



TEQUILA CHAIN

WHITE PAPER

V1.0.0

DECENTRALIZED CROSS
CHAIN TRANSACTION ECOLOGICAL CHAIN



1 Tequila at a glance

Tequila aims to provide global users with cross-chain digital asset trading services, and it is truly decentralized!

Tequila Chain is a decentralized cross-chain transaction public chain project, and TQ is its platform token.

Tequila Chain is a scalable heterogeneous multi-chain blockchain that supports complex ecological applications. Tequila Chain is built on the Substrate technical framework, it has a built-in native DEX matching transaction engine, and interacts with the parachain that supports various ecology through the core chain to meet the needs of more secure, transparent and efficient transactions.

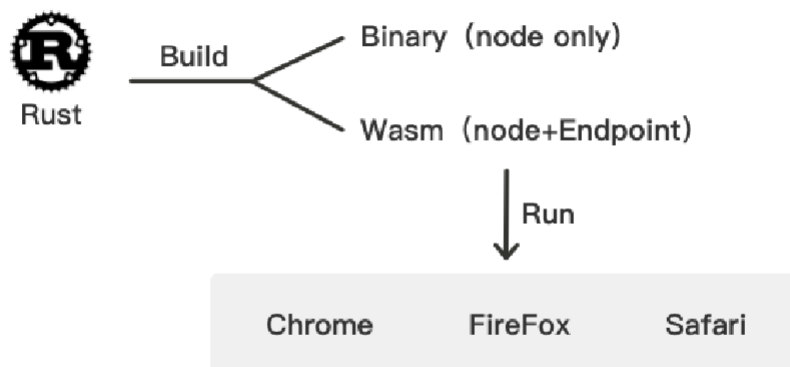
The cross-chain DEX protocol was independently developed by Tequila Labs, implements light clients for each parachain, and realizes cross-chain matching transactions of assets and data on the chain. The DEX protocol has powerful expansion capabilities and can seamlessly link with third-party DEX platforms, share order books, solve the problem of order islands, and jointly build a whole chain of decentralized transactions.

In order to meet the needs of the trading market for decentralized trading, Tequila has achieved breakthroughs in the following aspects to maximize the urgent needs of the trading market:

- A. Cross-chain technology. Tequila supports many highly differentiated consensus systems to interoperate in a trustless, fully decentralized federation, allowing trust-free mutual access to various blockchains. Through Tequila's relay chain technology, many parachains (other blockchain platforms) are connected to the Tequila relay chain through the XCMP protocol to achieve the ability to exchange assets and data (transactions) across the chain.



- B. Possesses complex computing capabilities. Tequila's Runtime supports both Native and WASM operating modes. For complex computing business requirements, it runs parallel programs under the chain in Native or WASM mode. The innovative processing mechanism solves computing problems that cannot be handled in ordinary smart contracts. assets and data (transactions) across the



- C. Decentralized DEX matching trading engine. Tequila independently develops the DEX matching transaction protocol, and configures a decentralized matching transaction engine at the bottom of the Runtime. The application only needs to implement the DEX20 Interface. The matching transaction provides on-chain decentralized transaction services in the form of an API interface. DEX API can provide services for Tequila Chain's native applications, and can also be called by smart contracts developed by third parties, thereby greatly reducing the deployment cost and development difficulty of transactional smart contract applications.



- D. Non-fork upgrade and extension. Tequila uses the heartbeat program to monitor the Tequila program version information of the verification node, and realizes the synchronous upgrade of all verification node programs in the entire network through the heartbeat program, without chain bifurcation. In the early stage, the Tequila version upgrade was controlled through the SUDO authority, and the SUDO authority will be removed through consensus in the later period, and finally the online upgrade will be carried out through the joint governance mechanism of the entire network.
- E. On-chain governance mechanism. Tequila has set up governance rules on the chain to support the further optimization of community practices with the development of the chain ecology in the future to govern this huge ecological network. By voting to elect board members to represent the interests of community members. TQ holders can participate in operations such as initiating proposals, changing the order of proposals, participating in voting, electing board members, and applying to become board candidates
Tequila governs, and all of this is executed under set rules.



2 The pain points that plague traders and their solutions

Due to its centralized data management model, traditional exchanges provide traders with convenient operation and fast trading experience, but its drawbacks also bring great troubles to traders:

- A. Human factors: Centralized management will face risks including internal operational risks, business ethics risks, asset embezzlement, and other risks that will seriously affect the security of user assets. In recent years, frequent internal thefts of exchanges, incidents of exchanges closing and cashing out of the way, core personnel being accused of being unable to withdraw cash, etc., have caused huge property losses to traders, and are more vicious in the future. The incident paved the way-danger can happen at any time!
- B. Technical factors: The centralized hosting of assets will lead to a huge risk of hacker attacks, testing the website's technical capabilities and emergency response capabilities. Even technical problems will become an excuse for some exchanges to shirk their responsibilities;
- C. Regulatory factors: As the government laws of various countries have a certain lag in new things, the acceptance of digital assets is not the same, and the government lacks the necessary supervision of the trading platform, which is also one of the reasons why the above two factors are difficult to control ;
- D. D. Cost factor: The centralized management model requires a large amount of manual processing of business. In order to support the high concurrency of transactions and ensure the security of transactions, a huge investment in technology platforms is required, resulting in extremely high operating costs of the exchange, and these costs are all It will be transferred to the trader, who will not only bear these costs, but also contribute a lot of profit to the exchange.



How to break the deadlock?

Maybe-decentralization and cross-chain is the best way to break the deadlock! Tequila gave a solution to the problem.

Tequila is a blockchain-based decentralized trading platform. It does not store user funds and personal data on the server, but only serves as an infrastructure to match buyers and sellers who want to trade digital assets. With the help of the matching engine, this type of transaction occurs directly between participants (peer-to-peer).

