.2 About Egret Technology

- Founded in 2014, has R&D centers in Beijing and Shanghai.
- W3C member, contribute to Web Standard Development.
- Core tech team comes from Adobe Asia R&D center, having over 15 years professional technologies experience.
- The largest HTML5 development platform and over 75% marketing penetration rate in China.
- More than 200,000 developers worldwide, with HTML5 content powered by its workflow covering 1 billion mobile devices.
- Investors: GuoJin Capital, Shunwei, XiaoMi and SIG for round A financing; Matrix, Shenzhen Capital for round B financing.



- Expanding to the global market, exploring the monetisation and business model of cloud service and big data.
- In partnership with world-renowned companies



Egret Technology independently developed 14 products such as the Egret Engine, Egret Runtime, DragonBones and Egret Wing, creating the first complete HTML5 development workflow in the world. For more information, please visit the website of



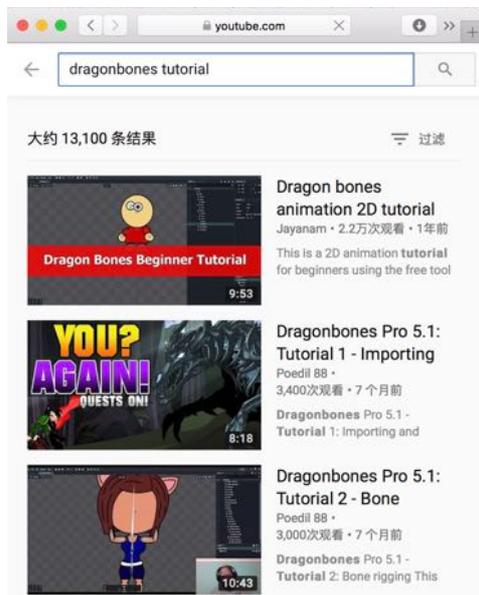
Egret Technology: <http://www.egret.com>



CCTV reported DragonBones, the skeletal animation software of Egret Technology, has become the international animation standard.

Related report:

<http://www.techweb.com.cn/onlinegamerim/2017-03-22/2503768.shtml>



There are more than 10,000 tutorials of Dragon Bones on Youtube, all of which are self-submitted and shared by the global developers, proving Dragon Bones immense popularity.

Using the Egret engine and Egret tools,

developers have created products that are representing milestones in the history of HTML5:



- Catch the Crazy Cat, the first popular HTML5 game on Wechat, gaining more than 100 million users within 3 days.



- Yugong Yishan, the first HTML5 paid game, with total users of more than 50 million.



- Legendary world, the first game with 10 million Yuan monthly revenue in HTML5 history



- Juezhan Shacheng, the first game with over 30 million Yuan monthly revenue in HTML5 history.

- Legend is coming, the first game with over 100 million Yuan monthly revenue in HTML5 history.

Another reason why the team chose Egret Technology is its good developer ecosystem. Every year Egret Technology holds a HTML5 developer conference, with thousands of people attending, proving developer loyalty and enthusiasm. It is believed that based on the huge developer community of Egret, the HTML5 blockchain technology of the Egretia Network will be quickly deployed in a variety of games and applications and gain popularity.



2017.12.28

微信推出“小游戏”第一周

截至 2018.1.4 白 鹭引擎数据变化如下:

“微信小游戏”创建

2921

After Tencent Wechat launched its mini-game, Egret Technology announced that its tools would start supporting the development of mini-games. In just a week, 2921 mini-game projects were created through Egret tools.

## 4.3 Core Members



### **Peter Huang**

Serial entrepreneur, used to be technical manager of Adobe Flash Platform, has 18 years of development and management experience in internet application and game project.



### **Dirk Meyer**

Sr. Program Manager, Digital Media BU PMO at Adobe, with more than 20 years of experience in global project management. Made impactful contributions to Adobe's strategic business plan and innovative programs. He is a blockchain technology advocate and investor.



### **Edwin Chen**

Founder & CEO of Egret Technology, serial entrepreneur, used to be Discuz! core member, founder of Ismole.



### **Yin Ma**

Compiler and toolchain expert, entrepreneur. Qualcomm senior staff engineer, his own business focused on software and solutions consulting. He has accumulated nearly two decades of experience in a variety of operating system platform compiler development. Worked in Microsoft, Absoft, etc. Created fastest Fortran compilers for Intel/AMD while working in Absoft as director of compiler development.



### **Ross Przybylski**

A passionate game industry veteran. With more than 15 years of experience in software development and 10 years of experience in game development, focusing on developing great games.

In addition to the above members, the Egretia Blockchain Lab also has experts from other industries around the world. We would also like to welcome more like-minded friends to join the blockchain laboratory, promoting the development of the industry.

