



Node All-Star

Attitude is Value

White Paper (English Version) V1.0

This document is not a securities offer or a collective investment plan.

We recommend that participants carefully read the full text of this document and conduct due diligence.

Node All-Star Foundation 3/18/2018 Version1.0

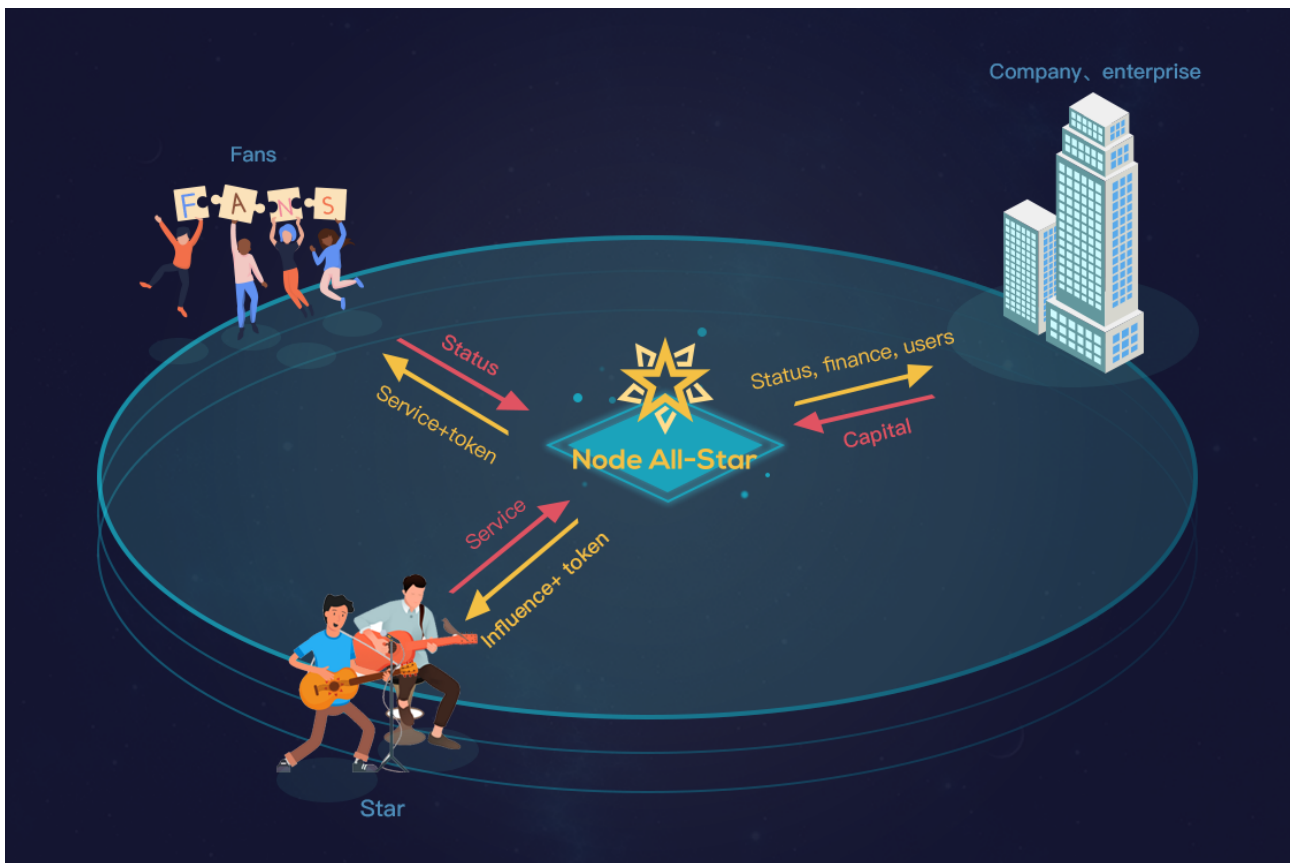
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1.What is Node All-Star



Node All-Star is a pan-entertainment eco-community based on the EOS.IO blockchain platform. It adopts the Proof of Opinion to form a token reward and feedback to the community members who contributed to the Node All-Star community ecology and allows them to exchange customized services, merchandise, etc. with their awards in the ecosystem. Meanwhile, a credible star business value measurement system has been precipitated to promote more benign development of the entertainment industry. Node All-Star transfers the fan attitudes and opinions that are difficult to be measured in the traditional entertainment ecosystem as an intangible asset to the blockchain, and rewards the actual economic value of these in the form of a token to all the Node All-Star eco participants. After formed, the data of the fan opinions and attitudes will be permanently saved to the distributed storage system IPFS (Interplanetary File System). Therefore, the data will become traceable, transparent, and tamper-resistant. Blockchain technology determines fans' right of their attitudes and opinions towards the celebrities, changing fans from traditional passive consumers and users to data holders and contributors. The production relationship of the entertainment industry will change accordingly. Fans will participate in the future economic activities of the entertainment industry by holding data of their attitudes and opinions which are the most valuable assets, and obtain the right to gain income generated by economic activities.

The POO reward mechanism enhances the participation of the community. On this basis, the Node All-Star ecosystem will create various online and offline entertainment consumption scenarios, such as star broadcasts, star Q&As, and fan meets, etc. These traditional scenarios will be upgraded and three-dimensionally holistic by blockchain technology, and will fully realize both peer-to-peer and end-to-end interconnection between information and value within the community. Fans, celebrities, and third-party commercial



organizations will become the three major co-construction groups of the community. Based on equality and mutual respect, they will establish a prosperous pan-entertainment eco-community together, and form a perfect closed-loop entertainment ecosystem. From a model analogy, Node All-Star ecosystem dedicates to build a blockchain era and a DianPing of the pan-entertainment industry.

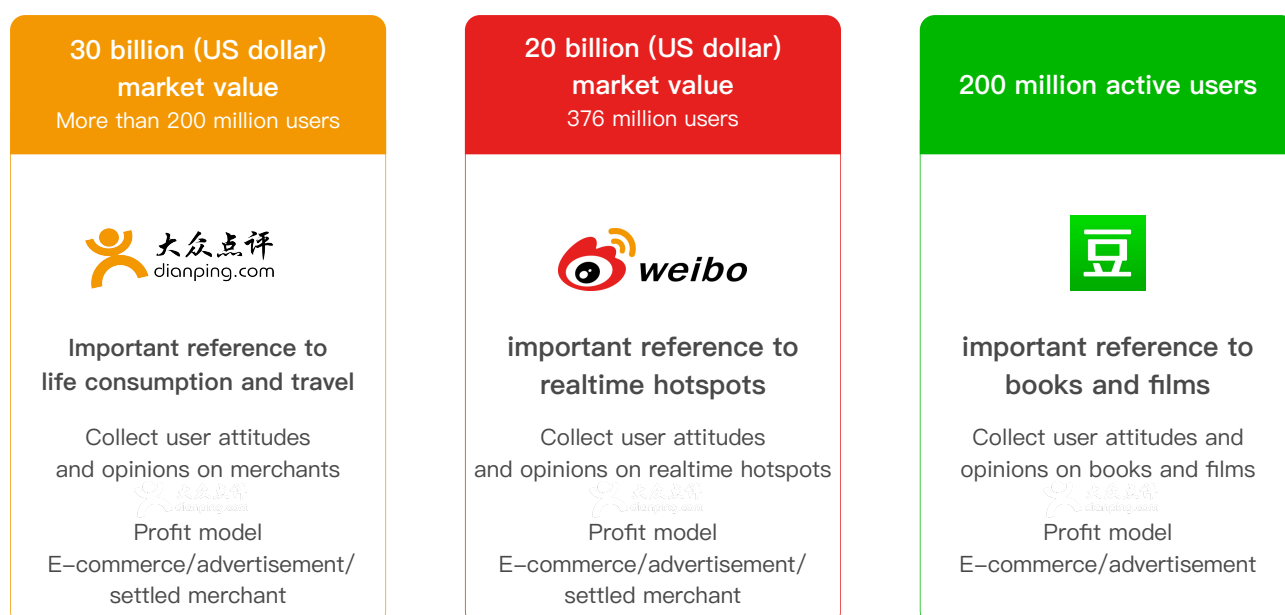
Comparison with the Dianping model

 Node All-Star	 大众点评 dianping.com (2017.10 Valuation of \$30 billion)
<ol style="list-style-type: none"> 1.To value fans' attitudes and opinions on celebrities; 2.Encourage fans to contribute attitudes and opinions momentarily with token; 3.Fans can exchange celebrity customization services ; 4.Utilize IPFS technology to establish an irreproducible database of distributed fan attitudes and build a DianPing for the Pan-entertainment industry in the era of blockchain 	<ol style="list-style-type: none"> 1.Collect user attitudes and opinions on various types of merchants (initial); 2.Give some reward coupons to the contributors of these opinions and attitudes (initial) 3.Users can consume in DianPing 4.The accumulated data becomes the most important reference for everyone's life and entertainment.