Unlike centralized exchanges that need to store and control the assets of traders, Tequila does not control the assets of traders. On the contrary, the assets are still stored on the blockchain (relay chain or parachain) and managed by the traders themselves. In this way, without transfer of asset management rights, the risk of loss will be much lower. Tequila solves the pain points encountered by traders in traditional trading systems in the following aspects:

1. Anonymity

With Tequila, traders manage their assets through private keys, avoiding KYC and AML issues.

2. Asset control

In a centralized trading platform, user assets are controlled by the trading platform. Users need to recharge their assets to the wallet of the trading platform. The asset custody function of a centralized trading platform is just like a bank. The user deposits the money in the bank, the bank gives the user an account, and the bank has absolute control over the user's funds.

With Tequila, users' assets are completely under their control. Tequila does not provide fund custody services, so it cannot control or transfer users' funds.



3. Capital risk management

The wallet of the centralized trading platform stores the funds of all users. Due to the huge amount of funds, it is easy to attract hackers. Incidents of sticking to theft or even running away from the trading platform are not uncommon. Once a problem occurs, almost all users will suffer losses.

Tequila users' asset management rights have never been separated from the users themselves, and the risk mainly comes from the users' management of the wallet private keys. Even if the private key of an individual user is leaked, it will not affect the security of other users' assets. Assets between users are completely isolated.

4. Transparency

The transactions between users of the centralized trading platform are accounted for by the trading platform. The transaction information is only recorded on the internal ledger of the trading platform, and is not recorded on the immutable blockchain. Therefore, transactions on the centralized trading platform are also called off-chain transactions, the transparency of transaction records is very low. If the trading platform wants to do evil, the cost of tampering with the transaction records is very low.

With Tequila, transactions between users are completed on the blockchain, and their transactions will be packaged by miners and broadcast on the blockchain, so Tequila transactions are also called on-chain transactions. The transaction information on the chain means that the transaction information can be publicly queried on the blockchain and cannot be tampered with, so Tequila's transaction information is more secure and transparent.



5. Cross-chain transactions

Since the centralized trading platform takes over user assets, all on-chain assets are converted into centralized data within the trading platform, and there is no cross-chain transaction.

Tequila is a heterogeneous multi-chain technology, mainly composed of relay chains, parachains and transit bridges. Tequila has realized connecting public chains, consortium chains, private chains, and all technologies that may appear in the web3.0 ecosystem in the future. It will enable each independent blockchain network to realize information exchange and trustless transactions through Tequila's relay chain.

6. Trading experience

In the centralized trading platform, since transaction data is not on the chain, as long as there is a matching counterparty, the transaction speed is extremely fast. At the same time, the centralized trading platform has simple operation steps, low threshold for use, and can provide a wealth of trading pairs, with a better trading depth, and a better trading experience for ordinary traders.

Tequila transaction data needs to be chained, and transaction confirmation needs to wait for the verification node to package and broadcast, so the transaction speed is slightly slower. Tequila's operating steps are relatively complicated, and the barriers to use are higher. We have to admit that the centralized trading platform has faster transaction speeds, lower barriers to use, and is better than Tequila in terms of user experience. However, compared with the characteristics of asset security, anonymous transactions, transaction transparency, and cross-chain transactions, it is believed that most traders will be willing to reduce the requirements for transaction experience, after all, asset security is the first.



3 Tequila Chain

Tequila Chain is a scalable heterogeneous multi-chain blockchain that supports complex ecological applications. It is built based on the Substrate architecture developed by Dr. Gavin Wood.

Substrate is a technical framework used to build a framework for distributed or decentralized systems. Substrate provides developers with rapid construction in terms of governance, development, scalability, interoperability, and high performance.

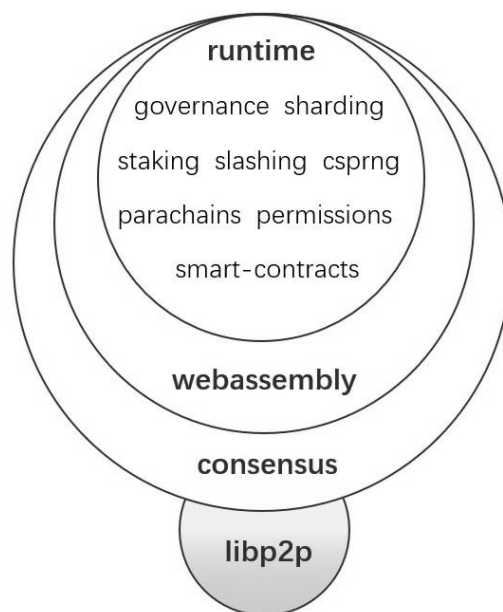
Capabilities of blockchain:

- A. **Developable:** For developers, they can customize the blockchain state, consensus and changes based on Tequila. Tequila provides free space and universal platform support. In addition, it can be developed at one time and in multiple locations. Ideal state of operation.
- B. **Governable:** Tequila's governance is evolvable. It has built-in democratic mechanisms, promotes on-chain governance, and executes on-chain. Its unique runtime design can truly achieve code is law, but the code can be determined based on community consensus, and It can be over time, not static, but gradually evolving.
- C. **Scalable:** On the one hand, the chain itself is scalable, and on the other hand, the ecological limitless expansion possibilities.
- D. **Interoperability:** Tequila naturally has cross-chain genes. With the development of the XCMP cross-chain ecology, the interoperability of the Substrate isomorphic chain will be easier.



- E. High performance: Tequila comprehensively improves the throughput of the chain in terms of efficient technical components, faster algorithm selection, and excellent engineering implementation solutions.

