R T C

Agreement Whitepaper

Directory

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The introduction

Rivet Chain

Introduction

The birth of blockchain has found the way forward for the world. The consensus system generates passive trust and forms a consensus mechanism that cannot be tampered with. Recently, there has been a significant increase in interest and research in distributed consensus systems, with a focus on distributed payment networks. This architecture allows for fast, low-cost transactions that are not centrally controlled.

The emergence of open source ecosystems, decentralized resource-sharing, and cryptocurrencies has inspired people to think that decentralized protocols have the potential to improve the basic framework of a social economy. Examples include cryptocurrencies such as Bitcoin and Ripple, as well as open source smart contract platforms such as Ethereum, and many distributed applications based on EVM (Ethereum virtual machine) and TVM, such as NEST (financial platform) and Augur (prediction).

The Rivet Chain mentioned here is developed based on the RTSP protocol and optimizes the existing deficiencies of Ethereum, a brand new blockchain system.

Rivet Chain is not a single blockchain system, but an integration of multiple research findings based on the blockchain. What Rivet Chain does is focus on developing a new set of approaches to help different projects communicate with each other and build a new blockchain Internet on distributed nodes.

The Rivet Chain allows other independent blockchains to communicate and trade with each other, and provides scalable solutions -- including new consensus mechanisms. This paper will discuss the relevant work of Rivet Chain from the perspective of basic information and technical principles.

Rivet Chain is a public blockchain architecture, which can solve the problem of streaming media transmission between public chain and side chain. It is a Byzantine fault-tolerant security consensus engine with high performance, consistent characteristics and the ability to prevent vandalism under strict bidirectional
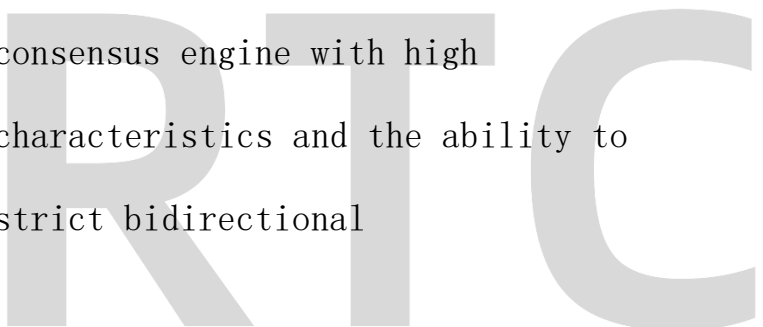
accountability. The consensus algorithm is very suitable for PoW + PoS proof mechanism under public block chain, through the use of link adaptation space, the content of the building is essentially the ultimate abstract base layer to achieve this: with a built-in Turing complete programming language block chain, allowed to write intelligent contracts and distributed application, for ownership and transaction format and state transition function to create your own rules.

It enables cross-chain interoperability between blockchains, USES decentralized storage and merckle trees, and trades only on critical chains, thus greatly reducing the congestion dilemma of the main chain network.

2

Summarize

Rivet Chain

——————————————— PROBLEM ———————————————

Many deficiencies have emerged in all current blockchains, including low overall energy efficiency, poor or limited performance, and a lack of mature management mechanisms.

While the advantages and disadvantages of blockchain are worth studying, here we focus on the challenges that distributed payment systems must encounter.

Many of today's problems, such as the Byzantine generals problem, have been addressed for years. Distributed payment architectures must remain stable in the face of common and "Byzantine" bugs that can arise from multiple sources in the system.

In the past many mandates for enhanced transaction throughput were developed for solutions such as Segregated-Witness and new assumed scalability agreements but these were given for vertical scalability on Segregated physical machine capacity for full audit performance. The lightning network can expand the transaction capacity through some transactions completely recorded in the main chain ledger.

This method is very suitable for small payment and anonymous protection payment channel, but it is not suitable for more universal expansion needs.

In traditional blockchain applications, all transactions are often sent to the main network, which on the one hand increases costs, and on the other hand greatly increases network congestion. There have been several similar cases on Ethereum in the past, such as FOMO 3D, as we know it.

There are many problems in the existing blockchain network, such as centralization, insufficient sharing and high transaction costs. Such problems also lead to the relative congestion of the audio and video streaming media chains, making it difficult to realize the real-time streaming media chains.

The ideal solution is to allow multiple parallel blockchains to interoperate while maintaining their security features, with excellent streaming media transmission and information carrying capacity. This has proved difficult, but not impossible, to do in the way that has been done before. For example, merge mining allows the

main chain to be reused on the satellite chain while the work is completed, but the transaction must be verified by each node in turn, and it is vulnerable if most of the hashing forces on the parent chain do not actively merge mining the child chains. Other technologies and defects will be outlined in our innovation efforts.

decision scheme

Streaming Media   Rivet Chain   interoperability

application   audio /video   reduce time
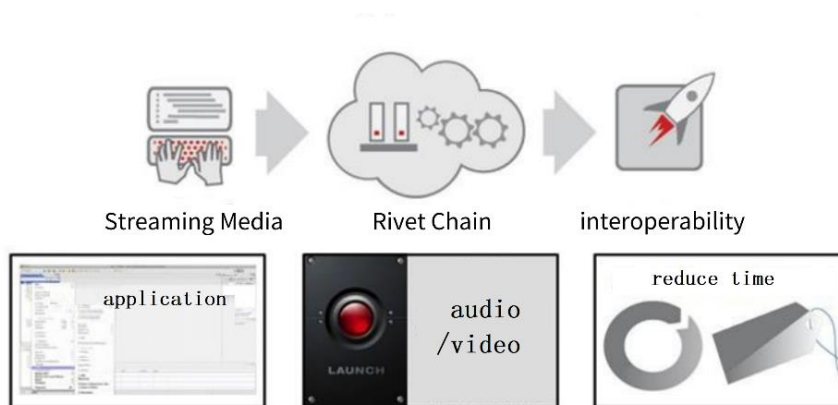
———————— Summary of Rivet Chain ————————

Rivet Chain is a new blockchain network architecture that addresses these issues. The Rivet Chain is a network of independent blockchains in many different Spaces. The space operates under the support of Rivet BFT, a byzantine-

like fault-tolerant security consensus engine with high performance, consistent features and the ability to deter vandals under strict bifurcation accountability mechanisms. Rivet BFT's Byzantine fault-tolerant consensus algorithm is well suited for public blockchains under the PoW+PoS mechanism. Blockchains using other consensus models, including similar pos-based Ethereum, can also be linked by the Rivet Chain using the adaptspace.