2.What does Node All-Star mean?

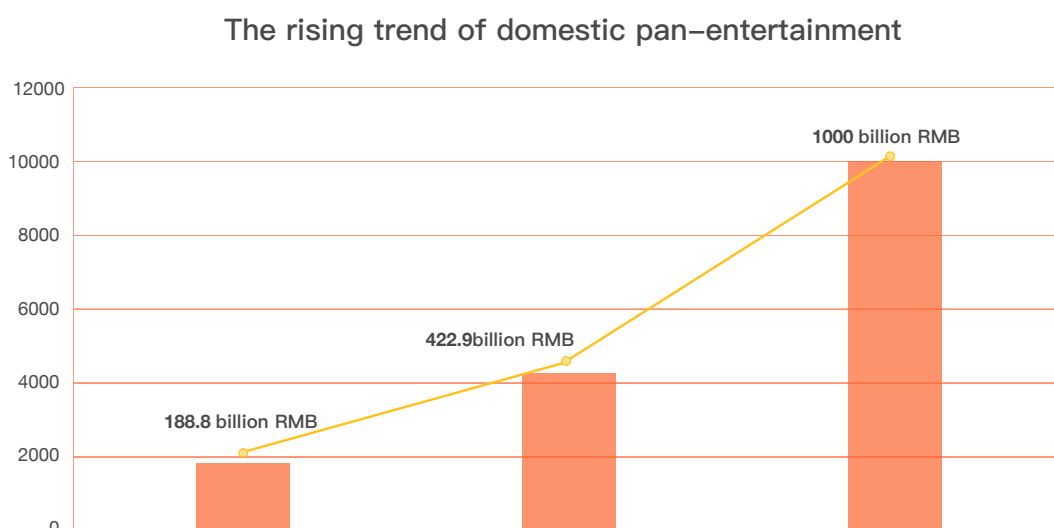
2.1 Fans contribute data, fans deserve interests

For a long time, the Internet industry has been emphasizing users as kings and data driven. Many companies performance have been born outstanding based on it. For example, the valuation of the DianPing was as high as 30 billion U.S. dollars. In Baidu's financial report 2017, the earning last year was 100 billion U.S. dollars with the net profit of more than 20 billion U.S. dollars. But what do these economic activities benefits have to do with the ordinary people? All of them were based on the user's data, however, the users not only gained nothing, but may be brought to some troubles caused by the data leakage. Similarly, in the entertainment industry, fans actively provide data through participation in voting, contributing their attitudes, leaving messages in post bar, commenting on microblogs, searching and browsing star content, and following live broadcasts. Nevertheless, after generated, these data of attitudes expression seem to be just a pile of data among the so-called big data on Internet platform.



The pan-entertainment industry has a considerable market presence with consumer spending, book movies, and real-life hotspots. It is also destined to emerge giant from this industry based on the collection of user attitudes and opinions.

The pan-entertainment industry has become an significant pillar of China's digital economy and an important engine for the development of the new economy. In 2016, the output value of China's pan-entertainment industry reached 415.5 billion RMB, accounting for 18.4% of the digital economy. In 2017, the output value of China's core entertainment industry was approximately 548.4 billion RMB, a yearly increase of 32%, and it is expected that its proportion of the digital economy will exceed one-fifth.



Source: White Paper on China's Anti-Entertainment Industry Development
2015–2016, China Culture and Entertainment Industry Preview

Node All-Star will use blockchain to determine fans' right of their attitudes and opinions towards the celebrities. Fans will become the data holders rather than traditional passive consumers and users. Thus their user relationship with the industry will also alter. This is a change in production

and relations. Fans will participate in the future economic activities of the entertainment industry by holding data of their attitudes and opinions which are the most valuable things, and obtain the right to gain income generated by economic activities.

2.2 The most credible star business value measurement system: traceable and tamper-resistant

Weaken misleading centralized public opinion

In the traditional entertainment ecosystem, the centralization of public opinion has eliminated the decentralized attitude. Any public figure may be discarded or washed white by the entertainment media driven by partial interest. As a fan or a public person, it is easy to be misled by media opinion when they cannot get the attitude of others to the public figure. For example, the stars information on Baidu can be done public relations, and on microblogs, stars pay to be on the search list, and erase their negative news, which is difficult to trace. The Node All-Star community will use blockchain technology to linearly record the attitude of all fans to a single star, and encourage fans to contribute attitudes continuously by token. Thus, the feedback generated will be more objective and fairer than traditional entertainment media. Saved by distributed storage technology, all attitudes and data will be recorded and disclosed in real time, through which fans will be able to observe the tend of the public's attitude towards a particular star every second as well as the historical attitude. This will significantly reduce the temporary misleading brought by the public opinion of centralized media, so that public figures will not be doing public relations easily.

Measure the commercial value of IP Objectively

The commercial value of IP in the traditional entertainment industry is difficult to excavate, measure, and to achieve real-time, transparent and objective. Advertisers and agents with high demand for information that measuring global IP commercial value are hard to distinguish between true and false, and it is also difficult to obtain data and information consists with real fact. The Node All-Star community uses blockchain technology to capture the attitudes from fans and the public, and establishes IP commercial value databases through distributed storage technology, which can provide advertisers and entertainment agents with more realistic first-hand information.

2.3 Reshape the benign development of fan-driven entertainment industry

Enhance the entertainment consumer experience

In the traditional entertainment industry, there are disadvantages of bad interaction experience between fans and stars, too standardized services and commodities, and the underdeveloped commercial value. The Node All-Star community will create multiple decentralized applications (DApps) for entertainment consumption, providing a variety of brand new entertainment consumption experiences including customized services for fans on the consumer side. The blockchain's characteristic of decentralization and peer-to-peer will make the interaction and value transfer between fans and celebrities become more efficient and transparent, turning both fans and stars into participants and co-builders of the Node All-Star ecosystem.

Make business promotion easier

The traditional business promotion model of entertainment industry is costly and inefficient, which has been improved driven by the Internet. However, situations like centralization, information asymmetry, and the low conversion rate of commercial promotion validated users. The Node All-Star community offers merchants a decentralized platform for collecting attitudes and opinions, gathering key data through the form of token incentives, and promoting it more accurately to the validated fan user groups.

Record fan loyalty

It is difficult to quantify or measure the loyalty of fans in the traditional entertainment industry, which leads to some unfairness in the process of star-chasing. The Node All-Star community will use blockchain technology and distributed storage technology to accurately record the fans attitudes and give back rewards to the die-hards.

3.Why Join the Node All-Star Community



As a fan

·Earn rewards

Get token rewards in various ways such as contributing attitudes

·Purchase service

Get customized services and products from stars through token consumption

·Connect stars

Gain the attention of the stars by maintaining loyalty to obtain special treatment and special



As a star

·Earn popularity and rewards

Participate in community and fan interaction to gain fan support and relevant token rewards

·Traffic monetized

Get token rewards by providing services to monetize the traffic

·Expand influence

Improve your attention and influence by participating in the community



As a third party business institution

·Collect fan attitudes

Directly collect fan attitudes and data in the Node All-star community by paying token

·Collect historical data

Obtain historical fan consumption attitude data from the Node All-star community by paying token

·Community Business Promotion

Conducting the commercial promotion and star collaboration in the community through community participation and collaboration with Node All-Star.

·Business crowdfunding

Commercial institution launch crowdfunding in the community to support future celebrity activities within the ecosystem, improving efficiency and reducing risk



As an investor

·Enjoy the community growth bonus

By holding NAST tokens, enjoy the growing dividends of the Node All-Star community and share the economic value of all data in the distributed database of the Node All-Star community.