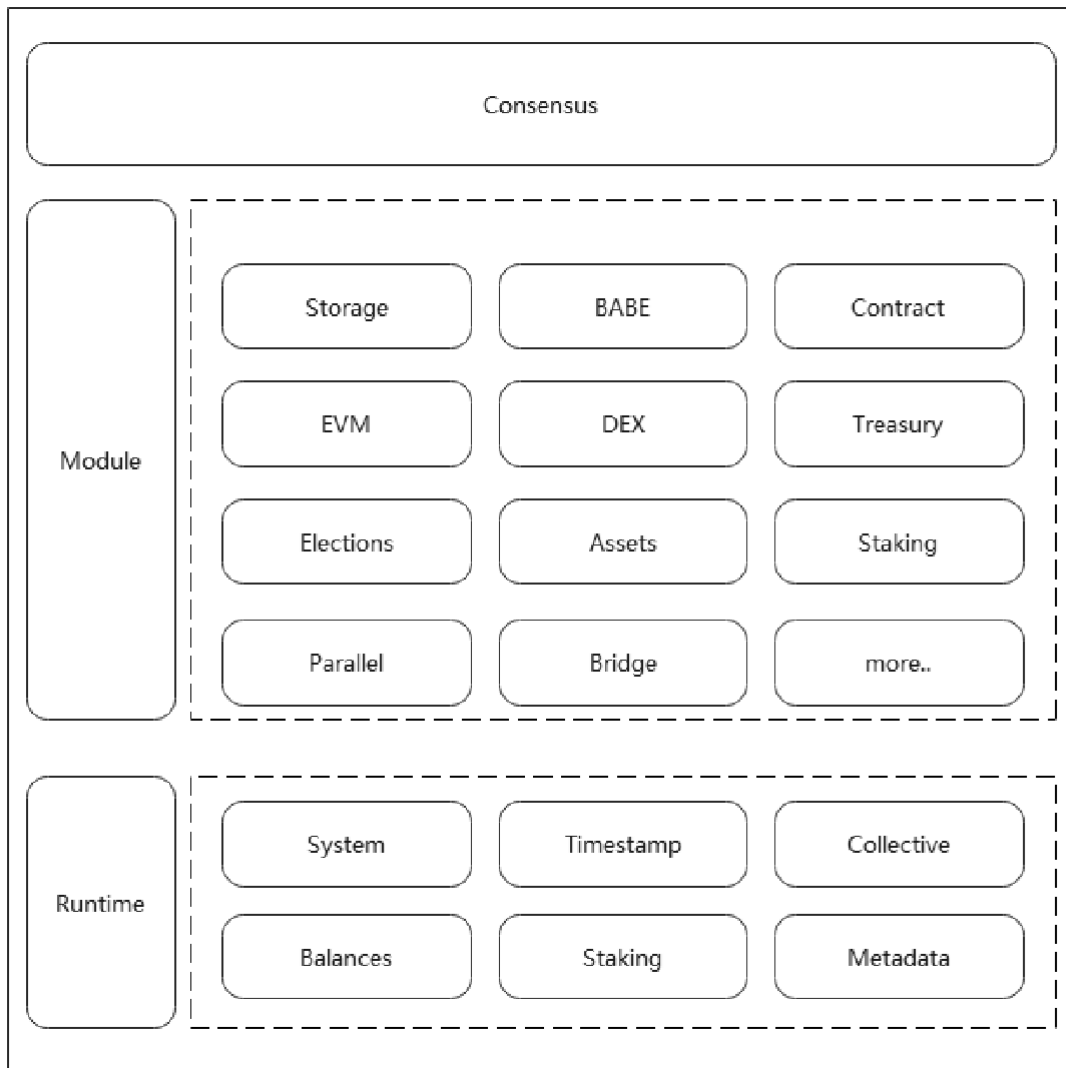
Substrate provides a powerful, community-active blockchain open source component library, each of which has the characteristics of independent use, and can be truly used out of the box.



Substrate provides developers with such a powerful and excellent technical framework, so that Tequila is born with advanced blockchain concepts, such as Runtime components, parallel threads, distributed hash tables, and on-chain governance.



The following is the logical architecture diagram of Tequila Chain:



Tequila cross-chain technology:

In order to support cross-chain asset transactions, Tequila hopes to connect various blockchain networks, focusing on solving the problems of interoperability, scalability, and shared security at three levels:



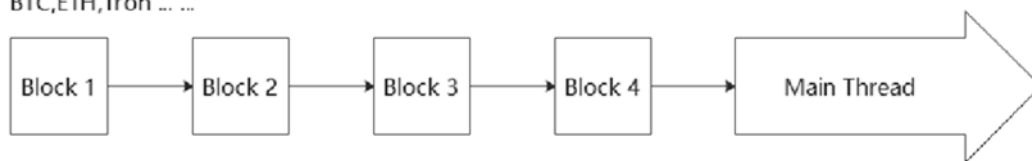
Interoperability

In the current blockchain ecosystem, each blockchain network exists in isolation, and there is no possibility of communication and interoperability between them. One of the purposes of Tequila's design is to allow DApps and smart contracts on the blockchain to seamlessly trade with data or assets on other chains.

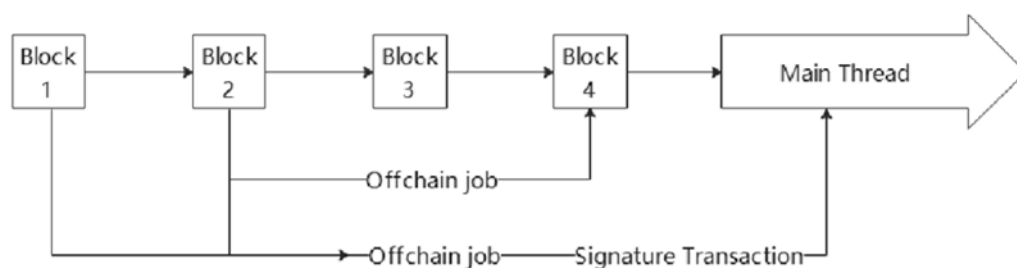
Scalability

In most current blockchains, transactions are processed one by one in the nodes. Therefore, when the transaction volume gradually increases, it is easy to encounter performance bottlenecks due to network limitations. Tequila provides the ability to run multiple parachains, and each parachain can process multiple transactions in parallel. In this case, the Tequila network is equivalent to obtaining unlimited scalability.