The first space of the Rivet Chain is called the Rivet Chain centre. The Rivet Chain centre is a multi-asset equity proof cryptocurrency network that can be adapted and upgraded through simple management mechanisms. In addition, the Rivet Chain centre can be expanded by linking to other Spaces.

The hub and Spaces of the Rivet Chain network can be communicated through the RTSP protocol, which is the virtual user datagram protocol (UDP) or transmission control protocol (TCP) for the blockchain. Tokens can move safely and quickly from one space to another without the need for liquidity between the two. Because everyone will be able to connect the new space to the Rivet Chain hub,

the space will be able to accommodate the new blockchain pieces.

──────────────── Concept ────────────────

We believe that blockchain interoperability is of high importance. In the existing network, you can access and modify a large number of data sets through the application's API. In a blockchain, data is blocked in one chain. We hope to break such a data island situation, because when the smooth flow of data and interaction, will produce more value and greater development space.

◎We hope to achieve the following reality through the Rivet Chain:
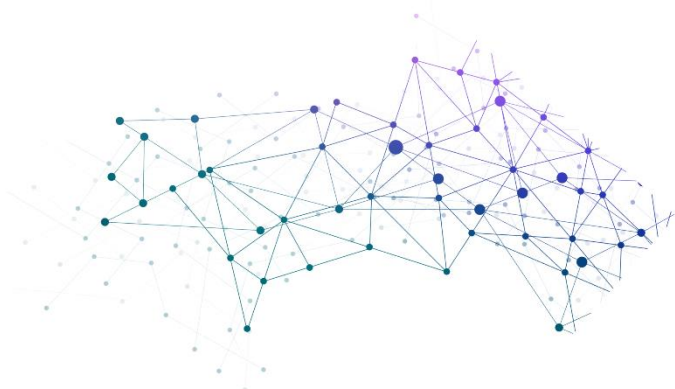
1. Without trust, different blockchains can directly and safely transfer assets;

2. Intelligent contracts between different chains can realize interaction;

3. Some special chains can be used by other blockchains;

4. Provide bridge-slots for chains that cannot guarantee security but can realize communication;

5. Make it possible for real-time streaming media to be unimpeded and controlled on the chain at low cost.

Interoperability between blockchains can be achieved using Rivet Chain. This is a valuable potential of the Internet, the assets by the consensus of different distribution and control, and can be trusted third party does not rely on need to realize the seamless transfer of assets across the chain and transaction, realize the chain finish most of the trading, only the key chain on the deal, thus greatly reducing the plight of the main chain network congestion.

3

Technical solution

In this section we describe the RTSP integration consensus protocol and the interfaces used to build its applications.

—————————— RTSP protocol ——————————

The Rivet Chain hub is the first public blockchain in the Rivet Chain network, run through the RTSP's integrated consensus algorithm. The RTSP open source project aims to further optimize the speed, scalability, and other issues of the PoW+PoS consensus algorithm. By adopting and improving the verified PoW+PoS algorithm, the RTSP mechanism can solve the related problems faced by the first-generation certificate of interest cryptocurrency.

RTSP blockchain real-time streaming protocol is an integrated consensus protocol for application layer protocol upgrade. The RTSP protocol is used to establish and negotiate real-time streaming sessions in space and blockchain.

The RTSP is an application-level protocol that controls the transmission of real-time data. The RTSP provides an extensible framework to enable controlled on-demand over

the blockchain of real-time data such as audio with video. Data sources include live data and data stored in clips. The purpose of the protocol is to control multiple data transmission connections, to provide a way to select transmission channels, such as UDP, multicast UDP and TCP, and to provide a method to select a transmission mechanism based on RTP.

The RTSP establishes and controls one or more time-synchronized continuous streams. Although it is possible to exchange a continuous media stream with a control stream, usually it does not itself send a continuous stream. In other words, the RTSP ACTS as a network remote control for the multimedia server. RTSP connections are not bound to transport layer connections, such as TCP. During an RTSP connection, the RTSP user can open or close multiple transportable connections to the server to make an RTSP request. In addition, connectionless transport protocols such as UDP can be used. The RTSP stream control may use RTP, but the RTSP operation does not rely on a transport mechanism for carrying continuous media.

The RTSP protocol supports the following operations:

Retrieve streaming media from the blockchain: the user can submit a presentation description via HTTP or other means. If the demo is multicast, the demo contains the multicast address and port for continuous media. If the demo is sent to the user only via a single broadcast, the user should provide the destination address for security purposes.

consensusers

In the classical Byzantine fault-tolerant algorithm, each node has the same weight. In the RTSP, nodes with varying amounts of commit distribution weight are referred to as consensusers. Consensus participants participate in consensus protocols by broadcasting encrypted signatures, submitting distributions, or voting on the next block.

The submission distribution right of the consensus is determined from the beginning, or it is determined by the blockchain according to the application. For example, in a proof of interest application like the Rivet Chain centre, the right to submit distribution can be determined by the number of tokens tied to the deposit.

─────────────── consensus ───────────────

The RTSP is a partially synchronous Byzantine fault-
tolerant consensus protocol derived from the PoW+PoS
consensus algorithm. RTSP has simplicity and high
performance. The protocol requires the consensus to be
fixed and known, and each consensus has its public key to
verify identity. These consensus-seekers are trying to
agree on a single block at the same time, which is a series
of transaction records. The consensus for each block takes
turns, and each round has a leader, or proposer, who
initiates the block. The consensus then makes a
distribution of whether to accept the block in stages, or
whether to go to the next round. In each round, the
proposer will select from the consensus list according to
the proportion of the submission distribution weight.

In addition to its superior security, the RTSP has
excellent performance. In the case of cloud platforms, the
RTSP consensus is based on 64-bit nodes in seven data
centers on five continents that can process thousands of
transactions per second with order submission delays of 1-2
seconds. It is worth noting that even in a relatively

severe hacker environment, such as consensus loss or the distribution of malicious BUG submissions, it is possible to maintain this high performance with over 1000 transactions per second.

Lightweight client

The main advantage of the RTSP consensus algorithm is that it has a secure and simple client, making it an ideal choice for mobile devices and IoT use cases. The microclient must synchronously run the header chain and find the most PoW+PoS, while the RTSP microclient needs to remain consistent with the validation group changes, and then simply validate the pre-submitted > in the latest block to determine the latest status.

This simple micro-client proof mechanism can also realize the communication between blockchains.

Defense

RTSP has a variety of defenses to protect against obvious attacks, such as remote disinterested dual attacks and censorship.