4.Community Token-NAST

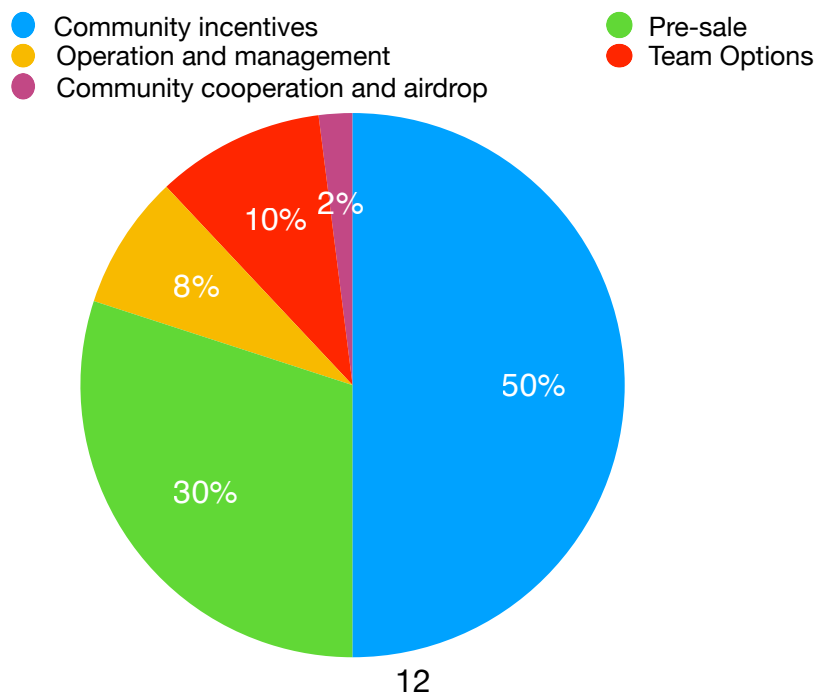
The Node All-Star Foundation will issue the Node All-Star Pass (NAST) as a value carrier (Utility Token) of its ecosystem. NAST not only represents the rights to consume and to use the infrastructure in the Node All-Star Entertainment Community Ecosystem, however, its core value is the right to gain economic benefits derived from all community attitude data in the future. The big data collected by traditional internet giants is worth billions of dollars, but the contributors of them do not directly access to these interests. In the Node All-Star community, all the participants will become masters of the data, enjoying the community-expanded dividends and the corresponding economic value of all the data in the Node All-Star community database.

Name: Node All-Star token (NAST) Total supply: 100 billion

Abbreviation: NAST Blockchain: EOS.io、HPB

Distribution:

50% Community incentives ; **30%** Pre-sale ; **8%** Operation and management ; **10%** Team Options ; **2%**Community cooperation and airdrop



4.1 Community incentives 50%

50 billion NAST will be used as community reward to fans and star groups who make a contribution. The distribution of community incentives will be linear and linked to two factors of the user's attitude weights and the number of user's NAST locked position.

The formula of each user's incentive weight obtained by using the attitude weight value is: incentive weight = immediate attitude weight value * NAST lock position number. 8 billion NAST will be released as NAST Community Incentives for the first year, then halved every 2 years.

Attitude weight

There will be 10 basic attitude weights for new users and 1 weight received automatically each day. The weights represent the number of times the user can contribute attitudes, and daily use can permanently increase the weight received each day. The upper limit of it is 100.

Relationship between attitude weight and number of actions:

Relationship between attitude weight and number of actions

Attitude weight	Number of actions
1-10	1weight=once
11-30	2weight=once
31-60	2.5weight=once
61-100	5weight=once

The permanently increased value of attitude weights received each day and the days required:

The permanently increased value of attitude weights received each day and the days required

Continuously use attitude weight for 10 days	+0.5 each day
Continuously use attitude weight for 20 days	+1 each day
Continuously use attitude weight for 30 days	+2 each day
Continuously use attitude weight for 40 days	+3 each day
Continuously use attitude weight for 50 days	+4.5 each day
Continuously use attitude weight for 60 days	+6 each day
Continuously use attitude weight for 70 days	+7.5 each day
Continuously use attitude weight for 80 days	+10 each day

The value of attitude weight that users daily received can be increased up to +10 points per day. Users are required to log in to DApp in the Node All-Star community everyday and continue to use the attitude weight. If the user interrupts the use, the days calculation of weights will be restarted. If the user cannot maintain the activity level and frequency after the elevation of the attitude weight, it will decrease reversely according to the active time and the daily increase in the above table.

NAST lock position number

The number of NAST lock positions is one of the determinants of the community token incentive obtained by users at each time they use attitude weights. The higher lock positions number determines the higher incentive weight, and also determines the incentive amount of NAST token that the user directly obtains. All NAST token incentives received by the user will be automatically entered into their own lock account. It must be unlocked 15 days before withdrawal. And the lock position only limits the withdrawal of NAST token without affecting its consumption and use.

4.2 Pre-sell 30%

The Node All-Star team will pre-sell 30 billion, or 30 %, of the NAST token. The sell also accepts EOS and ETH and HBP. All fund being raised will be managed by the Node All-Star foundation.

4.3 Operation and management 8%

The 8%, or 8 billion, will be used for the operation and management of the Node All-Star community.

4.4 Team option 10%

10%, that is, 10 billion NAST token will be used as feedback to the team members and consultants who has made a contribution to the project and the community. It also encourages team members continuously give them effort to the development of the project. Team incentives will be distributed to team members in the form of options.

4.5 Community cooperation and airdrop 2%

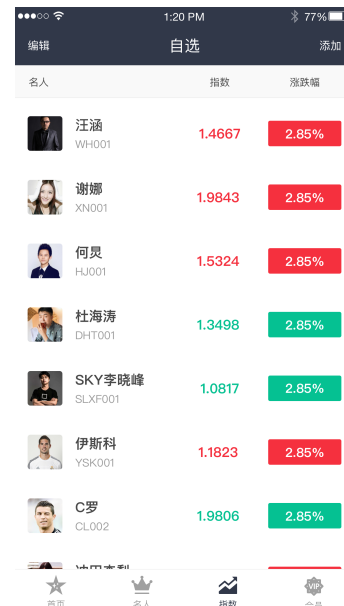
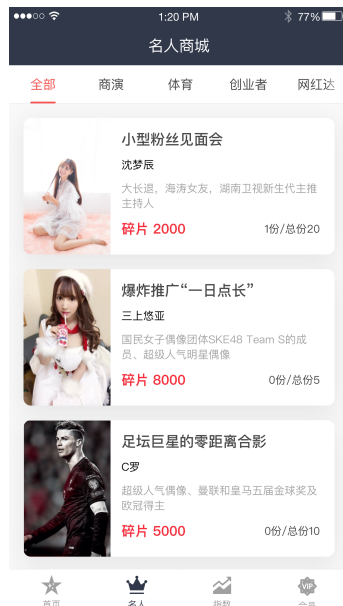
2%, that is, 2 billion NAST token will be directed to the designated cooperating community or other community.

