LiveDAO
DECENTRALIZED LIVE STREAMING SERVICE PROVIDER

A Bitcoin network like live streaming service system Version

Version V1.0
## CATALOGUE

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>3</td>
</tr>
<tr>
<td>I Who we are?</td>
<td>4</td>
</tr>
<tr>
<td>Core Team to Introduce</td>
<td>5</td>
</tr>
<tr>
<td>II LiveDAO components</td>
<td>6</td>
</tr>
<tr>
<td>III A free live streaming system</td>
<td>7</td>
</tr>
<tr>
<td>PONS Consensus mechanism</td>
<td>8</td>
</tr>
<tr>
<td>Live streaming data encryption technology</td>
<td>9</td>
</tr>
<tr>
<td>Strong client node</td>
<td>9</td>
</tr>
<tr>
<td>IV 5G technology assistant LiveDAO</td>
<td>10</td>
</tr>
<tr>
<td>Low bandwidth cost</td>
<td>11</td>
</tr>
<tr>
<td>5G network structure and D2D</td>
<td>12</td>
</tr>
<tr>
<td>5G other features introduction</td>
<td>13</td>
</tr>
<tr>
<td>V LiveChain live streaming chain</td>
<td>13</td>
</tr>
<tr>
<td>VI Perfect clearing and settlement ability</td>
<td>14</td>
</tr>
<tr>
<td>Low cost clearing and settlement</td>
<td>15</td>
</tr>
<tr>
<td>Cross chain technology</td>
<td>16</td>
</tr>
<tr>
<td>Multiple digital asset support</td>
<td>16</td>
</tr>
<tr>
<td>Complete OTC ecosystem</td>
<td>16</td>
</tr>
<tr>
<td>Decentralized wallet</td>
<td>16</td>
</tr>
<tr>
<td>VII Equity pass LIVE</td>
<td>17</td>
</tr>
<tr>
<td>Mining to get LIVE</td>
<td>17</td>
</tr>
<tr>
<td>Pledge LIVE to get live streaming opening rights</td>
<td>18</td>
</tr>
<tr>
<td>Pledge LIVE to obtain application rights for the super node of live streaming chain</td>
<td>18</td>
</tr>
<tr>
<td>Pledge LIVE to obtain voting rights for the super node of live streaming chain</td>
<td>18</td>
</tr>
<tr>
<td>Pledge LIVE to get strong client purchasing rights</td>
<td>18</td>
</tr>
<tr>
<td>Pay LIVE for consumption</td>
<td>19</td>
</tr>
<tr>
<td>VIII LiveDAO Ecological incentive principle</td>
<td>19</td>
</tr>
<tr>
<td>LiveDAO income distribution</td>
<td>20</td>
</tr>
<tr>
<td>IX LiveDAO Strong governance capability</td>
<td>20</td>
</tr>
<tr>
<td>X Contact us</td>
<td>21</td>
</tr>
<tr>
<td>Livedao Development Plan</td>
<td>22</td>
</tr>
</tbody>
</table>
Foreword

Photos have been an important part of our digital life in the last few years, but now comes a new star, it is video. And among all the video types, live streaming has a bigger market because it is more convenient and low cost.

Traditional live show is costly and sometimes you can not even have a chance get a ticket, but with live streaming, you can meet the person you in show and talk to him or her easily. You can spend your time and enjoy the show at home and no need to buy the expensive ticket or rush to the crowded to see the live show. Meanwhile, live streaming is also low cost for anchors or camgirls if they want to share something.

However, there are two drawbacks of the live streaming field. First, the centralization of the platform leads to the non-transparency, black-box operation, Shop big bullying and other problems. Second, the centralization of the live streaming system leads to the lack of content privacy and security, which limits the prosperous and diversified development of the live streaming industry.

With the popularity of blockchain technology, many live streaming platforms have been introduced in. Unfortunately, none of them really aim to solve the above two drawbacks. They are cheating investment and data in the name of blockchain. Their live streaming is still centralized, some projects assets settlement with blockchain, but these assets are either based on private chain and alliance chain, resulting in low exchange compatibility and poor liquidity; Or based on the public chain, leading to insufficient utility, low settlement efficiency and high transaction costs.

LiveDAO hopes to solve the two drawbacks effectively, so as to make the live streaming field more prosperous and diversified.