———————————————— RBCI ————————————————

The RTSP consensus algorithm is implemented in a program called RTSP BFT. The program is an application-independent "consensus engine" capable of turning any established black-box application into a distributed, replicable blockchain. RTSP BFT can connect with other blockchain applications through the application blockchain interface (RBCI). Moreover, the application blockchain interface (RBCI) allows blockchain applications to be implemented programmatically in any language, not just the language used by the consensus engine. In addition, applying the blockchain port (RBCI) also makes it possible to swap the consensus layers of any existing blockchain stack.

———————————————— Rivet Chain center————————————————

The goal of the Rivet Chain is to aggregate and promote through protocols, smart contracts and the RTSP, enabling developers to create arbitrary consensus-based, scalable, scalable, easily developed and collaborative applications. The Rivet Chain enables anyone to create contracts and decentralized applications in which they can set up freely defined ownership rules, modes of transaction

and state transition functions by establishing the ultimate abstract base layer – the blockchain with Turing's complete programming language built in. The main framework of the domaincoin can be implemented with very short code, and other protocols such as currency and credit systems can be implemented with very short code. Smart contracts (crypto black boxes that contain value and can only be opened if certain conditions are met) can also be created on our platform, and because of Turing's completeness, value-awareness, blockchain-awareness, and the ability to add multiple states, they are much more efficient than the smart contracts provided by the original script.

Each blockchain in the Rivet Chain network is run using the RTSP consensus algorithm.

Through the new blockchain communication protocol, the Rivet Chain hub connects to numerous other blockchain Spaces. The Rivet Chain centre is able to track the number of tokens and record the total number of tokens in each linked space. Tokens can be moved safely and quickly from one space to another without the need for exchange

liquidity between the two, as all token transfers between Spaces go through the Rivet Chain centre. 。

This architecture addresses many of the issues facing the blockchain space today, including application interoperability, scalability, and the ability to quickly upgrade. These Spaces allow the Rivet Chain to expand efficiently to meet global communication needs. In addition, the space is perfectly suited for distributed exchanges, and vice versa.

The Rivet Chain is more than a single distributed ledger, and the Rivet Chain center is not closed or central to the RTSP ecosystem. We are designing a protocol for an open network of distributed ledgers that will be based on the principles of cryptography, consensus, economics, and openness that will be the cornerstone of the financial system of the future.

———— Fault-tolerant mechanism ————

Virtually all mobile wallet now USES a reliable server to authenticate transactions. This is because the PoW mechanism requires multiple confirmations before a trade is deemed irreversible. And there are already double payment attacks on services like Coinbase.

Unlike other blockchain consensus systems, the RTSP provides instant, verifiable and secure mobile client payment authentication. Because the RTSP is designed to be completely non-forked, mobile wallet will be able to receive transaction confirmations in real time, enabling a truly untrusted payment method on smart mobile devices. This has also greatly affected iot applications.

Consensus participants in the Rivet Chain are similar to miners, but they use encrypted signatures to distribute submissions. Consensus is the security mechanism that is specifically used to deliver blocks. Non-consensual parties can delegate the equity token (also known as the "RTC") to any consensual party to earn a certain block fee and the RTC reward, but if the consensual party violates the terms of the agreement, then the token is at risk of being

reduced. The RTSP Byzantine consensus's provable security mechanism and collateral guarantees from stakeholders (consenters and entrusting parties) provide provable and quantifiable security for nodes and even micro clients.

management

Distributed public ledger should have a system and management system. Bitcoin relies on the foundation and mining for collaborative updates, but this is a slow-moving regulatory regime.

The consensus and trustees of the Rivet Chain centre are able to manage the Rivet Chain centre system by changing the pre-set default system parameters (such as blockchain transfer fee limits), collaborating on updates, and revising the readability of the system submission distribution. The system allows consensus-building parties to come together to address issues such as theft and vulnerabilities and come up with faster and clearer solutions.

The Rivet Chain network enables interoperability between the different institutional Spaces, giving

customers great freedom and potential to experiment without permission.

———————— Center and space ————————

Here we describe a new model of decentralization and extensibility. The Rivet Chain network runs numerous blockchains through the RTSP mechanism. While the goal of the existing proposal is to create a "single blockchain" containing all the global trade orders, the Rivet Chain allows many blockchains to operate in parallel while maintaining interoperability.

On this basis, the Rivet Chain centre is responsible for managing the numerous independent blockchains known as "Spaces". The space above the center will continuously submit the latest blocks, which enables the center to synchronize the status of each space. In the same way, each space will be consistent with the state of the center. To make a message travel from one space to another by publishing a proof that the message is accepted and sent. This mechanism is called "blockchain intercommunication," or RTSP for short.

Any space can become a center by itself to establish self-configuration, but for the sake of simplicity, only this kind of configuration with only one center and many non-centers is discussed here.

The Rivet Chain space is an independent blockchain capable of exchanging RTSP messages with the Rivet Chain hub. From a central perspective, a space is a multi-asset, dynamic membership-based multi-signed account that can be used to send and receive tokens through the RTSP dataset. Like cryptocurrency accounts, there is no room to move more tokens than they hold, though they can receive tokens from other people who have them. Space may be identified as a "source" of one or more tokens, giving it the power to increase the supply of tokens.
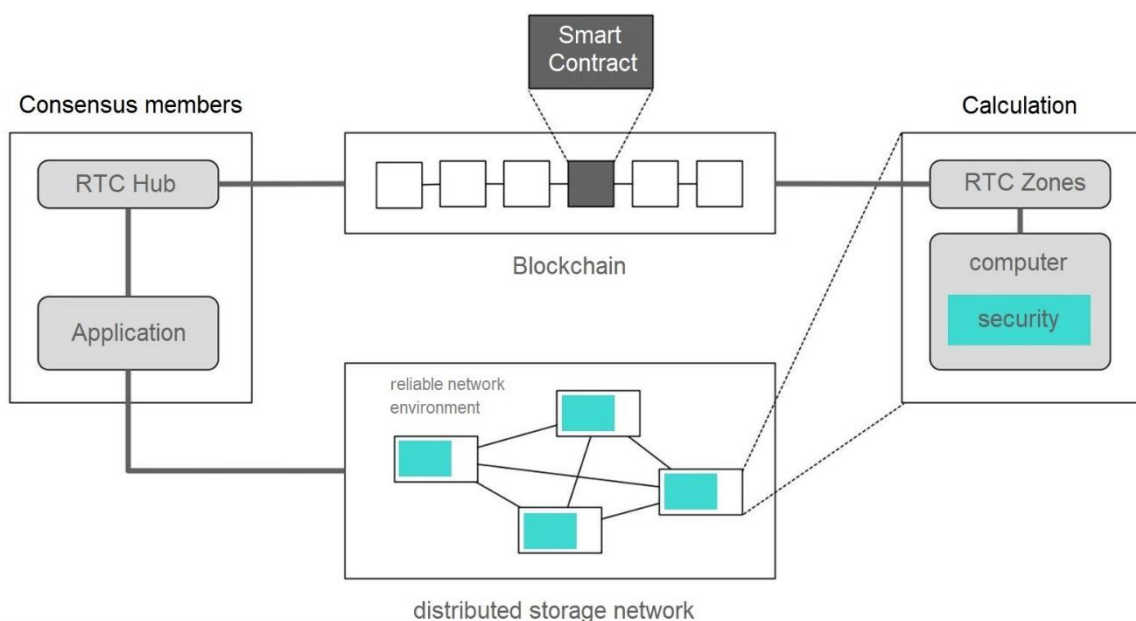
4