5.Application scenarios and incentives

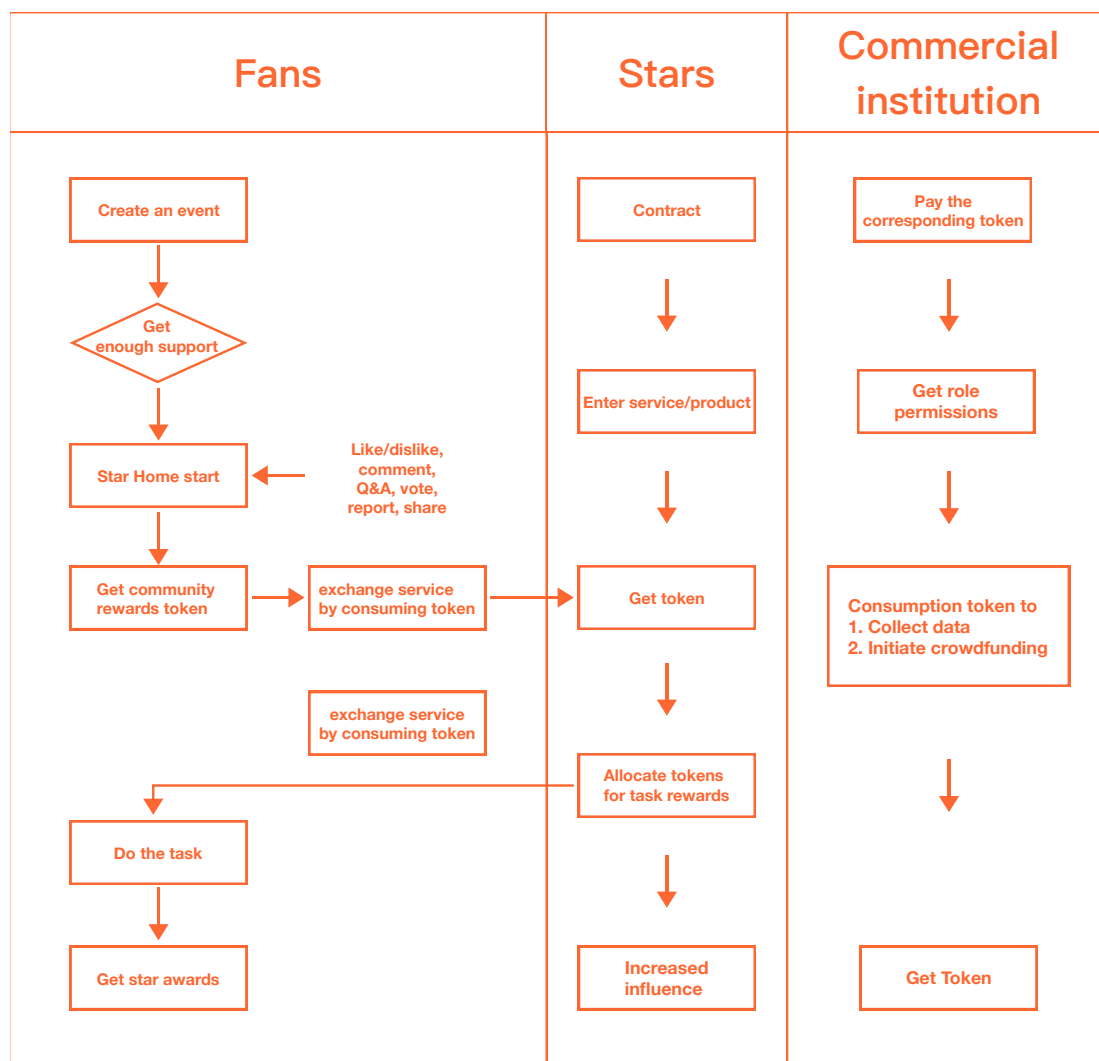
5.1 Star Index

The Star Index is the first decentralized application implemented by the Node All-Star community. It involves fans into contributions of attitudes through token incentives, and records the collected fan attitudes on the blockchain, which achieves transparent and tamper-resistant. On the consumer side, fans can purchase a variety of star services and merchandise, including star customization services on the Star Index through the consumption of NAST token, experiencing a new entertainment consumption business model.

The Star Index is built on the MCS (Multilayer Contract System) system. According to the order of requests, it will go through SPC (Smart Proxy Contract), NAC (Namespace Adapter Contract), BCC (Business Controller Contract), DCC (Data Controller Contract), and finally permanently stored the data in blocks through an IPFS distributed storage system. Based on the scenarios application of blockchain for predicting market and game, we have obtained a list that can reflect the commercial value of stars in real time, solving the pain points of measuring IP commercial value and the corresponding to the public attitude for fans, stars themselves, agent companies, and advertisers. At present, the Star Index DApp platform has entered more than 30 head stars, and has reached strategic cooperation with a number of star agent companies.



Here are the specific ways that fans, stars, and third-party businesses participate in the Star Index DApp:



Create a topic (general):

Fans, stars, and business organizations in the Node All-Star ecosystem can create any topic by consuming attitude weights. All topics are related to subjects like a specific star or work. Topics can be presented in articles, pictures, Q&A questionnaires, videos, etc. After the topic is created, the homepage of the subject corresponding to it may be opened if its activity reaches a certain standard. Fans may freely discuss and contribute attitudes under the homepage unless the topic activity is insufficient and shut down by the smart contract. The attitudes and data collected at each round of topics will be recorded by the blockchain, and permanently stored in the IPFS distributed storage system to form a database of the subjects corresponding to the topic.

5.1.1 Fans

Contribution attitude:

The expression way to contribute own attitude towards stars or celebrities in the Star Index platform to including the simplest form of like or dislike and the more complex form of Q&A and questionnaire. As long as contributing attitude, attitude weight will be consumed, and will also receive incentives corresponding to the incentive weight. Another decisive factor in the incentives obtained by contributing attitudes within the Star Index platform is the number of participants. The rewards assigned during each attitude capture of the Star Index platform will be determined by the user's participation order and incentive weights. This means that active and deep participants in the NAST community will receive more rewards.

●Like/Dislike

Like and dislike are the simplest attitudes expressions towards stars. Each topic is considered as a round from the beginning to the end. The star index corresponding to the star will change after each round of statistics, and these changes will be recorded in the blockchain, forming tamper-resistant data.

Attitudinal contributors will consume a certain number of NAST token (user-defined in the upper and lower limits) during the process of participating in the like/dislike expression, and relative token incentives will be received by the contributors of mainstream attitudes in addition to community incentives after the end of each round.

- Comment

Fans can comment on any content in any topic after consuming the attitude weight. After the comment is initiated, the community incentives will be got, and the comment can be liked, due to which the additional community incentive can be obtained.

- Q&A, questionnaire

Fans can participate in the attitude construction in the form of Q&A and questionnaire after consuming the attitude weight. Q&A and questionnaires can be initiated by fans, stars, or third-party commercial institutions in the community through token payment. The tokens paid here will be presented in the form of bounty below each Q&A or questionnaire. Questionnaires with more bounty often have more attitude contributors involved. Besides these bounty, community token incentives can also be received. The original data of all Q&A and questionnaires will be permanently stored in the IPFS distributed storage system. Any participant in the community can retrieve any of these data on the platform by paying token. Furthermore, all the subjective attitude contributions will be narrow examined and reported with decentralization by the community through the use of token incentive approach. Any ineffective attitude contribution will be punished (see Community Punishment Mechanism for details).

- Share/Recommend:

Fans can share any content on any topic to a third-party social platform without consuming attitude weight. On the contrast, they will get community incentives which are linked to the import traffic.

- Report

Fans can observe attitude contributions occurred recently from other fans in the subjective forms of attitudes contribution such as Q&A and questionnaires. Once it is considered to be irrelevant to the content, the "Report" option can be clicked. Report needs to consume the attitude weight. When the number of reports reaches a certain amount, the platform will automatically review it. As long as that is the case, the reported fan will not be eligible for community incentives and questionnaire bounty, and even will be double-deducted for all incentives that should be received. For all the fans involved, they will equally divide the deserved incentives and penalty deductions for reported fans.

- Invite

Fans can get community card incentives by inviting new users to register with their real names. Inviting a new user will receive a 1000 NAST community incentive, unlimited. With 50 the number of cumulative invited new users, fans can be upgraded to elite nodes.

- Loyalty reward

A fan with long-term attitude towards single star is rewarded as the star's "die-hard fan", and is given a customized award. The amount of time it takes to become a die-hard fan and the content of the award will be customized by the star. Node All-Star community will turn it into a smart contract, and fans who meet the requirements will be automatically upgraded to "die-hard fans." After which, the incentive weight will double when contributing attitude to the star.

- Attitude crowdfunding

When a star initiates the attitude crowdfunding, fans can support the star or the event which consume the weight of the attitude, and there is no limit to the number of support, until fans use up the attitude weight. When attitude crowdfunding is over, 45% of the resulting community incentives will be awarded to the star, another 45% will be allocated to all attitude contributors according to the proportion of attitude weight consumed, and

10% will be handed over to the corresponding legal institutions through intelligent contracts to ensure attitude crowdfunding. An attitude crowdfunding initiated by a star gets a community incentive linked to the total incentive weight of the crowdfunding, and the higher the total incentive weight, the more the community incentive was obtained (the total incentive weight of crowdfunding = the incentive weight of individual participant * the number of support times of the participant * the total number of participants). The list of supporters will be released after the attitude crowdfunding is completed, including the number of fan support lists and the fan incentive weight contribution list.

●Commercial crowdfunding

Fans can participate in the commercial crowdfunding initiated by merchants in the form of paying certificates. Merchants need to disclose the fund use and the rewards promised to the participating fans, and the whole process of the commercial crowdfunding will be recorded on the block chain , and overseen by the whole community. If the funds raised are less than those paid certificates, the loss will be

Ways for fans to get community incentives	consumption needs	Incentive composition	Incentive distribution
参与单个明星的态度贡献：点赞	1. 态度权重 2. NAST通证（上下限区间内自定义个数）	消耗态度权重所获得的社区激励 + 消耗NAST通证后在该轮次为主流态度所获得的额外奖励（非主流态度无该奖励）	1. The community incentives gained from the consumption of attitude weights will be distributed pro rata to all the attitude contributors for this round based on the participants' incentive weights. 2. After the NAST token is consumed, if the round is completed by the mainstream, the reward is: NAST consumption of all non-mainstream attitude contributors/ NAST consumption weight of mainstream contributors.