BTC,ETH,Tron



DEXer



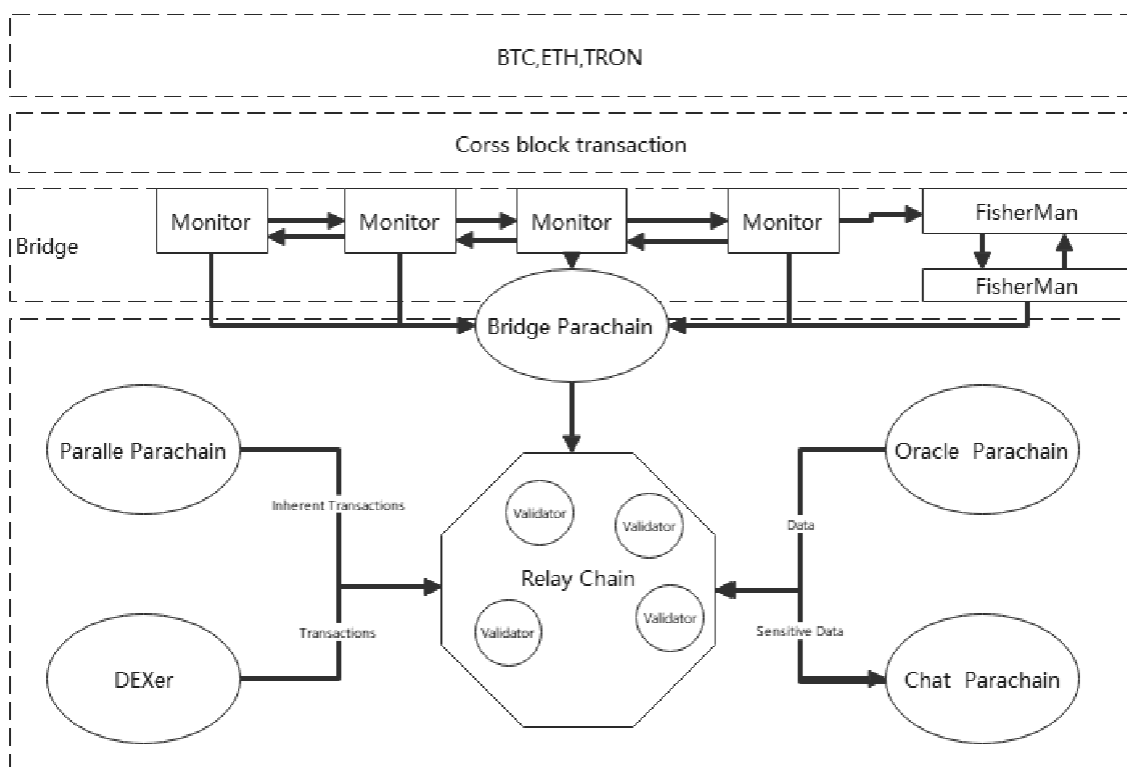


Shared security

If the various blockchains want to communicate with each other, the different computing powers between the various blockchains will lead to the inability to trust each other equally, which is not conducive to the cross-cutting of information such as assets. Chain communication. In the Tequila network, the relay chain as a whole will be responsible for the security of the entire network. Each parachain that joins the Tequila network has the same degree of security, so they can fully trust each other when communicating across the chain. Parallel chain. And because Tequila concentrates the security of the network on the relay chain,

Therefore, it is very difficult to attack the entire Tequila network.

Tequila architecture analysis



The above figure shows the overall architecture of Tequila Chain. From this we can see that Relay Chain is at the center of the network. It will handle the overall consensus and security of the network; there are many Parachains that connect to the relay chain to access the Tequila network. In; at the same time you can also see in



There is a bridge at the top of the figure, which is also the way to connect independent blockchains (for example: BTC, ETH) in the Tequila network. In addition, you can see many participants, such as: Monitor, Validator, Fisherman, etc. Then we will separately introduce the main chain roles and different participants in the Tequila network. Main chain roles

Relay Chain

The relay chain is the central chain of the Tequila network, which provides a unified consensus and security guarantee for the entire network. All validators in the Tequila network will pledge TQ tokens on the relay chain to participate in Tequila network governance. Since most business-related operations in the Tequila network will be implemented by various parachains, only a small amount of transaction types such as network governance and parachain auctions will occur on the relay chain, so the transaction procedures on the relay chain The fee is usually higher than the transaction fee on the parachain.

Parachain

Most of the computing work in the entire Tequila network will be entrusted to each parachain for processing, and the parachain will be responsible for the realization of specific business scenarios. Tequila does not impose any restrictions on the functions of parachains. Parachains can be used as application chains to implement any application scenario, but they do not have the consensus ability of blocks. They transfer the responsibility of consensus to the relay chain. All parachains will Share the security guarantee from the relay chain. Parachains can communicate with each other through ICMP (Interchain Message Passing), and at the same time, they will be verified by the validator assigned to it.