Use cases

Rivet Chain

# —————— Blockchain real-time audio/video streaming media transmission ——————

RTSP protocol defines how a one-to-many application can efficiently transmit multimedia data over a blockchain network. The RTSP, which is architecturally superior to RTP and RTCP, USES TCP or UDP for real-time streaming data transfer. RTSP is a multimedia streaming protocol for control of sound or Video, and allows multiple streams at the same time. The blockchain network protocol used for transmission is not within its definition. Proxy's Cache applies to the RTSP as well, and because the RTSP has the redirection function, it can transform the service blockchain according to the actual load, so as to avoid the delay caused by too much load concentrated in the same blockchain.

The RTSP makes it possible for real-time streaming media such as audio and video to be broadcast on a controlled on-demand basis on the blockchain.

The RTSP protocol makes it easier to add optional parameters in a self-describing fashion. The RTSP

information can be carried over any underlying blockchain transport protocol.
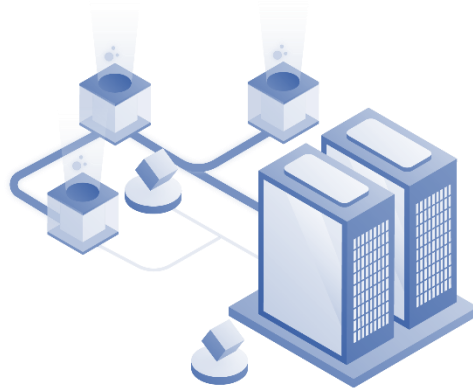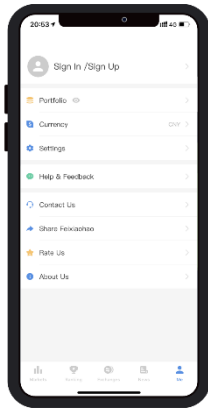
◎ RTSP 请求能够几种不同方式传送：RTSP requests can be sent in several different ways:

- persistent transmission connection for multiple request/response transmissions.

- one connection per request/response.

- connectionless mode.

———————————— Extension ————————————

Expansion has always been a problem in ethereum. Currently ethereum handles every transaction on the node and stores all the states.
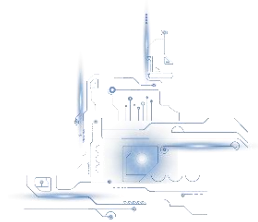
Based on ethereum, RTSP submits blocks faster than ethereum workload proves, so ethereum virtual machine partition driven by RTSP consensus can enhance the performance of ethereum blockchain. In addition, it can be used to coordinate the circulation of tokens between the ethereum contracts in different zones, and to shape the basis for the expansion of ethereum centered on tokens through the zoning.

── Across the chain of communication ──

Let's talk about the way the center interacts with the space. In order for the data set to be converted from one chain to another, a certificate needs to be issued on the receiver chain to make it clear that the sender has initiated a data set to the identified destination. The certificate to be verified by the recipient must be identical to the sender header. This mechanism is requires two interacting chains to know the situation of the other side by two-way transmission of the existence proof data set. The RTSP protocol can be naturally defined as the use of two types of transactions: the RTSP Integration transaction, which allows the blockchain to verify its

latest block hash value with any observer; The other is the
RTSP Distributed transaction, which verifies that a data
set is actually transmitted from the sender's application
to the hash value of the latest layer of blocks.

By separating the RTSP mechanism into two separate
transactions, the RTSP Integration transaction and the RTSP
Distributed transaction, the sender is also given complete
freedom to determine the number of data sets that can be
sent.
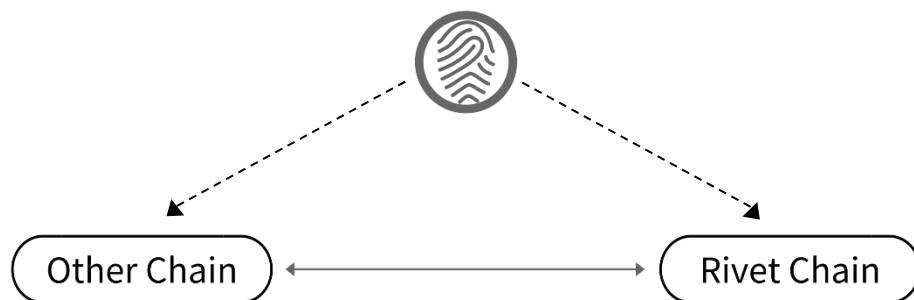
───────── Convenient use ─────────

Rivet Chain space can run any application logic
that is set at the time the space is created and can be
continuously updated by the manager. This convenience

allows the Rivet Chain space to act as a link bearer for other cryptocurrencies, such as ETH, and it can also be linked to these blockchain derivatives, using the same code base, and differentiating between validation procedures and initial allocation. This allows a variety of existing cryptocurrency frameworks, such as Ethereum, Zerocash, etc., to be combined with RTSP BFT to become a consensus engine for better performance in the general network, providing more opportunities for interaction between platforms. In addition, as a multi-asset blockchain, each transaction may contain multiple input and output items.