## 4.4 Advisors



### Lucas Lu

Lucas received his PhD degree in Particle Physics from SMU in 2005. He worked at CERN when he participated in theoretical and experimental research of Higgs Partical. Dr. Lucas Lu, was previously a co-founder and CTO of Light In the Box, a company which went public on the NYSE, and prior to that, Lucas was the first GM of Alibaba's Taobao Mobile platform, and was the GM of another Alibaba business unit. Lucas founded 5miles in 2014.



### Frank Lee

Founder of several start-up companies and Angel Investor. Successfully developed the first Litecoin ASIC miner in the world. Two companies are included in MI eco system. Invested and co-founded companies in various areas, including Game, VR, AR, IOT, etc. Graduated from Tsinghua University with degree in Electrical Engineering.



### Yao Yong

The pioneer of Chinese game engine, the founder of Wing Hang Technology, leading the company to develop H3D engine itself. The products such as "QQ Dancer" and "Dancing Time" made by the company using the H3D engine are widely known. These games have a large number of players, one of them reached 6 million concurrent online users.



### Hongfei Tian

Hongfei received his Master's degree from MIT. Now a founding partner of iVision, responsible for Internet finance and enterprise software investment. Previously worked at SIG, Oracle as a software security engineer, World Bank IFC, etc. Has autonomously developed Bitcoin payment gateways, Bitcoin mobile wallet-Yard wallet, and copyrights authentication systems.

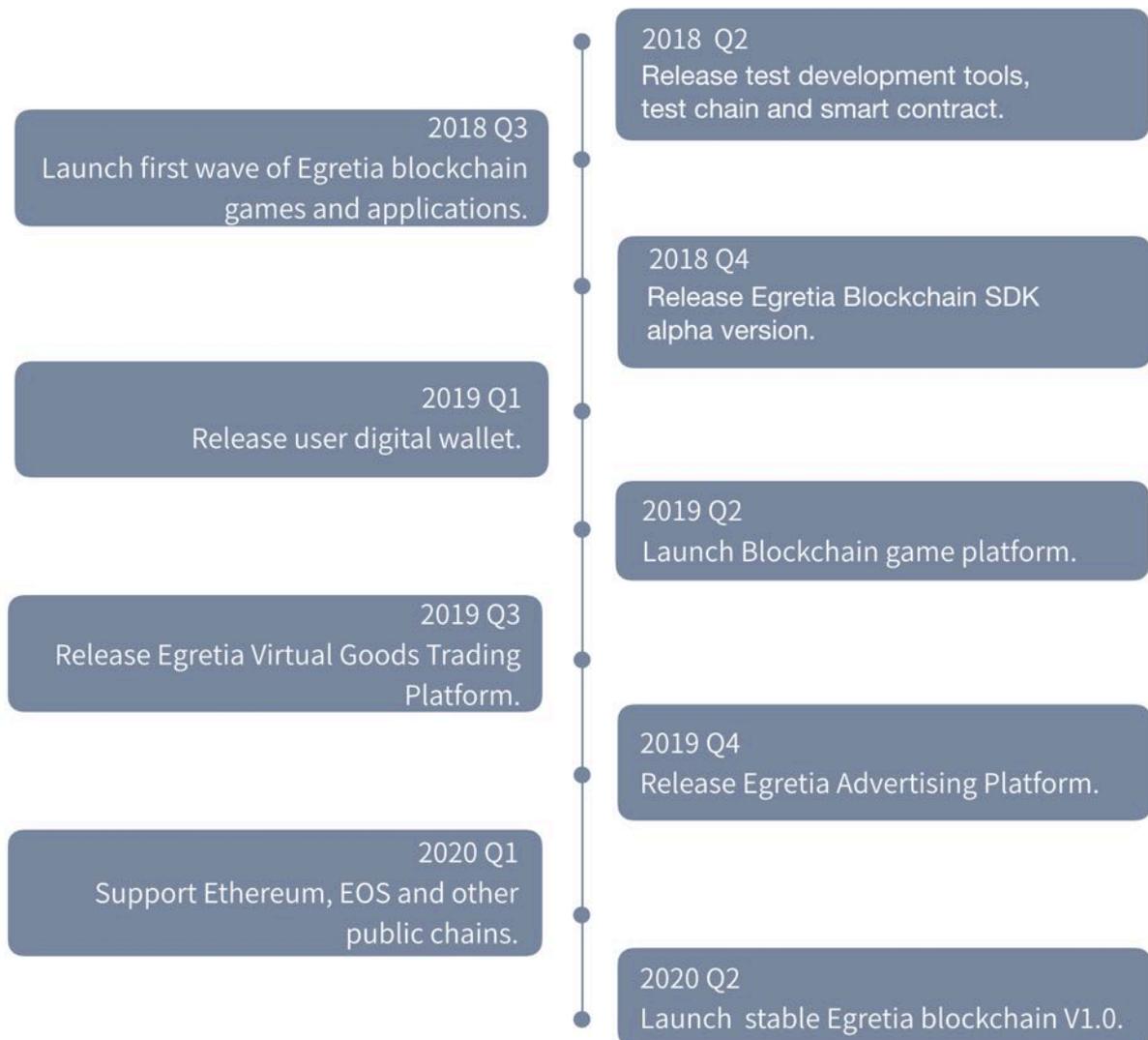
# Chapter 5



## Roadmap and Milestone

## Roadmap and Milestone

The professional engine tools and blockchain technology team of the Egretia Network will ensure milestones will be delivered on time.