The transfer bridge plays an important role in the inter-chain communication of the blockchain. Tequila transit bridge mainly has three different meanings:

A. Bridge Contracts:

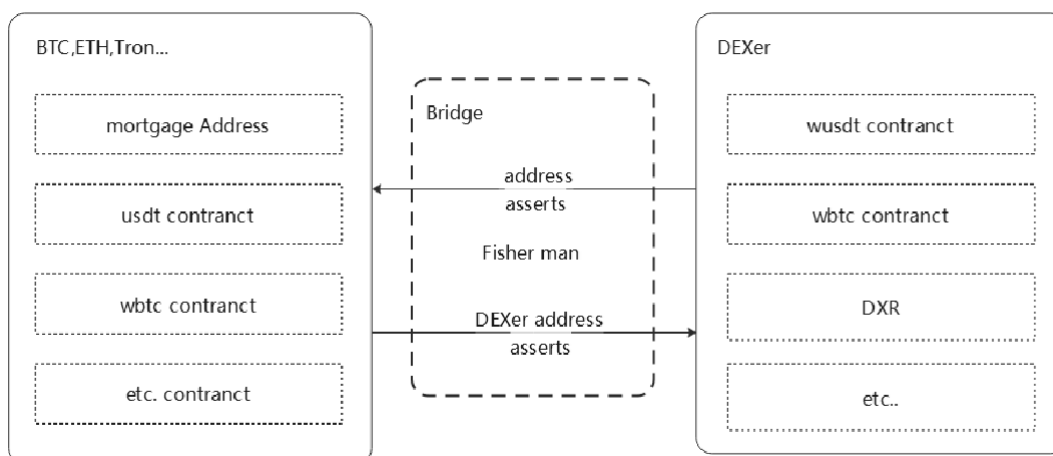
The effect of a bridge is achieved by deploying smart contracts on Tequila's parachain and external blockchains (such as Ethereum) to achieve cross-chain value transfer.

B. Cross-Parachain Communication:

Because parachains can communicate between chains through ICMP, there is no need for smart contracts to undertake the bridging function. And ICMP-based inter-chain communication will be a solution natively supported by Tequila.

C. Built-in Bridging Modules:

In the Tequila network, receiving messages on parachains from non-parachains is likely to be done in Tequila's built-in modules. In this case, there is no need to deploy smart contracts in non-parachains to act as "virtual parachains", and collectors can directly collect and sort the transactions on the blockchain and submit them to the relay chain.



The main participants

In the Tequila network, there are 4 main types of participants, namely validators, collectors, fisherman, and nominators. To put it simply, their responsibilities are as follows: Collectors will collect transaction information from each parachain and package them into blocks to be verified. The next group of validators will verify the blocks on the parachain; at the same time in the network The fisherman of will monitor the behavior of validators, and if the fisherman find illegal behavior, they will report to other validators; and the nominator will participate in network governance by staking TQ to their trusted validators.

Inter-communication-ICMP

Between the parachains of the Tequila network, they communicate with each other through ICMP. ICMP stands for Inter-Chain Message Passing, that is, inter-chain message passing. Taking parachain A to send a transaction to parachain B as an example, the process is briefly described as follows:

Parachain A puts the transactions that need to be cross-chain into its own message output queue (egress). The collector of Parachain A will receive the cross-chain transaction at the same time when collecting the transaction and submit it to a group of verifiers of Parachain A.



If this group of validators of Parachain A is successfully verified, the block header information of Parachain A and the information in the egress queue in Parachain A will be submitted to the relay chain. The relay chain will run a consensus algorithm for block confirmation and cross-chain transaction routing. The validator on the relay chain will move the corresponding transaction of parachain A from the egress queue of parachain A to the message input ingress of parachain B. Parachain B will execute the block, execute the corresponding transactions in the ingress queue and modify its own ledger.

Consensus

In the Tequila network, it is also necessary for all nodes to reach a consensus before all states on the blockchain can continue to build and evolve. This is a way to reach an agreement on a shared state. Through the consensus mechanism, the state of the nodes in the Tequila network can be kept synchronized with each other. It aims to provide network participants with objective facts of all states, and each network participant has its own subjective judgments based on this objective fact. The communication between and finally reached an agreement to build a new block.

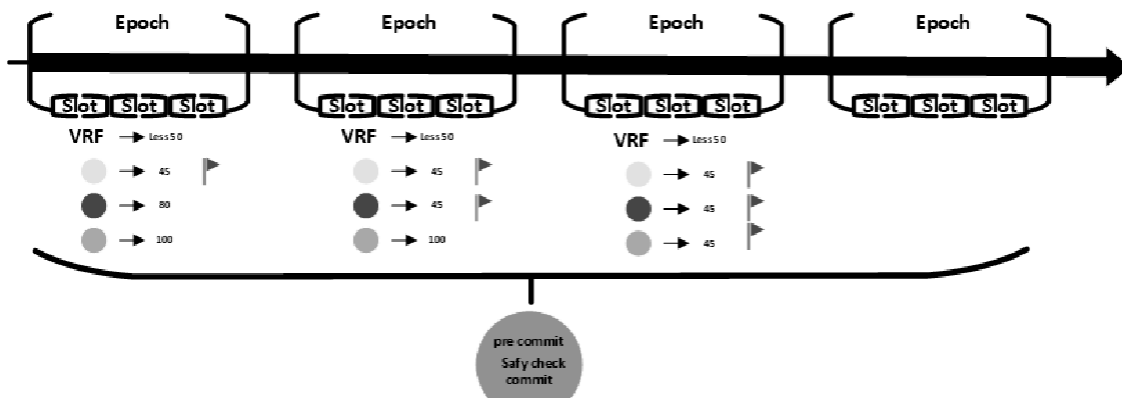
There are two different consensus in the Tequila network, namely GRANDPA and BABE. There are two different consensus because Tequila uses a hybrid consensus approach. Here, the hybrid consensus separates the generation of the block from the final determination of the block. The BABE consensus is used for the generation of the block, and the GRANDPA consensus is used for the determination of the block.