Spaces can also become blockchain versions of commercial or political systems, where specific services that were previously operated by one or more organizations are now run as RBCI applications in a space that maintains the security and interactivity of the public Rivet Chain network without relinquishing control over the underlying services. Therefore, Rivet Chain may provide a good operating environment for those who want to use the blockchain technology but are not willing to give up control to a distributed third party.
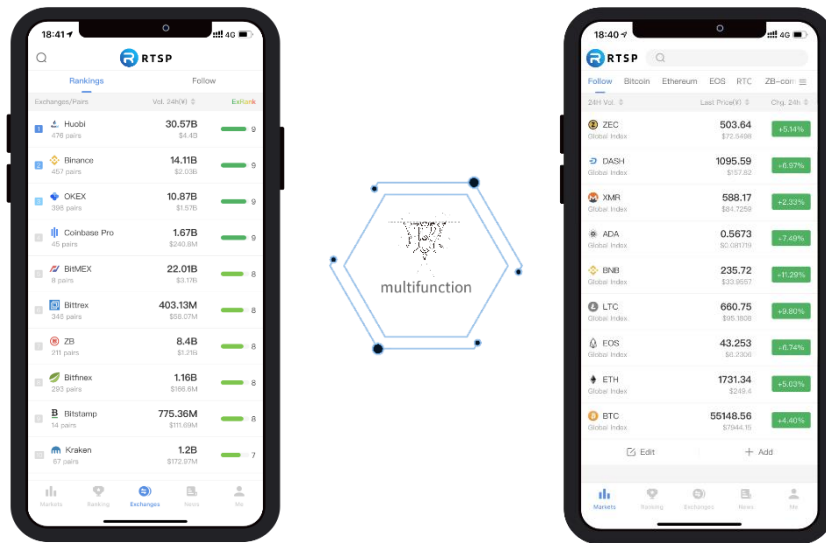
—————— Google architecture high-speed
blockchain browser ——————

Rivet Chain USES Google's underlying search architecture to create an integrated blockchain knowledge map, dynamic, adjustable neural network, a blockchain encyclopedia with comprehensive information, an "APP Store" with selected projects, and a social media gathering place for traffic sharing.

Google giant Token search engine has millisecond level startup, personalized customizable, recommended blockchain exclusive content. "Search is what you think" -- we classify the high-quality content produced by blockchain

media and we-media, so that users can find the content they are interested in in the first time. All blockchain knowledge users want to know can be searched, and all quality projects users want to know can be learned through Rivet Chain.

Technical characteristics

Rivet Chain giant Token has a WEB site search engine, Google images, newsgroups, and directory of four function modules, search SuLu machine is fast, develop a analysis on the relationship between the various Chain do precise search engine, search engine search request can handle up to one hundred million times a day, 3 billion WEB documents database entities, provide regular search and advanced search function, information entry, and supports a variety of languages, supports up to ten thousand kinds of currencies and exchange.

1、When searching by keyword, all and part of keywords are included in the returned results. When searching by phrase, it is conducted in an accurate way by default.

2、We do not need to use AND when querying in our blockchain browser. Narrow it down by entering more keywords or using a secondary search.

3、the unique PR technology, PR can make an objective evaluation of the importance of web pages. PR is an important standard for us to evaluate the quality of a website. There are ten levels of PR, ranging from 1 to 10. The higher the PR, the higher the quality and authority of the website, and the higher the ranking.

4、update and included, we will be all the blockchain search engine included the fastest, more stable update.

5、Attach importance to link description and link quality.

6、Hypertext matching analysis: our blockchain search engine also analyzes web content. Instead of simply scanning the text based on the web page, we analyze the entire content of the web page as well as factors such as font, partition, and
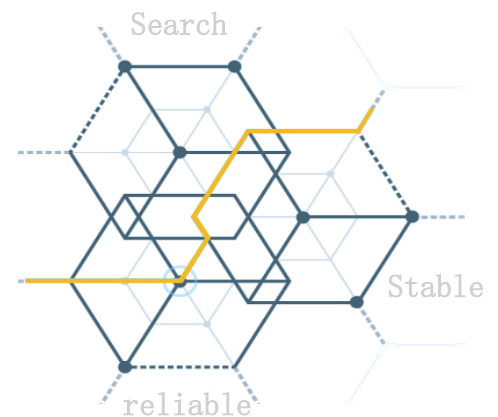
the exact location of each text. The content of
adjacent pages is also analyzed on the chain to
ensure that the results most relevant to the user
query are returned.

—— Create an autonomous organization ——

Rivet Chain allows blockchain enthusiasts from
different regions of the globe with common interests to
speak and interact in a circle of different topics, hot
topics and projects. Rivet Chain supports real-time
Posting, timely interaction, and enables more people to
access and receive feedback in the fastest and most concise
way. Your voice will be heard by more people. Rivet Chain
is a practitioner and enthusiast of blockchain, enabling
individual creators, we media, communities and projects to
make better content visible to more people, maximizing the
benefits to content producers and the value of content
information, and creating a virtuous cycle of content
output, creators' benefits and content quality. Rivet Chain
is committed to creating the most professional and open
interactive platform for the blockchain industry, and will
become a lifelong career of Rivet Chain.

— Digital asset information revolution —

Rivet Chain provides real-time reminder of bitcoin transactions, efficient transactions, and information to redefine the bitcoin market. Through big data technology, multidimensional and multi-level processing of massive data is conducted to timely share the most valuable information to users. The Rivet platform allows you to quickly get alerts about transactions, and any useful and valuable information about the transactions will be sent to you in the first place, regardless of the ups and downs of the mainstream tokens and the tokens you follow. Through big data technology and Google architecture giant search engine, RTC conducts efficient data analysis and data mining in the aspect of blockchain, and builds neutral and authoritative market data platform and comprehensive information platform. To provide users and blockchain projects with high-quality SNS services, provide timely valuable blockchain information, dynamic and other digital content products. Rivet Chain seeks directions in the exploration of blockchain applications by building a new general certification economy system, so that everyone can quickly and conveniently inquire the currency price, gain

insight and grasp the latest trends anytime and anywhere. We strive to provide the most simple, convenient and efficient way for every experiencer to explore blockchain, hear blockchain and see blockchain.

# 5

RTC

Issuance and incentives

─────────── **Mainnet Launch** ───────────

The launch of the main network of Rivet Chain means that the underlying system of Rivet Chain public Chain application is completed, while the Rivet Chain public Chain is a self-application ecosystem built on the block Chain.

─────────── **RTC** ───────────

The Rivet Chain is a multi-asset distributed ledger with its own tokens, which will be issued on the Rivet Chain. The RTC is the only equity token in the Rivet Chain. The RTC is a license that the holder submits to distribute, verify, or delegate to another consensus, and the RTC can also be used to pay transaction fees to reduce e-waste. The additional inflation RTC and block transaction costs will be distributed as incentives to the consensus and the entrusted consensus.