With the characteristics of 5G network, LiveDAO has the opportunity to become the innovator of live streaming technology. Completely avoid the two drawbacks.
LiveChain, Inc., a high-tech company, its headquarter is in Nevada, USA, it is listed on OTC Markets, which committed to the development of distributed live streaming technology and the application of public chain technology. LiveChain, Inc. will be listed on the main-board in the United States in the near future.

The core team is from the United States, mainly responsible for the construction of LiveDAO cloud terminal. Another team is from Ukraine L2L studio, they are mainly responsible for the construction of fog terminal.

LiveChain Holding is a company established in Delaware, its main responsibility is to operate an m&a fund and acquire institutions which have value to LiveDAO ecology (technology party, CP party, web celebrity incubator, etc.). LiveChain Holding will be listed in Market in the United States in the near future.

LiveDAO is a community gathered by the participants from the distributed live streaming system. With the technical achievements of LiveChain, Inc., live streaming fans around the world will constantly join in the LiveDAO community.

Since its establishment, LiveDAO has undertaken the mission of build a secure and private live streaming system, and made all rules truly transparent and fair to implement. All LiveDAO’s digital assets are based on public chain, and has complete blockchain browser and wallet.
CORE TEAM TO INTRODUCE

JASON
The first batch of blockchain experts involved in BTC and ETH community construction. He has been active in various blockchain communities and is a fanatical follower of blockchain technology. After that, I focused on the research of strong governance blockchain model and conducted in-depth research on DPOS consensus algorithm.

Good at block chain bottom chain design and construction. A variety of block structures have been innovated to improve the functional expansibility of the Block chain. Proficient in multiple programming languages, proficient in C++. Deep understanding of intelligent contract design.

ABEL
Distributed technology specialists. Before 2017, influenced by blockchain technology, decentralized technology and distributed technology will be further studied. After 2017, it will focus on the landing development and deployment of non-block chain distributed system. Have rich experience in distributed technology.
Various fragmentation structures of heterogeneous types were designed and implemented, and distributed communication protocols tailored to different sizes and performance requirements were written.
A unique understanding of the regulatory control system of distributed system greatly improves the practicality of distributed system and reduces the operating cost.

Jack
Founder of Ukraine L2L studio. I have been exposed to P2P technology since childhood, and I believe that P2P technology is the ultimate destination of the Internet.
For the use of P2P technology control computing power and network in-depth research. Try the landing of P2P technology in the field of multiple Internet application. Participated in the construction of several P2P networks for free.

After years of accumulation, the company has obtained world-leading technical achievements in the four fields of dynamic routing selection, dynamic path prediction, P2P governance tools and P2P encryption technology.
LiveDAO is made by cloud terminal and fog terminal together.

- **Cloud**
  - realize the content freedom
  - prevent copyright protection
  - make the settlement transparency

- **Fog terminal**
  - enhance freedom of content
  - make bandwidth low cost
  - make server low cost

= **LiveDAO**
  - new generation live streaming system

Cloud terminal has innovative decentralized distributed live streaming system and LiveChain live streaming chain, a public chain based on BFT-DPOS consensus algorithm. The decentralized distributed live streaming system is used to make sure the content to be shared is secure and private, and the LiveChain live streaming chain is used to make sure asset circulation and rules implementation, which are ensure the fairness of rewards and punishments for all ecological members.

The cloud terminal also has a complete clearing and settlement system, which enables assets have high liquidity and availability.
In fog terminal, LiveDAO integrates P2P technology into live streaming system by in-depth research on P2P technology, and makes full use of the 5G cellular network to reduce the bandwidth cost sharply.

LiveDAO can achieve complete decentralized operation and governance with this structure. Then we will introduce the characteristics or principles of each section.

**A free live streaming system**

LiveDAO has developed a set of decentralized distributed live streaming system, realized decentralized consensus and governance from cloud terminal, and realized distributed data boost from fog terminal. The mode that combining cloud and fog together enables LiveDAO to build a free, private and transparent live streaming system.

LiveDAO solved the problem of content “freedom” and copyright protection with
LiveChain live streaming chain. Through the application of P2P technology, LiveDAO enables each mobile phone to realize the forwarding of live streaming through the complete LiveDAO live streaming protocol that built in the LiveDAO APP, and this process is completely no sense and safe.