Hybrid consensus is a way to obtain the benefits of probabilistic certainty (the ability to generate new blocks) and provable certainty (an agreement is reached on a chain and is irreversible) in the Tequila network. By adopting such a hybrid consensus mechanism, Tequila can quickly generate blocks, and a slower deterministic mechanism can be used in



Run in an independent process to complete the block confirmation, and the overall network transaction speed will not be slowed down or blocked.

BABE (Blind Assignment for Blockchain Extension) is a consensus protocol based on PoS. It runs between validator nodes and determines which validator generates a new block. Starting with the genesis block, we divide the subsequent time of creating the block into different epochs, and then divide the different epochs into slots with smaller time intervals, as shown in the figure. The main point in the BABE consensus protocol is to select different validators and generate a block in each slot. BABE will randomly allocate slots to the validators for block generation according to the total amount of TQ pledged by the validators during each epoch period.





4 DEX matching trading engine

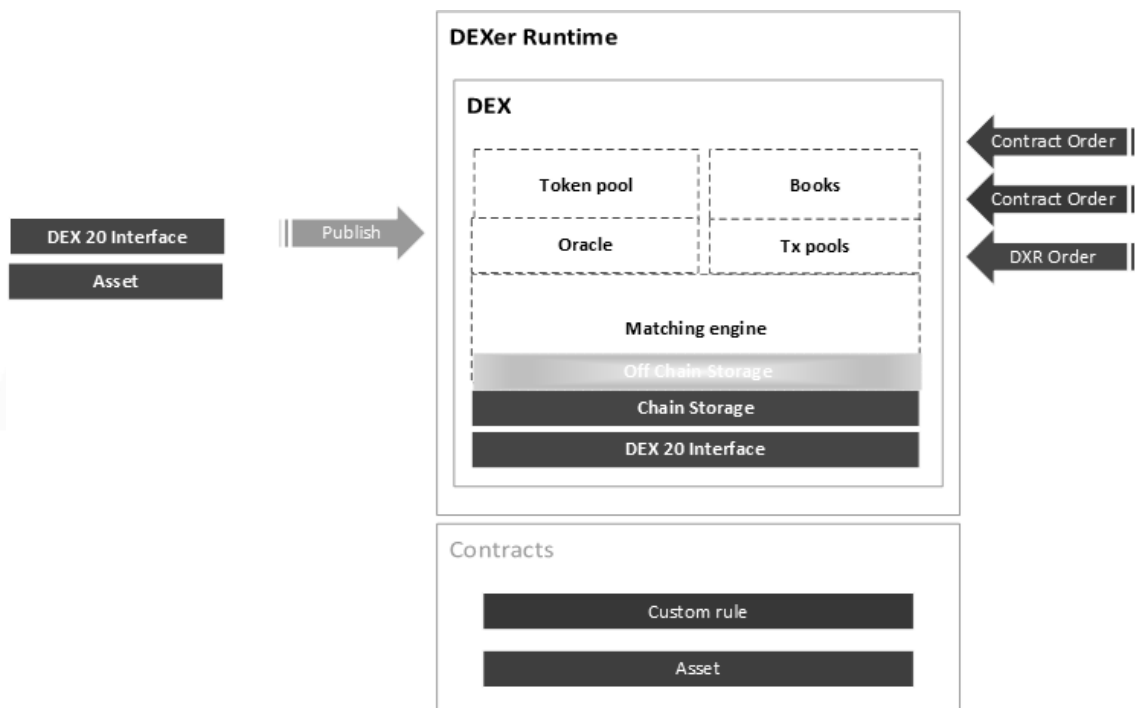
There are two types of applications on the Tequila Chain: native applications and contract applications.

"Native application" is a service that is built on the Tequila Chain Native layer and published by Tequila Chain. "Contract application" is an application of a smart contract developed by a third party that runs on the Tequila Chain virtual machine.

Among Tequila's native applications, the core application is the DEX matching trading engine.

DEX is a protocol built on the Native layer, and its full name is "Decentralized Exchange Protocol".

The working principle of DEX is as follows:





Overview of DEX Matchmaking Transaction Agreement

Tequila provides a scalable, fully decentralized platform for exchanging digital assets in a peer-to-peer and offline signature manner. DeFi applications that support high-frequency trading meet high liquidity and provide lightning-fast transaction speeds.

In DEX, orders (books), assets (assets), cross-chain (cross-chain) and on-chain market making (AMM) are all on-chain. Transaction peripheral functions (such as market data aggregation, technical analysis indicators, storage and retrieval of transaction history) and other related functions are off-chain. It allows us to increase the throughput of transactions and make it comparable to the efficiency of centralized transactions.

DEX Matching Trading Engine (DEX Engine)

DEX Engine consists of Tequila's two-layer runtime and cross-block computing modules. Because of Tequila's natural design mechanism, complex matching and long time-consuming tasks can be realized, and finally digital assets can be exchanged by way of offline signature through the DEX20 interface.

DEX Fees

DEX supports limit order transactions, and does not charge matching fees, also known as zero fees.

DEX trading pair management

The creation and access of the transaction KeyPair is entirely governed by community voting.



DEX consensus algorithm

GRANDPA & BABE

DEX Interface20

The DEX20 asset matching core protocol consists of three parts. As long as the contract application on the chain inherits and implements DEX20, the assets of the contract can seamlessly support DEX.

Authorization to freeze assets

Revoke_dex

Commit_dex

TPS

No less than 500 transactions/s, 3000 transactions/6s (per block time)



5 TQ

There is an economic system in the Tequila blockchain ecosystem that enables all network participants to better participate in the network's contribution. TQ is the medium in this economic system.