Comment	Attitude weight	Community incentives received by consumption of attitude weight + community incentives received by the liked comment	<p>1. The community incentives gained from the consumption of attitude weights will be distributed pro rata to all the attitude contributors for this round based on the participants' incentive weights.</p> <p>2. The liked comments awards will be linked to the liked fans' incentive weight and the number of liked</p>
Q&A, questionnaire	No consumption	Community incentives received by consumption of attitude weight + token incentives provided by Question or questionnaire sponsors	<p>1. The community incentives gained from the consumption of attitude weights will be distributed pro rata to all the attitude contributors for this round based on the participants' incentive weights.</p> <p>2. The bounty for the questionnaire attitude contributor will be distributed equally to each participant according to the bounty token paid by the questionnaire initiator divided by the total number of participants in the questionnaire.</p>

Share/ recommend	No consumption	The amount of page views received from a third-party platform will be converted into community token incentives	The amount of page views obtained from a third-party platform is converted into community token inventions and then distributed to fans who share community content.
Report	Attitude weight	Rewards should be received by the reported fan (community incentives+questionnaire rewards) +deducted punishment(double the amount of rewards)	After the report is successful, all attitude contributors participating in the report will share the reportee's due reward + punished deduction according to the incentive weight ratio.
Invite	No consumption	Successfully inviting a new user will receive 1000 NAST of community incentives. Successfully inviting a total of 50 new users can be upgraded to become elite members in the community.	Non-community elite nodes: 1000NAST Community Incentive Community elite nodes: 1000NAST Community Incentive + Node Incentive (See the Community Elite Node section for details)
Loyalty award	Attitude weight	Community incentive weights *2 + star custom awards (including NAST token or customized services)	Star customization

Attitude Crowdfunding	Attitude weight	Community incentives corresponding to total crowdfunding incentives*45%	The community incentives corresponding to 45% of the crowdfunding total incentive weights are distributed in proportion to the incentive weight of the participating fans.
Business Crowdfunding	NAST token	The reward promised by the merchant who initiated the business crowdfunding (customized by the merchant)	The return promised by the merchant will be paid in proportion to the NAST paid for participating in crowdfunding.

●Consume NAST:

Other than receiving community awards for their contribution, fans can also consume star services, products, and other customized products on the Star Index platform. The main providers of goods and services on the Star Index platform can be stars, merchants, and fans. Block chain realizes point-to-point value interconnection upon which star index DApp stands to upgrade entertainment consumption experience and create multi-dimensional entertainment consumption experience for fans.

5.1.2 Star

Node All-Star community will follow Dianping's model to include celebrities from all walks in the database of the Star Index platform. Stars who work with the Node All-Star community or empower the Node All-Star community will offer services or related goods on the Star Index platform.

collect attitude:

On the star index platform, 10% of the community incentives generated by fans' contributions will be attributed to Node All-Star stars (except attitude crowdfunding), including likes / hitches, comments, Q & A, etc. At the same time, stars have collected

invaluable data that is helpful to increase their business value in the process of being contributed by fans. These data will bring huge economic benefits to stars and have a great impact on their career.

- attitude crowdfunding

Any star signing and cooperating with the star index platform has the authority to launch attitude crowdfunding, and win the support of fans. For example (Wu Jing: should I shoot Wolf Warriors 2). Stars can predict the market reaction based on the number of fans' votes. Among them, 45% of the community incentive generated by attitude crowdfunding will be attributed to the star, while the other 45% will be allocated to the participating fans according to the ratio of the number of participants to the incentive weight, and 10% will be handed over to the corresponding legal institution to ensure that the star performs public funding through the intelligent contract.

- Q&A、 Questionnaire

Stars can offer Q&A and questionnaires to fans in the community by rewarding them, and collect subjective attitudes toward individual questions. The more rewards, the more fans will participate in the contribution of attitude.

provide service :

Any star working with or authorized by the Node All-Star community can serve fans or sell related goods on the Star Index platform, and all merchandise transactions will be settled in NAST.

- service/good

Stars can offer services and sell goods to fans and the price of which is up to the star and NAST is used as the transaction settlement.

- customized service

Stars can provide customized services to fans, such as blessing videos with fan names, products with celebrity signatures, etc. Fans may be willing to pay more for these customized services, while stars can offer customized services to loyal fans on a rewarding basis.

collect “die-hard” fans :

Stars can customize the terms for “die-hard fans” in the star index platform initiated by the intelligent contract, for example, set it to 1000 times of attitude contribution. The platform will automatically upgrade the fan to the star's "die-hard fan" after meet this term, which can not only double the incentive weight in the attitude towards the star, but

also receive the star's self-defined additional reward. The reward can be in the form of NAST certification or customized services and so on.

invite fans:

Stars can share account invitation codes to invite fans to sign up as new users of the star index and share community incentives.

Initiate missions:

Stars can initiate missions in the Node All-Star community by rewarding their fans with certificates, such as rewarding 10000 NAST to invite more fans to contribute to themselves in a day, or within an hour, and so on. The content and award of the initiating task are customized by the star.

5.1.3 Commercial Organization

As the main participants and co-builders of the Node All-Star community and the main service object of the Node All-Star database, merchants can obtain star attitude data by paying certificates. In addition, merchants can conduct related business promotion activities in the community to form interaction with fans, stars and other groups. To become a cooperative business organization of star index platform, the basic conditions of Node All-Star community should be met, and the community team will seriously evaluate the financial strength of the cooperative merchant and ensure the quality of the community.

●Commercial crowdfunding

Merchants can launch a commercial crowdfunding by mortgaging the platform and paying NAST certification, which requires disclosure of the use of crowdfunding and related qualifications, as well as of promised returns and how to deliver. The whole process of commercial crowdfunding will be recorded in the block chain, traceable and untampered, and the whole community will jointly supervise and manage the merchant's crowdfunding behavior. Commercial crowdfunding is determined by the merchant, the higher the amount set, the higher the

payment and mortgage. If the crowdfunding situation is not as expected, the merchant will bear the loss of this part by himself if the number of crowdfunding card or multi-fund pass card is less than that of payment and mortgage in the time window of crowdfunding after payment.

- unlock data

Merchants can unlock the historical data in the distributed database of Node All-Star community by paying the certificate. The amount of the card paid by the merchant will be related to the size of the required data, the length of the traceability and the degree of subdivision. All vendors who pay NAST certificates will be given precise awards in the form of community incentives to all contributors to the data.

- collect attitude

Merchants can collect fans' attitude including topic, questionnaire and so on, in the form of award pass.

- community commercial promotion

Merchant can carry out the industry promotion in the Node All - Star community in the form of payment card. Promotion mode involves forms such as advertisement, plant-in advertisement , promotion video , soft text and so on . The NAST card paid by the merchant in the commercial promotion activities will flow exactly into all the promotion participants through the form of community incentive.

5.2 Star Cast



Star cast is an upcoming DApp and the IP live broadcast platform in the Node All-Star ecology. Users can interact with and give their favorite IPs NAST. As a star IP, it can also reward the user group NAST by launching missions, so as to gain more fans to join the live broadcast and consolidate their popularity, and the fans can also get more NAST by completing the reward task initiated by star IP. As a business, you can place ads or promote your community by paying for NAST. The decentralization of block chain technology brings users a new consumption experience, realizes the peer to peer value interconnection and interaction with IP fans, and does not generate platform fees and other intermediary costs. The platform will collect attitudes through the participation of fans and stars in live events, as well as the frequency and frequency of viewing, while offering community incentives to all star participants.

5.3 Star Headline



Star headline is the upcoming DApp of the Node All-Star community and the entertainment content distribution platform in the Node All-Star ecosystem. Fans can get first-hand information about the star by following their favorite star or IP. Star headline takes the form of grabbing the entire network to bring users the most efficient information channel of a single IP, while opening a self-media port, so that more users can contribute content to the community. Each star or IP can set up their own content distribution channel. Users can obtain VIP subscription and other related orientation privileges of each IP channel by consuming NAST. Star headline will collect attitude data in a similar way to the star index.

5.4 Star Q&A



Star Q&A is the DApp to be launched in Node All-Star community, a knowledge payment platform in the Node All-Star ecosystem. Fans can use pass-through NAST as a medium of value exchange to issue questions to favorite stars. Based on block chain, we have upended the payment model in the traditional fan economy to build a point-to-point value interconnect channel for fans and stars. Users can customize the number of passes they want to pay, thereby obtaining a highly personalized information-sharing service . At the same time, all issues and transaction prices are disclosed on the platform . If other users see their interest on the platform , they also get personalized information about the star - sharing from the question ' s fans , so good questions can also generate revenue .

5.5 Encryption Star



The encryption star is a block chain-based celebrity-forming game that the Node All-Star community is going to launch. Every star authorized in the Node All-Star community will have a 3D encrypted celebrity on behalf of himself on the encryption star platform in the NAST trade. Not only collection value, the encryption star will bring a variety of benefits related to the star, such as discounts on goods, custom service privileges and so on, and there will be more occasional surprises to hold encryption stars. Each encryption star has its own level of loyalty, and the higher the encryption star level is, the more privileges it brings and the greater the value added when it is sold. Encryption Star will have a variety of ways to collect fan attitude data and release relevant community incentives.

6.Community Node

Node All-Star aims to create a new entertainment eco-community with fans, stars, coexisting with merchants. Each participant and contributor is a node of the community, even a genesis node or an elite node. This is the "community node" initiated by the Node All-Star community, creating community creation and elite lineup. All participants can become the genesis and elite nodes in the Node All-Star community and enjoy the unique rights corresponding to the community nodes. There are multiple ways to become community nodes, all on the premise of licking the brick for the building of the Node All-Star community. The greater the capacity, the greater the responsibility. Nodes gain community trust, enjoy more community dividends, and also bear the future of the community, so "community nodes" is a dynamic concept. If a community node is unable to maintain its contribution to the community after acquiring rights, it will be quickly replaced by a more standards-compliant node competitor. The generation and replacement of all nodes will be automatically implemented by the intelligent contract of the Node All-Star community.