In default, the APP will only boost the currently watched live streaming to ensure the low performance consumption and high battery life of the phones. Of course, users can also set more live streaming data that they want to boost on the APP. In order to guarantee the data quality, we limit 4 streaming data max on one phone.

In the whole live streaming and watching process, LiveDAO does not use any centralized server, it is completely based on the super node, all anchors and users will install LiveDAO live streaming software by themself. All live streaming phones become nodes in the network of this system. This allows LiveDAO more free to spread videos.

Finally, LiveDAO realizes the freedom, security and reliability of the whole live streaming and watching process with live streaming encryption technology. Meanwhile, due to the special live streaming network mode, we will also develop and provide strong client node (professional boost data mining machine) to help the live streaming network running more efficiently.

**PONS Consensus mechanism**

LiveDAO newly developed the consensus mechanism of PONS (proof of network sharing volume), which is the basic consensus mechanism of ecological mining. According to a series of rules, everyone who contributes to the ecology will be rewarded when they mining. Such as contributing bandwidth to boost the stream data. Through the integration of LiveChain, all people can get the ecological reward fairly.
Live streaming data encryption technology

LiveDAO uses a special data partition encoding and encryption technology in the transmission process, letting random fragments of live stream use different encoding methods. As a result, the streaming data cannot be restored to complete the video information after being intercepted. Because all the restored information is dynamically updated through the LiveChain live streaming chain. This information is available only to users with privileges. Meanwhile, with our optimization, live streaming performance will not be affected, so the privacy and security of the streaming can be maximally protected.

Finally, LiveDAO developed a complete authentication system to protect the rights of anchors and viewers. LiveDAO has set up a rights authentication system based on decentralized control system to maximize the protection of the interests of ecological members.

Strong client node

In order to ensure that the live streaming network can run well in the most extreme bad circumstances, at the same time, to make the live streaming network run more efficiently when saturated, LiveDAO developed strong client node (professional boost data mining machine).

Strong client node is connected to live streaming network by 5G network, which is small in size and can be carried to anywhere with you.

Strong clients have greater data boosting capability (meaning clients have more opportunities to get ecological rewards) and are designed to boost 7-15 streams simultaneously. Strong clients give priority to boost the less watched streams, while the amount of live streaming is saturated, it will boost data at the optimal network.
5G TECHNOLOGY ASSISTANT LIVEDAO

Benefiting from the new 5G network, LiveDAO become a completely decentralized and distributed live streaming system. 5G networks not only bring 1GB of upstream and downstream peer bandwidth, but also bring a revolutionary network structure. Because decentralized distributed streaming systems must be based on a full cellular network, which is not possible to realize with a centralized network. Luckily, 5G network is a complete cellular network, it has more features that perfectly support the implementation of decentralized and distributed live streaming system.

Low bandwidth cost
5G network has 1GB of upstream and downstream equivalent bandwidth, which brings extremely high rate of support for live streaming system. Meanwhile, according to the announced 5G cost, the bandwidth cost of the live streaming system will only be 1/400 of the bandwidth of the traditional computer room, or even lower.

5G network structure and D2D
Under the traditional centralized network structure, the center point of each node (such as the base station, the outing node, and the server) is the block of its performance. When they do high concurrency and high connection work, it will cause high latency and even bandwidth insufficient.
In addition, when the network is far away from the terminal, it will magnify the weaknesses of communication. Such as phone A and phone B in the picture. The current 4G network is known as the centralized network.
5G networks allow direct data communication between terminals. Due to the short wavelength of 5G communication, the adoption of Massive MIMO technology increases the number of base stations, they are in array mode, so the diffusion efficiency between terminals is extremely high.

We can even think of every 5G mobile phone terminal is a "simple base station".
5G other features introduction
There are also many features suitable for us to achieve decentralized distributed live streaming system. Such as:
Beam shaping allows communication interference to be minimized, so the network will be more stable. Unlike 4G networks, which are disturbed by cross-interference.
CU separation and heterogeneous network characteristics have doubled the control efficiency of 5G network, making data flow smoother and network latency lower.