TQ is the native token of Tequila Chain. TQ is also a proof of permission for the holder to vote, verify or delegate to other verifiers, and it can also be used to pay transaction fees when conducting transactions. TQ has four main uses in Tequila:

1. Governance

The holders of TQ determine the future of Tequila Chain to a certain extent. Similar privileges owned by miners on other platforms will be given to participants in the relay chain, that is, holders of TQ. They can manage important events in the network, such as protocol upgrades and repairs.

2. Operation

Game theory will incentivize TQ holders to do good things in the network. Participants who have not done evil will get corresponding rewards through this mechanism, and participants who have done evil in the network will lose their TQ. This can also guarantee the security of the network to a certain extent.

3. Inter-operability



For a message to be sent from one blockchain to the next, the sender can pay a certain TQ as a transaction fee, but this is not required.

4. Bonding

New parachains need to join the network by bonding (bond) TQ. And unmaintained and useless parachains can also be removed from the network by unbinding TQ. This is also a form of PoS.

TQ's issuance mechanism:

TQ measures the issuance of 2.1 billion pieces, without pre-mining, and 100% of the blocks are rewarded by the verification nodes on the chain.

The issuance of TQ adopts a deflation mechanism. The first block is rewarded with 50 blocks per block, and then every 21 million blocks (about 4 years) are halved. According to the rule of halving about every four years, after 33 halvings for a total of more than 100 years, by the 34th halving, it could not reach 1 satoshi, that is, one part in 100 million TQ, and the issuance was terminated.

1. Assignable nodes

All check nodes participating in Tequila can get TQ distribution in each block reward.

2. Allocation of reference indicators

Tequila's block reward distribution mainly refers to two indicators, one is the node's hardware indicator score, and the other is the node's pledged TQ amount. Among them, the former gets 20% of the block reward, and the latter gets 80%.



Calculation formula:

Suppose the hardware index score of the i-th node is A_i , and the amount of pledged TQ is B_i , if the current block reward is 50TQ, then:

$$\text{Income distribution of the i-node} = \frac{A_i}{\sum A_i} \times 50 \times 20\% + \frac{B_i}{\sum B_i} \times 50 \times 80\%$$

Participants in Tequila incentivize and punish

It is distributed to all nodes every 10 minutes (every 100 blocks).

Validator incentives

The validator confirms the block on the relay chain by staking TQ. When the block is confirmed, it will receive the corresponding reward. If you do evil and are reported by the phisher and verified as true evil, the verifier will be punished.

Collector Motivation

The collector will collect the transactions in the parachain, and the transaction fees in these transactions will be used as a reward for the collector. Angler Incentive

The phisher monitors the validators in the Tequila Chain network. If an illegal transaction is found, it will report it to other groups of validators by pledge TQ for verification. If other validators prove that the report is true, the phisher will Corresponding rewards will be obtained. On the contrary, if the report is false, the angler will be punished accordingly, and the TQ pledged by him will also be confiscated.



Nominee incentive

Nominators can support up to 16 validator candidates they trust, and pledge their TQ through their trusted validators, so that they can share their profits with the validators. In Tequila's pledge mechanism, all validators will receive the same reward, and all nominees participating in the pledge will wait for the validators to subtract the commission set before distributing the rewards according to their mortgage ratio.



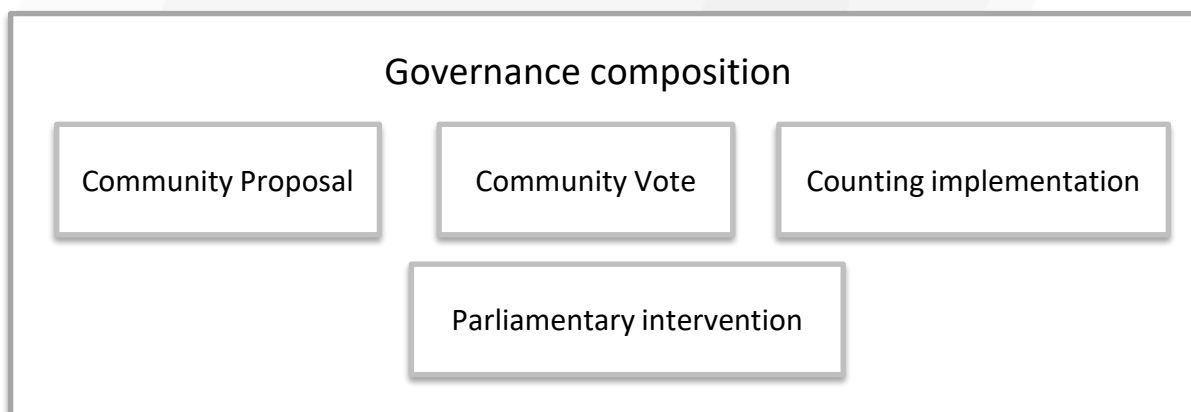
6 Tequila on-chain governance

There are two modes of blockchain governance, on-chain governance and off-chain governance. Off-chain governance is relatively casual, basically dominated by the will of some people, and there is no strict and precise process. Mainstream public chains such as BTC and ETH all adopt off-chain governance methods. When the opinions of the governance parties cannot be unanimous and cannot be reconciled, a bifurcation phenomenon will occur. This is also the origin of ETC and BCH. On-chain governance is all deterministic. Who can participate in governance, how to participate, how to pass, how to implement, there are clear definitions and rulings.

Tequila Chain's governance method adopts on-chain governance.

Tequila's on-chain governance has a clear governance process. There are certainty when a proposal can be proposed, how to vote, how to pass, and when to execute. The manifestation of the proposal on the chain is a piece of code, and the implementation proposal is the function call ``set_code``.

All agreement level changes must pass a referendum, and those with more votes will have the right to speak online. The main components include referendum, parliament, fiscal system, etc. The implementation rules include voluntary lock-in to increase voting power, delay in implementing proposals, and adaptive quorum deviation.