The following are the criteria for Node All-Star community users to become genesis / elite nodes and the criteria for maintaining the rights and interests of genesis / elite nodes :

Genesis Node ration: **200**

rights of genesis node:

- 1.10% of total community income will be allocated to all genesis nodes in the form of a certificate per quarter according to the incentive weight;
- 2.The upper limit of attitude weight value was raised to more than 300, per action consumes 10 attitude weight value;
- 3.the node invitation award:

For each new invited active user to sign up, in addition to the community invitation award, the node invitation award will increase linearly with the increase of the number of invitations. A fixed increase

of 1000 NAST for per invited active user is award, until the total award reaches 20000NAST. The base node invitation award that invited the first active user after becoming the genesis node is 10000 NAST.

4. Star customized services, offline fan meetings and other services are prioritized;

To be a genesis node for the first time(meet any one):

1. number of stored NAST reaches 4000W;
2. Cumulative success in inviting 120 active users to register with their real names for arbitrary DApp in the Node All-Star community.

Terms for continuous genesis node rights or permission:

- 1.If the number of NAST lockers is 4000W or more for the first time, the number of stored NAST should be kept no less than 4000W, otherwise the rights or permission will be cancelled by the intelligent contract;
2. If the way to become a genesis node is inviting 120 active users for the first time, 20 new active users must be invited every month, otherwise the permissions will be cancelled by the intelligent contract.

Elite Node ration: **2000**

rights of elite node:

- 1.10% of total community income will be allocated to all existing elite nodes in the form of a certificate per quarter according to the incentive weight (different from elite node award) ;
- 2.The upper limit of attitude weight value was raised to more than 200, per action consumes 10 attitude weight value;
- 3.the node invitation award:
For each new invited active user to sign up, in addition to the community invitation award, the node invitation award will increase linearly with the increase of the number of invitations. A fixed increase of 500 NAST for per invited active user is award, until the total award

reaches 10000NAST. The base node invitation award that invited the first active user after becoming the genesis node is 5000 NAST;

4. Star customized services, offline fan meetings and other services are prioritized;

To be a elite node for the first time(meet any one):

1. Number of stored NAST reaches 1000W;
2. Cumulative success in inviting 50 active users to register with their real names for arbitrary DApp in the Node All-Star community.

Terms for continuous elite node rights or permission:

- 1.If the number of NAST lockers is 1000W or more for the first time, the number of stored NAST should be kept no less than 1000W, otherwise the rights or permission will be cancelled by the intelligent contract;
- 2.If the way to become a genesis node is inviting 50 active users for the first time, 10 new active users must be invited every month, otherwise the permissions will be cancelled by the intelligent contract.

7.Community Ranking Mechanism

The Node All-Star community will create multiple lists of communities built on smart contracts, allowing all participants in the community to see clearly and intuitively their contributions to the community. The community will set up the following list and publish it regularly:

Fan attitude contribution rank

Node All-Star community will rank the number of fan attitude contributions per DApp in the ecosystem and regularly publish a list of fan attitude contributions.

Fan loyalty rank

Node All-Star community will count the number of times each star has been continuously contributed by a single fan in the ecosystem and regularly publish a rank of fans' loyalty to a particular star.

Star popularity rank

Node All-Star community will count the number of times all stars in the ecology have been contributed and regularly publish a list of celebrities' popularity.

Star hits rank

Node All-Star community will count the number of times all star services have been purchased in the ecosystem and regularly publish star hits.

Fan consumption rank (single star)

Node All-Star community will keep track of how all DApp fans in the ecosystem spend on individual stars and regularly publish fan spending charts.

8. Technology Architecture

8.1 Identity authentication & Authority management

DApp in the Node All-Star community uses blockchain tech to realize basic services including user account registration, attitude contribution weight-validation, content weight-validation, identity authentication and node privilege management. A series of actions concerning real name registration, contribution attitude, etc are recorded in traceable, non-tampering blockchain, to realize distributed management of authentication rights and permissions for participants in our community. Privilege management mainly involves determining whether a particular message is properly authorized.

The simplest form of authority management is to check whether the transaction has the required signature, which however implies the required signature is not unknown. Typically power is tied to classified individuals or groups of individuals. EOS.IO software provides a declarative privilege management system that allows accounts to fine-grained and high-level control over who can do what at what time.

It is essential that identity authentication and rights management be standardized and separated from the business logic of the application, which makes it possible to develop a tool to manage authority in a common way and provide a tremendous space for performance optimization .

Each account can be controlled by any weighted combination of other accounts and private keys. This mechanism creates a hierarchical privilege structure that can accurately reflect the organizational situation of authority and makes it easier than ever for multiple users to control funds. Multi-user control is a crucial factor for enhancing security. If used properly, the risk of being hacked can be greatly eliminated. With EOS.IO, accounts are able to

define permission levels, with each derived from higher authority levels. Each defining authority level defines a power that can be a threshold for multi-signature checking of keys and / or defining authority levels for other accounts. For example, an account's friend authority level can be set to that it can be equally controlled by any of its friend accounts.



Another example is the Steem block chain, which has three hard-coded defining authority: owner, active and posting. With posting authority one can only perform social behaviors such as voting and publishing, while with active one can do everything except change the owner and owner authority is essentially reserved, one can do everything with it. EOS.IO implements a similar management philosophy by allowing each account holder to define its own hierarchy of authority and groups of actions, based on which All-star node permissions, star permissions, and merchant permissions in the Node All-Star community are implemented.

8.2 Data archive

DApp in the Node All-Star community uses blockchain tech to realize basic services including user account registration, attitude contribution weight-validation, content weight-validation, identity authentication and node privilege management. A series of actions concerning real name registration, contribution attitude, etc are recorded in traceable, non-tampering blockchain, to realize distributed management of authentication rights and permissions for participants in our community. Privilege management mainly involves determining whether a particular message is properly authorized.

DApp in the Node All-Star community adopts distributed storage IPFS systems to manage and record data, e.g. users' contributions to the platform. Fan attitude data is the core value of the Node All - Star community and is the core asset that the whole community must uphold together . The data contributed by the participants of the Node All - Star community will be encrypted using the user ' s private key , and stored in the decentralized IPFS distributed storage network . The hash of the data will be used as a reference, stored in the block chain, and the user with permission can obtain the reference through the intelligent contract to address the data. Meanwhile, the storage provider can not obtain the corresponding decryption key, i.e. can not extract data. In the business model of the Node All-Star community, access to data needs to be unlocked by paying NAST certificates, and any participant in the community has the right to unlock historical data.

PFS is a decentralized point-to-point distributed file system connecting all computing devices to the same file system using content-addressing technology, with which users need not to bother the location of the server or the name and path of the file store. Each file is placed in the IPFS node, and a unique encrypted hash value is obtained based on its content. Hash value directly reflects the contents of the file, and even if only 1 bit changes, the hash value will be completely different. When the hash is requested, the node of the file will be located using distributed hash list and the document retrieved and its data validated. IPFS network is a flexible, fine-grained,

distributed network, which meets the requirements of the content distribution network well. Currently, IPFSs are still in developing stage. In order to ensure the user experience in Node All-Star community, the user's content will be encrypted and stored in the central database. With the development of IPFS technology and the increase of data volume, the data storage in Node All-Star community will transfer to the stage of semi-centralization and semi-distributed. At the time IPFS technology is fully developed, all historical data of Node All-Star will be migrated to IPFS distributed storage system.

the practice of encrypting and storing attitude contributors' data to IPFS by Node All-Star is as below :

AES encryption module (aes.js)

```
const fs = require('fs');
const crypto = require('crypto');
const algorithm = 'aes-256-ctr';

return crypted;
}
exports.decrypt = (buffer,password)=>{
let decipher = crypto.createDecipher(algorithm,password)
let dec = Buffer.concat([decipher.update(buffer) , decipher.final()]);
return dec;
```