As the settlement token for the Rivet Chain public Chain application and as the top-up settlement token for the third party application of the Rivet Chain system, the wallet and the Rivet Chain system blockchain browser are decentralized
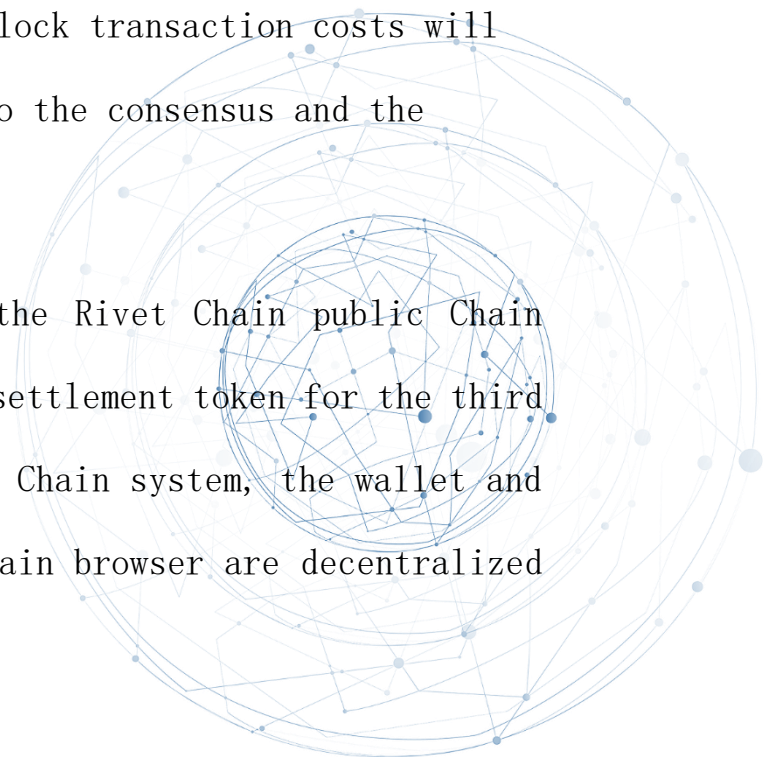
by the Rivet Chain system. The total issuance of RTC tokens is 350 million pieces, 200 million of them will be divided into 24 months and completely isolated.

Total circulation	350,000,000 RTC
Ways of proof	Pow+Pos
Mining algorithm	Ethash+RTSP
Block Interval Time	12s
Block size	$\leqslant$ 5.6MB
Initial yield per block	3 RTC
Reduction cycle	7280000
Yield reduction	1/3

— Distribution plan and management rules —

1、20% of the founding team

The contribution of the founding team and the r&d team will be rewarded. From the launch of the main network, 40% of the first year will be released quarterly, the rest 30% of the second year will be released quarterly, and 30% of the third year will be released quarterly.

2、The proportion of angel funds is 15%

Angel investment, the main network launched, the first year quarter release 40%, the rest of the second year quarter release 30%, the third year quarter 30%.

3、The proportion of ecological incentive is 65%

Provide incentives to community maintainers, resource providers, consensusers, and other contributors.Incentivize good practices in the Rivet Chain.

Angel Funds
15%

Founding Team
20%

R T C

Ecological incentive
65%
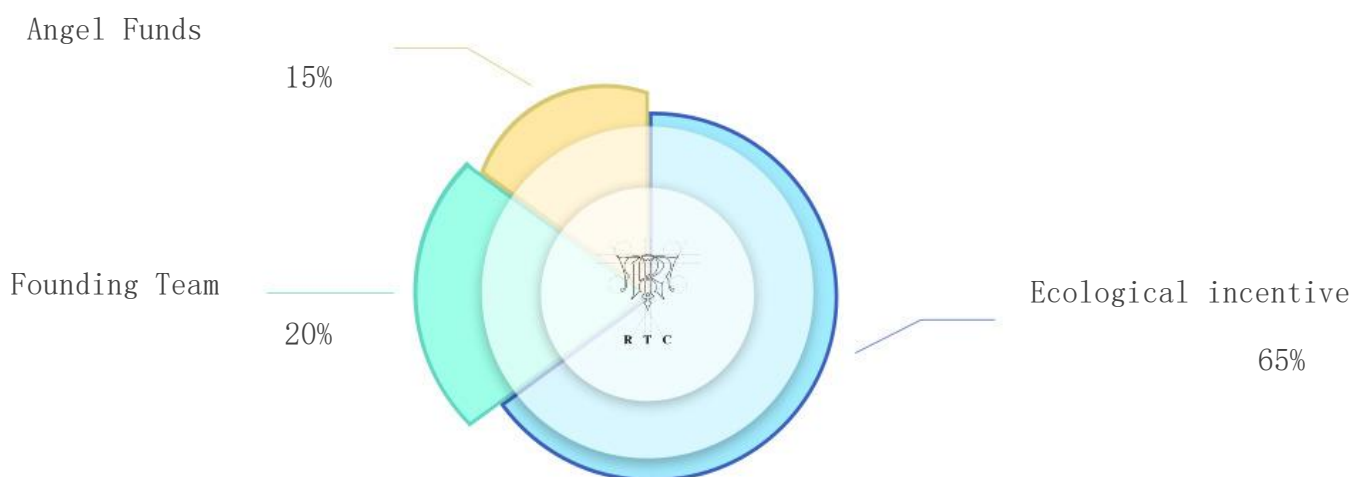
RTC Assign scheme legend

———— Limit the number of nodes ————

Unlike other PoW+PoS blockchains, the RTSP blockchain slows down as nodes increase due to increased complexity of communication. Fortunately, we were able to support enough

nodes to achieve a reliable globally distributed blockchain with very fast transaction confirmation times. And as bandwidth, storage, and parallel computing capacity increase, we will be able to support more nodes in the future.

The maximum number of nodes is 50 master nodes and 100 light nodes.

———— Become the consensuser after the initial block ————

The RTC holder can become a consensus through the distribution of applications and submissions. Anyone can become a consensus consensus at any time, unless the current number of super consensus groups exceeds the maximum, and the number of new super consensus groups needs to be waited for in the future.

————————— Motivate a hacker —————————

The security of the Rivet Chain center depends on the security of the underlying consensus. To encourage discovery and early reporting of vulnerabilities, the Rivet

Chain center encourages hackers to discover vulnerabilities.

———— Management specification ————

The Rivet Chain hub is managed by a distributed organization and requires a clear management mechanism to coordinate changes to the blockchain, such as system parameter variables, as well as software upgrades and constitutional amendments.

All consensus vote on all proposals. Failure to vote on the proposal in a timely manner will result in automatic suspension of consensus for a period of time.

The delegate automatically inherits the distribution of the submission rights of the consensus of its delegate. This commit distribution can be overridden manually.
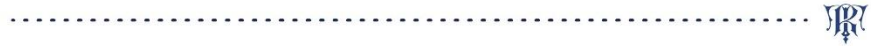
————————— Foundation —————————

Rivet Chain Foundation of New York (hereinafter referred to as the "Fund") established the Fund in New York in September 2017. The Foundation is committed to the development framework of RTSP and Rivet Chain, aiming to promote the open source security and prosperity of the ecosystem. At the same time, the fund will invest in the value of the encrypted money market.