LIVECHAIN LIVE STREAMING CHAIN

LiveChain live streaming chain is a public chain built based on BFT-DPOS consensus algorithm. Theoretically, it will produce a block every 0.5 seconds with no branching, the LiveChain live streaming chain can ultimately support millions of transactions per second, waive transaction and registration fees, and execute complex intelligent contract procedures in a decentralized manner. With LiveChain live streaming chain and intelligent contract technology, all reward and incentive rules will be implemented in a fair, open and untamable manner.
LiveChain live streaming chain has a complete block chain browser, ecological members can use it to check the transaction status freely.
LiveDAO is now accepting applications for super nodes of LiveChain live streaming chain. Any organization or individual can pledge a certain number of LIVE to get the application rights. To apply the super node you need to prepare the server according to the configuration requirements of LiveDAO, and attach the qualification and main body introduction in the application email. LiveDAO will select alternative nodes according
to the applicants' contribution to the community (number of web celebrity, number of fans, copyright content, etc.).

LiveDAO wants LiveChain to have 21-31 super node servers worldwide and another 100 alternative nodes. We will post the pre-selected alternative nodes on the network for all ecological members to monitor and vote. You need to pledge LIVE for the rights to vote. After becoming the super node of LiveChain live streaming chain, you can share 50% of LiveDAO ecological transaction fee with all super nodes. The way to obtain that fee is to allocate 50% of the total revenue to all nodes according to the rules.

Among the pre-selected nodes of which are not been selected can voluntarily choose to become alternative nodes, and after committing to become alternative nodes, they need to be ready to become official nodes at any time. After becoming a official node, it can participate in the profits distribution according to the rules.

PERFECT CLEARING AND SETTLEMENT ABILITY

LiveDAO's strong clearing and settlement capacity is mainly from its fairness, efficiency, low cost, simplicity and multi-asset support, which are benefit from the LiveChain live streaming chain and LiveChain cross-chain technology.
LiveDAO adopts decentralized cross-chain technology, so that assets can flow freely between live streaming chain and EOS main chain. It allows users in the EOS ecosystem to access and use LIVE through existing Exchanges and wallets easily, increasing the liquidity of LIVE. So, all eco-members can use any EOS support wallet and Exchanges.

**Low cost clearing and settlement**

In all clearing and settlement and account registration process, LiveDAO all operation are free. When paying for anchors or buying goods (gifts for anchors, etc.), LiveDAO will charge 5%-60% of the fee depending on the influence of the CP. (no matter using LIVE payments or other digital currencies)
Cross chain technology

With decentralized cross-chain technology, assets can flow freely between the live streaming chain and the EOS main chain. And live streaming chain can be used efficiently and cheaply, while make sure that the sum of all the assets keep the same. It is the pledge model when it cross from the EOS main chain to the streaming chain; and it is the combustion mode when it cross from the live streaming chain to the EOS main chain. During the whole cross-chain process, control and behavior are completed by all the nodes of live streaming chain. So decentralized cross-chain technology guarantees the safety of assets.

Multiple digital asset support

To facilitate the usage, LiveDAO clearing and settlement system supports digital assets with high degree of consensus. It supports BTC, USDT currently.

Complete OTC ecosystem

LiveDAO has established complete OTC exchanges in many places worldwide, users can conduct OTC transactions in a decentralized wallet. LiveDAO makes it easy and safe for users to do OTC transactions by simplifying trading process technology, automatic order matching technology and fast trading technology.

Decentralized wallet

LiveDAO offers an open source decentralized wallet. LiveDAO can not only support its own ecological equity coin, but also support various chain digital assets, and support cross-chain transfer, cross-chain payment. LiveDAO wallet has all versions for IOS, Android and WEB.
LIVE is the ecological equity of LiveDAO, total amount is **3 billion.**

Part LIVE from Team and ecological construction will continue to be locked, you can vote to unlock and release according to the community rules. The LIVE that you got from mining can be traded freely.

**Mining to get LIVE**

Mining activities that contribute to LiveDAO’s ecology will be rewarded. For example: you can get mining incentives if it in accordance with the rules of data boost. The initial LiveDAO will set a mining rate, which will reduce half each year.
Pledge Live To Get Live Streaming Opening Rights
Anchors broadcasting in LiveDAO need to pledge a certain amount of LIVE. We will hold zero pledge launching activities time to time to encourage anchors.

Pledge Live To Obtain Application Rights For The Super Node Of Live Streaming Chain
The super node of LiveChain LIVE streaming chain can be applied by pledging a certain amount of LIVE. If the application is done to be a super node, the pledge will be remained, so as to be a spare node. Pledged LIVE will be returned after 30 days when you lose the super node or spare node.