Data from attitude contributors in Node All-Star community is going to be stored after encryption, its content stored in IPFS after download, so as to improve the level of privacy and security by storing encrypted data in IPFSN.

```
const ipfsFile = require('./ipfsFile');
const fs = require('fs');
const crypto = require('crypto');
const AES = require('./aes');

//operation file
let addPath = "./storage/add/onepiece.jpg";
```

```

let getPath = "./storage/get/onepiece.jpg";
let jsonPath = "./storage/get/json.txt";

//generate 64-bit random number as cipher
let password = crypto.randomBytes(32).toString("hex");
let buff = AES.encrypt(fs.readFileSync(addPath),password);

ipfsFile.add(buff).then((hash)=>{
  console.log(hash);
  console.log("http://localhost:8080/ipfs/"+hash);
  return ipfsFile.get(hash);
}).then((buff)=>{
  fs.writeFileSync(getPath,AES.decrypt(buff,password));
  console.log("file:"+getPath);
}).catch((err)=>{
  console.log(err);
})
//operation content
let User = {
  "name":"naruto",
  "age":23,
  "level":"ss"
};
buff = AES.encrypt(Buffer.from(JSON.stringify(User)),password);
ipfsFile.add(buff).then((hash)=>{
  console.log(hash);
  console.log("http://localhost:8080/ipfs/"+hash);
  return ipfsFile.get(hash);
}).then((buff)=>{
  fs.writeFileSync(jsonPath,AES.decrypt(buff,password));
  console.log("file:"+jsonPath);
}).catch((err)=>{
  console.log(err);
})

```

8.3 Cryptocurrency Consensus Algorithms

The Node all-star community is committed to creating a pan-entertainment public comment on the block chain era, which asks for a strong infrastructure to support a large amount of data concurrency. If the Node All-star community had 500W people online per day, it would be required to compute 600 times a second, and such performance requirements would be achieved only through the current mainstream blockchain consensus(DPOS). According to this algorithm, people who hold tokens in the whole network can choose the block producers through the voting system, and anyone who is elected can participate in the production of blocks.

The DPOS mechanism pseudo code implementation is as follows:

```
for round i
dlist_i = get N delegates sort by votes
dlist_i = shuffle(dlist_i)
loop
slot = global_time_offset / block_interval
pos = slot % N
if delegates[pos] exists in this node
generateBlock(keypair of delegates[pos])
else
skip
```

EOS.IO expects to produce one block every 0.5 seconds. At any time, only one producer is authorized to produce blocks. If a block is not successful at a certain time, skip it.

The block generation in the EOS.IO is based on a 21-block cycle. At the beginning of each cycle, 21 block producers will be voted out with the top 20 winners automatically selected, and the 21st winner selected according to the probability of the resulting votes. The selected producer will be mixed based on the pseudo-random numbers derived from the block time in order to ensure the connection between the blockers.

If the block generator missed a block and did not generate any blocks in the last 24 hours, the blocker would be deleted which ensures the smooth operation of the network.

Normally, the block chain of DPOS does not experience any bifurcation because block producers cooperate with production blocks rather than competition. If there is a block bifurcation, the consensus will automatically switch to the longest chain. A blockchain with more producers will grow faster than a blockchain with fewer. In addition, no blockchain producers grows faster than those with more producers, and no producer produces blocks on both blockchain forks simultaneously. If found out, he may be voted out.

8.4 Transaction confirmation

The producer of blockchain maintained by the DPOS consensus algorithm is generally 100% online which means that a transaction is written into the block chain after an average of 1.5 seconds and is known to all the outbound nodes which further indicates that within 1.5s one deal is identified by blockchain at a possibility of 99.9%.

Abnormal situations such as software bug, Internet congestion or malicious block producing would incur branching(bifurcation). To ensure irreversible transaction, wait for 15 blocks to confirm. According to the configuration of EOS.IO software, waiting 15 blocks normally takes an average of 45 seconds.

Within 9 seconds of the bifurcation, the outbound node may discover the bifurcation and warn the user. When two consecutive loss are observed, the change node is located in the branching with a possibility of 95%. When three consecutive loss was observed, the probability is 99%. A predictive

model can be adopted based on node lost information, recent participation rates, and other factors to quickly inform users about the problem.

The response to the warning depends entirely on the nature of the business transaction, but the simplest response is to wait for 15 / 21 blocks before confirmation until the warning stops.

8.5 TaPoS

EOS.IO software asks for each transaction to include hash of the nearest block head with two purposes:

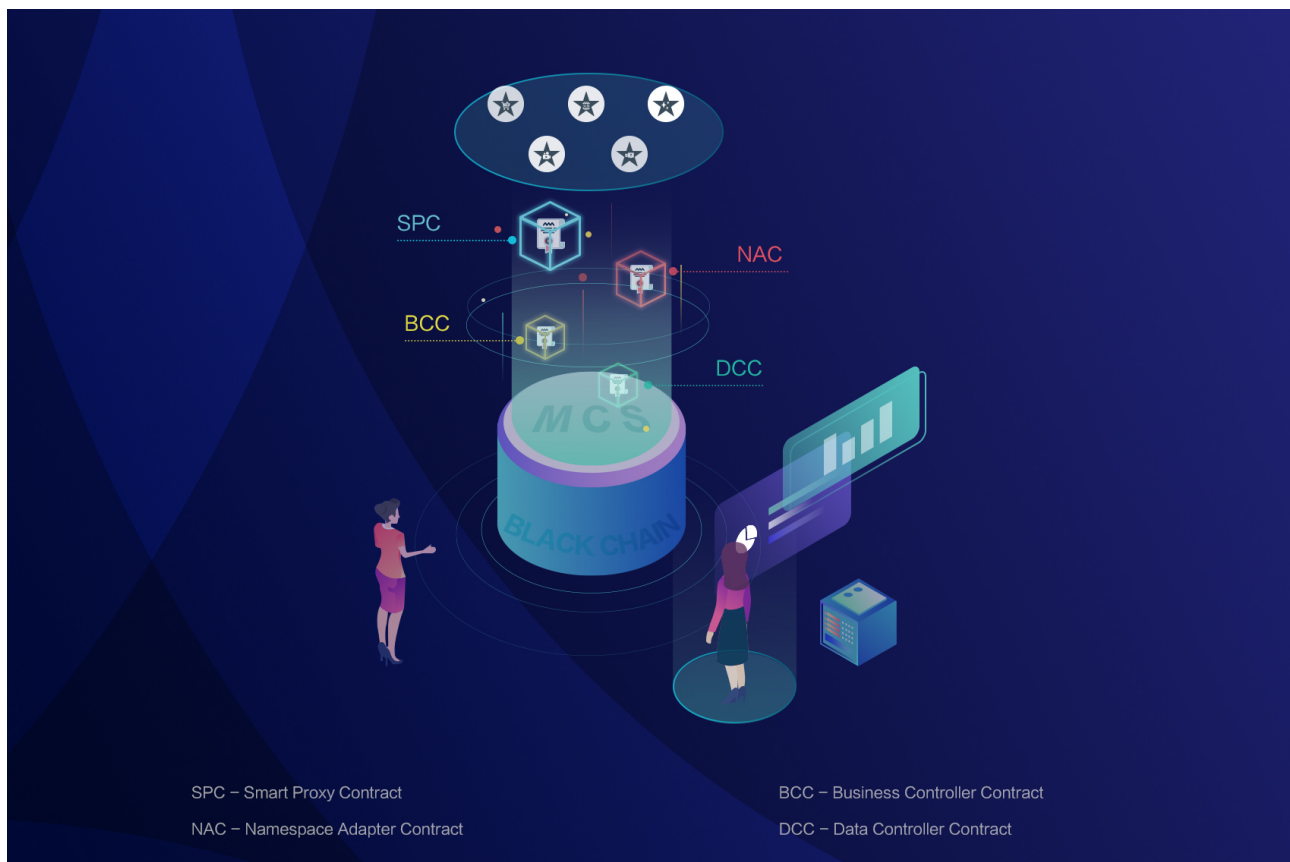
- 1.Prevent the occurrence of a large number of transaction records on the branched block chain;
- 2.Facilitate the perception of whether the user is on the branched block chain. Over time, all users confirm the block chain directly, which makes it difficult to forge the fake chain, for counterfeiting will not be able to migrate the transaction from the legal link.