The fund ensures the security of fund accounts and assets through security mechanisms such as blockchain consensus, non-tamper technology and intelligent contract. In the early days of the foundation, the decision-making committee was composed of the chairman of the foundation, the core members of the Rivet Chain creation team, and the supporting institutions.

In addition to serving and advancing the Rivet Chain itself, the foundation also aims to use the value generated by the project to invest in ecological partners. Each year, the foundation will give 5% of the funding to potential developers in the ecosystem to help them grow faster.

The foundation will continue to support and invest in the Rivet Chain and RTSP ecology, with the purpose of promoting the rapid leap-forward development from technology to application at each node in the upstream and downstream of the ecology, and extending the single point prosperity of the Rivet Chain to the complete prosperity of the whole RTSP ecology.

The foundation shall establish a decision-making committee, which shall maintain high standards of integrity and ethical conduct; Abide by the relevant laws and regulations of the region and the self-discipline principle of the industry; Provide transparent financial management; The foundation will invite third-party auditing institutions to audit and evaluate the fund use, cost expenditure and profit distribution of the foundation. The functions of the decision-making committee include the appointment or dismissal of executive heads and heads of functional committees, making important decisions and holding emergency meetings. The decision-making committee shall have the power to appoint or dismiss personnel.

The fund will establish a public relations committee, which will serve the foundation and the global community. The committee will be responsible for the RTSP and Rivet Chain's global markets, including law, legal, technical intellectual property and open source projects.

Rivet Chain fund in New York is mainly invested by the well-known cryptocurrency venture capital fund -- Unblock Ventures, the comprehensive Digital asset investment fund -- Galaxy Digital, and the famous American equity-based crowdfunding platform -- AngelList.

The leading institutions providing academic and technical support to the Rivet Chain fund in New York are the renowned Colorado startup incubator -- TechStars and the prestigious University of Southern Californ.
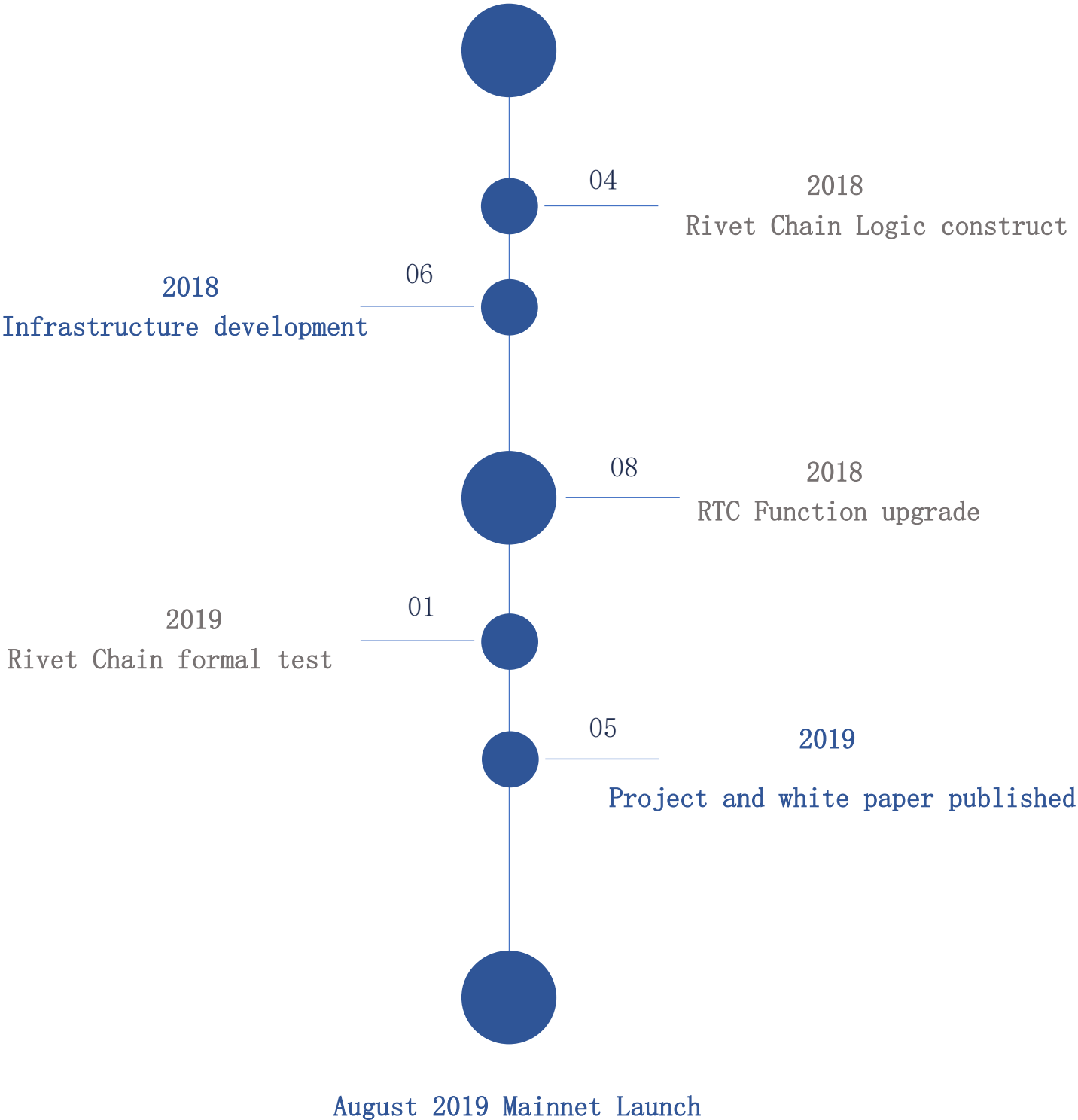
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The roadmap

The RTSP ecological project was approved in October 2017

04   2018
Rivet Chain Logic construct

2018   06
Infrastructure development

08   2018
RTC Function upgrade

2019   01
Rivet Chain formal test

05   2019
Project and white paper published

August 2019 Mainnet Launch

7

Innovation work

Rivet Chain

—————— Standard development ——————

Rivet Chain enables cross-chain interoperability between blockchains, USES decentralized storage and merckle trees, and trades only on critical chains, thus greatly reducing the congestion dilemma of the main chain network.The core mechanism for two-way links is in principle the same as that used by the Rivet Chain.

We're currently working on a number of different strategies to spatialize the state of the blockchain to address the need for scalability. The goal of these efforts is to maintain the abstraction layer provided by the current virtual machine over the Shared state space. At present, a number of research work is underway.