Pledge Live To Obtain Voting Rights For The Super Node Of Live Streaming Chain
The super node of LiveChain live streaming chain is the result of voting on the public pre-selected nodes. All ecological members who want to support pre-selected nodes can pledge a certain amount of LIVE for a limited period to get the voting rights. If the LIVE not used, it will not be retained, not returned, and become invalid directly.

Pledge Live To Get Strong Client Purchasing Rights
If any ecological member wants to strongly support LiveDAO, buying a strong client terminal is the best choice. At the same time, due to the advantages of the number of streams and logic, the probability to get mining reward for strong client terminal is far higher than LiveDAO’s live streaming APP (higher mining income). If you pledge a certain amount of LIVE for 6 months, you can obtain the purchasing right of a certain amount of strong client terminal every month. The amount will become invalid every month, and will not be accumulated or refunded.
Pay LIVE for consumption

the two most important ways for LiveDAO ecological consumption are: paying for the live streaming or buying gifts for anchors. When paying for consumption, LiveDAO charges 5%-60% commission according to the influence of CP.

VIII. LiveDAO Ecological incentive principle

LiveDAO believes that incentives are dynamic, not fixed, especially for live streaming systems. Dynamic state helps to achieve a dynamic balance of ecological prosperity. What LiveDAO does not change is the principle of motivation. Of course, to be fair, all enforcement rules will be published to public. The principles of motivation are as follows:

The basic incentive principle is that every live streaming can be watched; the hot live streaming be seen by more people.

Live anchors with high popularity are contributors to the ecology and need to get benefit from it. Low-hot live anchors who boost the data are contributors to the ecology and need to get benefit from it.

Live streaming which with high popularity who benefit from ecology need to pay for it. (LiveDAO will charge an extra threshold fee, such as the hot live streaming. The fee should be paid by the anchors or the viewers, which serves as fans feedback or support for the streaming activity.)

Live streaming which with low popularity who benefit from ecology need to pay for it.
LiveDAO income distribution

LiveDAO will charge 5%-60% of fees from eco-consumption transactions for operations and incentives, depending on the influence of the CP. 50% of the fee will reward the super nodes of the live streaming chain. 25% will be used for daily operation, system operation and maintenance, system update, node maintenance, strong terminal research and development, etc. 25% will be used to buy back LIVE at market price, and after buyback these LIVE will be burned and destroyed.

- Buyback: 25%
- Daily operation: 25%
- Super nodes: 50%

LIVEDAO STRONG GOVERNANCE CAPABILITY

LiveDAO believes that live streaming should be a tool to make the world to be a better place, so LiveDAO will stop everything that goes against it. LiveDAO base line for the content: Firmly resist the content that violates the interests and security of all mankind. The content that violates human nature seriously must be purged.
LiveDAO itself has a strong governance ability with the help of LiveChain live streaming chain which based on DPOS consensus algorithm. At the same time, LiveDAO has both short-term and long-term plans to achieve better goals.

Live streams is encrypted, so in the early stage, LiveDAO locks and marks the abnormal live streams by report and random inspection, and then adds the feature codes to the relevant anchors and live streams, and prohibits the live stream with the relevant codes to be forwarded by broadcasting to the whole network.

After a period of governance, LiveDAO will introduce AI image recognition, deploying it on the live streaming chain in a distributed manner to improve the efficiency of community governance.

FUTURE LIVEDAO

In the future, LiveDAO will focus on the protection of anchors' IP, resolutely crack down on the theft of anchors' IP by recording and other methods, and firmly support the rights and interests of anchors. Meanwhile, a complete system will be introduced to help anchors. For example, lowering the threshold for live streaming, training anchors for rapid growth, and helping anchors increase revenue, etc.

Contact us

Email: support@livedao.io
Website: livedao.io
LIVEDAO DEVELOPMENT PLAN

May 2019

LiveDAO is growing fast
The concept and technology of LiveDAO have been affirmed by many supporters all over the world.

December 2019

LiveChainHolding listed
SEC approval, the launch of the IPO, the main board of the New York stock exchange listing.

January 2020

LiveChain main chain goes online
LiveChain's main link &LiveDAO live broadcast App will be officially launched in January next year.

February 2020

LIVE went LIVE on the main exchanges
LIVE will be LIVE on hotcoin, or OKEX, or safe.
The world's first ST model was launched