8.6 BFT(Byzantine Fault Tolerance)

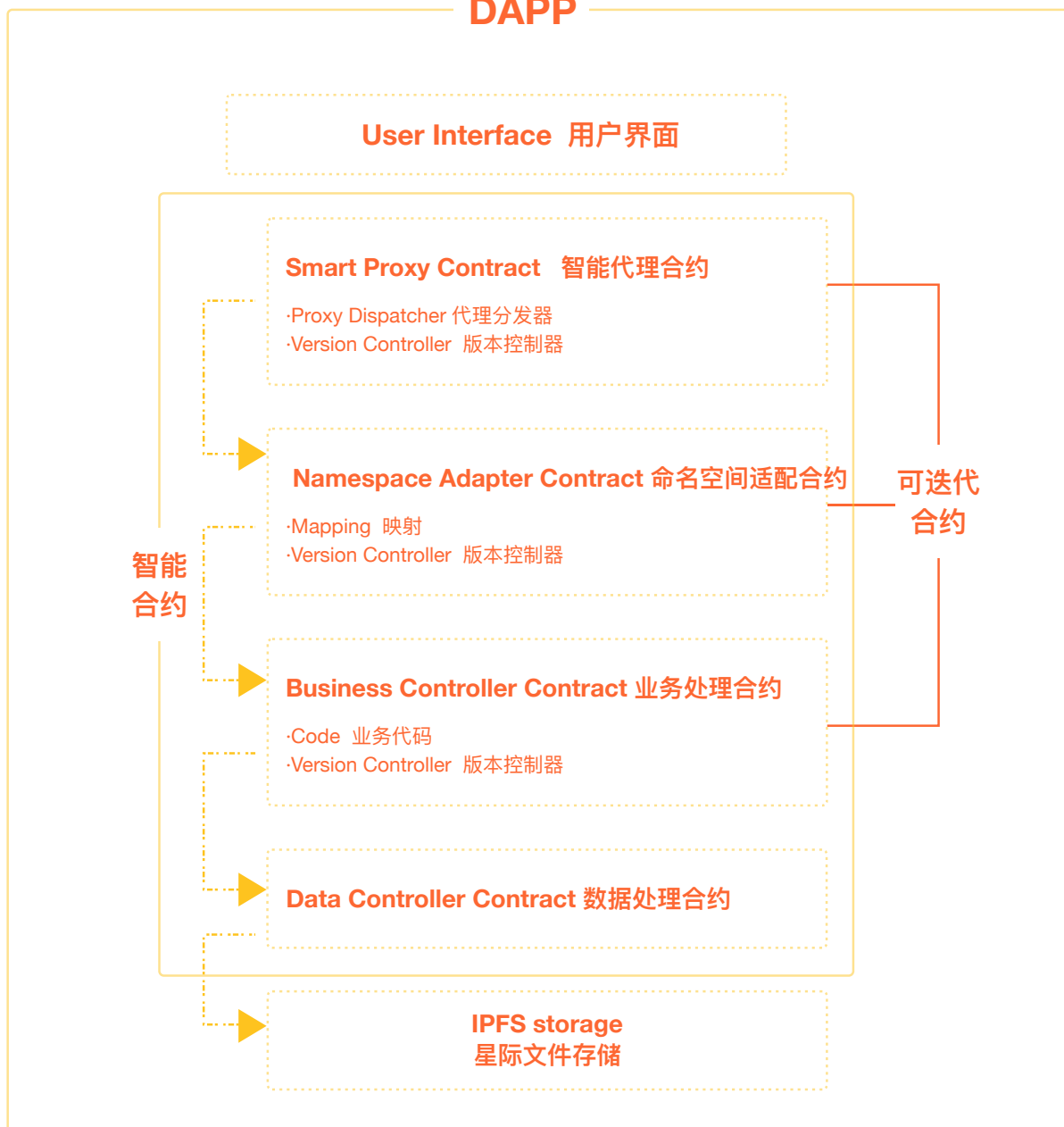
BFT is a examining model of how tolerant a distributed system is to errors. If a distributed system can tolerate arbitrary errors (such as hardware errors, network congestion and latency, hacker attacks, node defected,etc),then we recognize the system as Byzantine fault-tolerant.Although Byzantine fault-tolerant has been proved to be feasible in the 1980s, there has been no practical and efficient algorithm implementation. It was not until 1999 that Castro and Liskov published PBFT(Practical Byzantine Fault Tolerance [2.2] that turned BFT theory into a practical solution for the first time.

Node All-Star community, an ecology with high concurrency and decentralized network composing of different DApp, adopts BFT model to optimize DPOS and increase the security of DPOS.DPOS BFT can effectively

solve the technical bottleneck that may be encountered in attitude collection and greatly improve the ecological stability.



DAPP



9.Team Member



Ocean Lu Founder/CEO

Mr. Lu is an untiring entrepreneur with a 10-year experience in the Internet industry, dedicating to the research and practice of community content, upgrading of the consumer industry, and the field of cultural entertainment and so on. He was also the ex-product director of the KELA Diamond and Yun Jia Zhen, and the VP of iLaw with a rich experience in product, operation and marketing promotion.



Chase Su CTO

Technical expert, with more than 11 years of online games, social game development experience, master in dealing with high concurrency, stability-related. Problem solving; geek. Served as technical director/chief architect in Tencent, Pingan and other companies. Began to focus on block chain in 2016 and now the CTO of Star-Index, charging in block chain architecture design, consensus algorithm research, intelligent contract optimization etc.



Zeyu co-founder

Graduated from Purdue University with a master's degree in accounting and finance. Senior financial practitioner, blockchain investor. Currently working for a top investment bank in China, he has working experience with well-known institutions including Fosun Group and Haitong Securities. He has conducted in-depth research on bonds, asset back security (ABS), and the token economy, and is responsible for the top-level design of the project.



Yao Co-founder

Mr. Yao, a graduate of Shanghai Jiao Tong University, has been a well-known enterprise in China Airlines, Ctrip, McKinsey and other companies. Mr. Yao provides market value management services for several A shares listed companies. Mr. Yao is currently responsible for financial control and provides other financial support for the project.

10.Partnership

HOFAN

www.hofan.cn/page-s7.html



HPB

<http://www.gxn.io/>



INLABS Foundation

<https://ink.one/>



Imagination FUND

想象力基金
Imagination Fund

CONSESUS Capital

<http://cssfund.com>



Kds Life

<https://www.kdslife.com>



顾问团队



汪晓明
HPB创始人&CEO



季军
比特快讯CEO



董平
宽带山创始人
名品导购CEO

合作媒体



11.Routine



Star Index

2018 Q2: product planning; establishment of R&D center
2018 Q3: Demo contract; DApp basic functions, registration, etc.
2018 Q4: Launch of the Beta version



Star Headline

2019 Q1: product developing
2019 Q2: launch in June



Star Cast

2019 Q3: product developing
2019 Q4: launch in Dec



Star Encryption

2020 Q1-Q3: product developing
2020 Q4: launch

12.Risk Tip

12.1 operational and political risk

It happens only when the Node All-Star project is in daily operation, raising funds in violation of local laws and regulations, which could lead to business operations and project suspension.

The Node All-Star foundation promises to pay close attention to the relevant laws and regulations concerning fund registration and publish the daily operations all transparently. All raised funds will be used for the initial plans only. Meanwhile, the foundation will hire legal advisers of the business operations to issue legal opinions on the daily operation of the foundation.

12.2 market risk

Investors should aware that there is a risk of price fluctuation in any financial market, especially in trading and financial market with virtual currency as commodity where market value, a fictitious currency, is unstable and accompanied by large fluctuations.

To manage the risk, Node All-Star will do its best to ensure the progress of projects and product development. Good market consensus and recognition will largely reduce the risk of asset price flashbacks and short-term instability.

12.3 bottom block chain risk

The EOS block chain platform is still in the stage of developing and users' number is increasing. Although the Node All-Star team is fully optimistic about the future of EOS.io it may still run into technical problems and other unpredictable risks in the process of development, resulting in EOS's development falling short of expectations.

To manage the risk, the Node All-Star team will bring more IT and block chain technical experts to the R & D team after adequate funding has been

secured. When any emergency occurs, our IT and block chain technicians will resolve any technical issues that affect the user experience in the first place. We will ensure that each DApp in the Node All-Star network remains in good working order.

12.4 foundation management risk

The risk of fund management is the risk of capital loss arising from the market volatility, hacking, and embezzlement.

The Node All-Star team will publish all foundations' money flows and account addresses on the official website for full transparency. In the area of network security, we will hire professional network security experts and engineers to raise sufficient funds to enhance the security of the fund. At the same time, we will adopt different types of virtual money wallets to diversify and reduce the risk of fund management and fund security.

13.Disclaimer

To participate in the sale of the certificate, you must agree to the purchase instructions and terms of the Node All-Star project. You need to commit to the Node All-Star Foundation:

- Under the restriction of your local laws and regulations, you have the right to purchase Node All-Star pass;
- You are not an American, Korean or Chinese citizen, or you can buy Node All-Star certificates through citizenship any of these countries;
- You are familiar with local laws, regulations and rules governing the regulation of virtual currencies, and the purchase and trading of virtual tokens or certificates are not prohibited by local regulatory laws;
- The purpose of buying a certificate is not speculative;
- The regulatory laws of the region in which you live do not include certificates in the scope of equity or securities crowdfunding;
- You will not use the certificate obtained for illegal activities, including money-laundering or even terrorist activities;
- You are solely responsible for deciding whether the Node All-Star certificate matches your own circumstances and spending power;
- The purpose of obtaining Node All-Star certificate is to use and consume all kinds of applications in Node All-Star ecology;

- You are aware of the risks associated with the sale of general certificates (including the risks associated with the incomplete development of the Node All-Star network and other operational risks);
- Understand the use of cryptographic currency and the use of certificates and the risks associated with them.