——————— Lightning network ———————

The lightning network is designed as a token delivery network that runs on top of the public blockchain, by moving most transactions away from the consensus ledger to so-called "payment channels". This is achieved through cryptocurrency scripts on the blockchain, which enable both parties to enter into stateful contracts held by both parties, update the status by sharing digital signatures, and finally publish evidence on the blockchain after the contract ends. This mechanism is first welcomed by cross-chain atomic swap transactions. By opening payment channels with multiple parties, participants of the lightning network can become the concentration point and provide a path for others' payment, so as to fully connect the payment channel network. The cost is the funds tied to the payment channel.

Although the lightning network can easily span multiple independent blockchains and transfer value with the help of trading markets, it cannot achieve asymmetric token trading from one blockchain to another. The main advantage of the Rivet Chain network described here is the direct exchange

of tokens. In other words, we hope that payment channels and lightning networks will be widely adopted along with our token transmission mechanism to save costs and protect privacy.
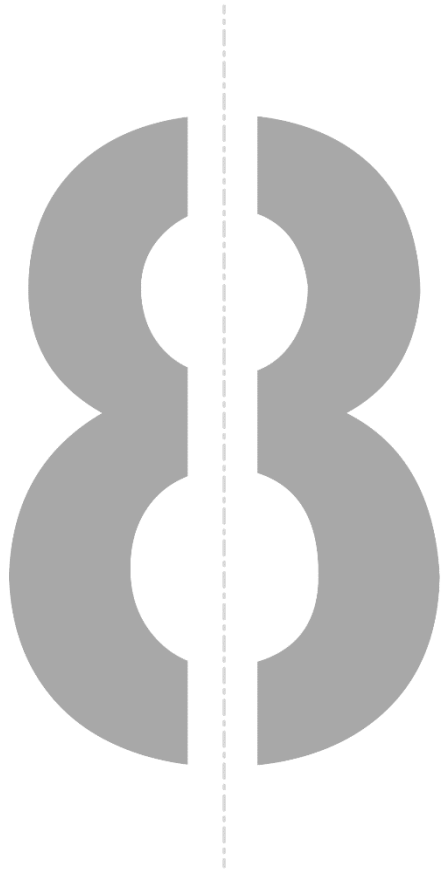
Risk statement

There are many risks in the development, maintenance and operation of the Rivet Chain, many of which are beyond our control. Each participant shall carefully read, understand and consider the following risks and carefully decide whether to participate in our plan. If the holder of the RTC token is deemed to have fully understood and agreed to accept the following risks:

Legal policy and regulatory risk

Blockchain technology is subject to the supervision and control of a number of different regulatory organizations around the world. The RTC may be limited by their requests or actions, including but not limited to limiting the use of digital tokens. Token holders must conduct their own due diligence to ensure they comply with all legal security risks related to their local cryptocurrency, tax, bond and other regulations.

Funds collected during the angel or private placement phase are not covered by insurance. In the event of loss of them or their loss of value, the buyer may not be able to obtain assistance from any private or public insurance to unauthorised claim the risk of RTC. Everyone should take

the following measures: properly maintain the security of their registered mailbox or account; Use high security passwords; Do not open or reply to any spam messages; Keep strictly confidential its confidential or personal information.

Technical risk

The Rivet Chain is still in the development stage, and due to the technical complexity of the development of the public Chain at the bottom of the Rivet Chain, development may from time to time face unforeseeable and/or insurmountable technical difficulties. Therefore, the development of the Rivet Chain may fail or be terminated at any time for any reason.

Source code vulnerability risk, no one can guarantee that Rivet Chain source code is completely flawless. Code can have certain flaws, errors, flaws, and vulnerabilities. This may compromise the availability, stability and safety of the Rivet Chain, thus negatively impacting the value of the RTC. Source code is fundamentally transparent to facilitate code identification and problem solving from the community.

Liquidity risk

The RTC is neither a currency issued by any person, entity, fed bank or national, supranational or quasi-national organization, nor is it a hard asset or backed by other credit. The circulation and transactions of the RTC in the market are not specified by the seller and are not required. The RTC trades only on the basis of consensus among relevant market participants on its value. No person shall be obligated to purchase any RTC from the holder of the RTC and no person shall be able to guarantee to any extent the liquidity or market price of the RTC at any time.
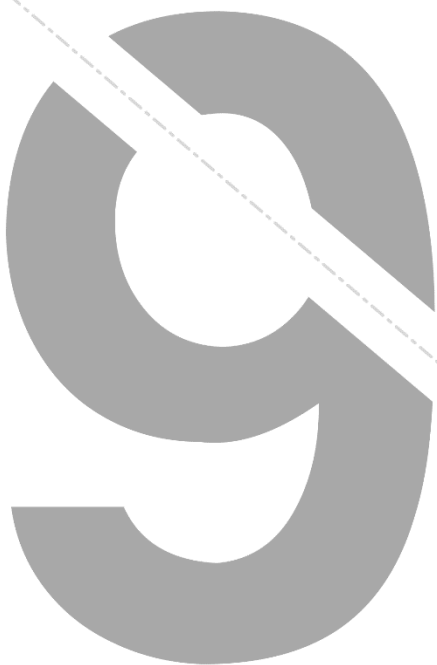
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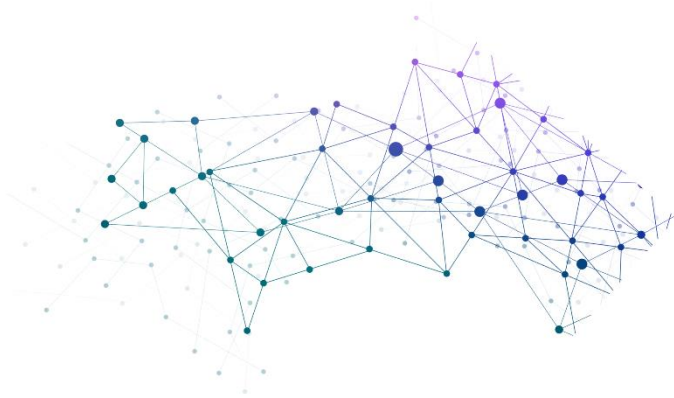
Rivet Chain

We would like to express our heartfelt thanks to all our friends and peers for their help in concept formation and inspection, as well as for our strong support in the work of RTSP and Rivet Chain.

- Steven Carl has helped a lot with formatting and phrasing, especially in the center and space sections.
- Justin Johnson helps with version iteration.
- Avril Snow gives feedback in the motivation section.
- Jonathan walker's feedback on the high-speed browser section and help with diction.
- At the same time also thank Alexander Lei in various support and contribution.

- Thank you for browsing.

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Citations

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