## Risks

You acknowledge and agree that there are numerous risks associated with purchasing Egreten, holding Egreten, and using Egreten for participation in the Egretia Network. In the worst scenario, this could lead to the loss of all or part of the Egreten which had been purchased.

### 1. Uncertain Regulations and Enforcement Actions

The regulatory status of Egreten and distributed ledger technology is unclear or unsettled in many jurisdictions. The regulation of virtual currencies has become a primary target of regulation in all major countries in the world. It is impossible to predict how, when or whether regulatory agencies may apply existing regulations or create new regulations with respect to such technology and its applications, including Egreten and/or the Egretia Network. Regulatory actions could negatively impact Egreten and/or the Egretia Network in various ways. The Foundation (or its affiliates) may cease operations in a jurisdiction in the event that regulatory actions, or changes to law or regulation, make it illegal to operate in such jurisdiction, or commercially undesirable to obtain the necessary regulatory approval(s) to operate in such jurisdiction. After consulting with a wide range of legal advisors and continuous analysis of the development and legal structure of virtual currencies, the Foundation will apply a cautious approach towards the sale of Egreten. Therefore, for the token sale, the Foundation may constantly adjust the sale strategy in order to avoid relevant legal risks as much as possible. For the token sale the Foundation is working with Tzedek Law LLC, a boutique corporate law firm in Singapore with a good reputation in the blockchain space.

### 2. Inadequate disclosure of information

As at the date hereof, the Egretia Network is still under development and its design concepts, consensus mechanisms, algorithms, codes, and other technical details and parameters may be constantly and frequently updated and changed. Although this white paper contains the most current information relating to the Egretia Network, it is not absolutely complete and may still be adjusted and updated by the Egretia team from time to time. The Egretia team has no ability and obligation to keep holders of Egreten informed of every detail (including development progress and

expected milestones) regarding the project to develop the Egretia Network, hence insufficient information disclosure is inevitable and reasonable.

### 3. Competitors

Various types of decentralised applications are emerging at a rapid rate, and the industry is increasingly competitive. It is possible that alternative networks could be established that utilise the same or similar code and protocol underlying Egreten and/or the Egretia Network and attempt to re-create similar facilities. The Egretia Network may be required to compete with these alternative networks, which could negatively impact Egreten and/or the Egretia Network.

### 4. Loss of Talent

The development of the Egretia Network depends on the continued co-operation of the existing technical team and expert consultants, who are highly knowledgeable and experienced in their respective sectors. The loss of any member may adversely affect the Egretia Network or its future development. Further, stability and cohesion within the team is critical to the overall development of the Egretia Network. There is the possibility that conflict within the team and/or departure of core personnel may occur, resulting in negative influence on the project in the future.

### 5. Failure to develop

There is the risk that the development of the Egretia Network will not be executed or implemented as planned, for a variety of reasons, including without limitation the event of a decline in the prices of any digital asset, virtual currency or Egreten, unforeseen technical difficulties, and shortage of development funds for activities.

### 6. Security weaknesses

Hackers or other malicious groups or organisations may attempt to interfere with Egreten and/or the Egretia Network in a variety of ways, including, but not limited to, malware attacks, denial of service attacks, consensus-based attacks, Sybil attacks, smurfing and spoofing. Furthermore, there is a risk that a third party or a member of the Foundation or its affiliates may intentionally or unintentionally

introduce weaknesses into the core infrastructure of Egreten and/or the Egretia Network, which could negatively affect Egreten and/or the Egretia Network.

Further, the future of cryptography and security innovations are highly unpredictable and advances in cryptography, or technical advances (including without limitation development of quantum computing), could present unknown risks to Egreten and/or the Egretia Network by rendering ineffective the cryptographic consensus mechanism that underpins that blockchain protocol.

## 7. Other risks

In addition, the potential risks briefly mentioned above are not exhaustive and there are other risks (as more particularly set out in the Terms and Conditions) associated with your purchase, holding and use of Egreten, including those that the Foundation cannot anticipate. Such risks may further materialise as unanticipated variations or combinations of the aforementioned risks. You should conduct full due diligence on the Foundation, its affiliates and the Egretia team, as well as understand the overall framework, mission and vision for the Egretia Network prior to purchasing Egreten.