There are roughly three stages in the governance process. The first is the national proposal stage, in which everyone can pledge a certain amount of coins to make a proposal. Then comes the referendum stage. Every once in a while, the proposal with the highest mortgage amount will enter the referendum stage, and all users can express support or opposition to the proposal. The last is the implementation of vote counting. After the voting phase is completed, if the proposal has received enough support, the proposal will be implemented in accordance with the mechanism.

During the referendum stage, the parliament may intervene. Under certain circumstances, the parliament can cancel or initiate the referendum.

The parliament has two main tasks: initiate a referendum and cancel the referendum. The majority of all members agree, and without any opposition, the parliament can directly initiate a referendum. When all parliamentarians unanimously agree that certain referendums will harm the system or are risky, they can also be cancelled.

The seats of members are fixed, and the term of office is fixed. The referendum can remove members early. When parliamentary seats are vacant, the election of members is conducted, and the candidate with the highest number of votes is elected. Anyone can submit a candidate application to become a candidate for parliament through self-mortgage, and return to mortgage after being elected. Unelected top N candidates continue to participate in the next election of parliamentarians.



8 Tequila Ecosystem

Tequila's decentralized transaction mechanism uses a decentralized consensus mechanism to realize the transaction mode of order book sharing and automatic matching of the entire network under the premise of ensuring the safety of user assets, creating a precedent for decentralized transactions. If you want Tequila to obtain more trading varieties, trading depth, and greater liquidity, Tequila must build a complete decentralized trading ecosystem.

First of all, Tequila provides a complete set of mechanisms to provide solutions in terms of consensus mechanism, price discovery mechanism, and asset locking mechanism. Various service providers in the Tequila ecosystem can define their own service content and service forms, publish their own service products in the form of smart contracts, and even build their own service brands in Tequila.

The Tequila ecosystem includes brokers (issuers), matching service nodes (verifiers), clearing service contracts, stable currency contracts, lending contracts, ETFs, mutual funds, and many other roles. Numerous service providers and communities together form the Tequila ecosystem. Tequila provides a complete mechanism for all members of the ecosystem to operate their own businesses and develop together with Tequila.

Tequila certifies quality service providers through governance mechanisms. Service providers can initiate proposals on their own and conduct a referendum, and service providers certified by the community can release their own service products, such as asset issuance. Products released by certification service providers also require open source certification to prevent the possibility of illegal operations.

In the Tequila ecosystem, third-party IT service companies play a very important role. In the decentralized ecosystem, except for the members of the ecosystem service providers under the chain, most of the service content they provide is presented in the form of smart contracts.



Tequila's smart contracts need to be developed in the Rust language, which requires a professional IT service company to complete.

Give examples of several important members of the Tequila ecosystem:

Stable currency: Tequila advocates a stable currency issued in a decentralized manner, rather than offline service providers through currency mapping. After all, there is a risk of additional issuance and false issuance of currency-mapped stablecoins. Of course, Tequila supports various types of stablecoins, and the final choice is left to the trader.

Oracles: Decentralized smart contracts cannot communicate with off-chain data. Many services in the Tequila ecosystem need to interact with off-chain data, such as currency quotations and exchange rates. Oracle service providers can provide data interaction services between off-chain data and smart contracts on Tequila Chain.

Decentralized lending: Lending is one of the most common businesses in the financial services sector. There are also decentralized lending service providers in the Tequila ecosystem, which provide mortgage lending services to solve the problem of user capital turnover.

The Tequila ecosystem will be very large and complex. In addition to the above-mentioned basic businesses, there will be hundreds of business sectors, and each business needs to establish its own economic model and profit model. Tequila will even fund some projects with advanced concepts and technological content, help them improve their business models, and help them with business development and promotion.



9 Tequila development plan

The Tequila Labs team is responsible for the technology development, implementation, and operation and maintenance of the entire Tequila Chain. In the previous year or so, Tequila Labs has conducted in-depth study and research on Substrate technology, and independently developed a DEX matching transaction engine, developed its own consensus mechanism, and after countless tests and debugging.

Finally, Tequila achieved the best implementation plan in terms of security, concurrent processing capability, stability and other main technical indicators, and finally released Tequila Chain test chain.

Tequila Labs did not raise funds in the early stage, and all the costs of technology research and development and system development are borne by themselves, just to ensure that there is no financial management burden after the Tequila project goes online. Tequila will not do TQ pre-production, and 100% of TQ will be produced through the consensus of verification nodes. All the efforts and efforts are just for Tequila Chain to realize its own value in a very open and fair manner, so that all partners participating in Tequila can realize rich returns based on the consensus on Tequila's value.

Tequila has done the technical preparations for the launch of the test chain. The scheduled test chain launch time will be between January and March 2021. In this uncertain length of time, Tequila needs to do the following:

- Continue to test and optimize the Tequila Chain, which is essential for better security, performance and scalability after the test chain is online;
- Develop richer interface APIs to enable third-party service providers and users to better interact with Tequila;



- Contact more community members to participate in Tequila consensus and governance, so that when the test chain goes online, enough verification nodes participate;
- Planning and designing some ecological applications, after the Tequila test chain is online, users can participate in the experience;

During the operation of the Tequila test chain, the TQ, assets and other data generated by the participating communities, service organizations, users and other roles will become the effective data of the formal chain, and all verification nodes will become the first batch of verification nodes in the formal chain. In other words, the data of the test chain will be mapped to the main network, and the data generated by the test chain will be 100% mapped on the main network.

The operating cycle of the test chain is initially estimated to be 6 months. For the specific implementation, please refer to the information published on Tequila's official website.



10 How to participate in Tequila

Tequila will soon release its official website (built-in block explorer) and wallet APP. By then, all organizations or individuals interested in Tequila Chain can learn about Tequila information through official information channels.