IOTF

White Paper V1.02

CONTENTS

Preface abstract

IOTF is an intelligent and trusted decentralized blockchain platform designed to reshape the value ecosystem of IoT and the value of data. The current IoT terminals and the resulting amount of data are increasing. For IoT companies, the pressure of innovation in their business models is becoming more and more urgent. It not only refers to perfecting the well-known framework of the public and simplifying the original business model, but also needs to gain competitive advantage from new technologies and new opportunities. Therefore, we think that the enterprise needs to fundamentally change their traditional value creation and value acquisition. In addition, the terminal equipment and people produced more and more data, but the value and ownership of the data have never been truly attributed, evaluated, quantified and enabled. As the producer of the data, they have never owned it and benefited from it, and the value of the data has been separated into isolated islands without forming an effective interworking mechanism. However, we think that the data produced by households and terminals are the most valuable data in the industry. The IOTF will realize the ecological value reconstruction and data value confirmation and transaction of the Internet of Things industry through the self-developed IoT intelligent terminal industry public chain technology and solutions.

The products and technologies of IOTF will be implemented in the following three phases:

First, create a public chain of industry value and build an ecosystem of value for the Internet of Things. The IOTF is based on the features of IOT application to develop the decentralized value public chain, supports various industry applications and provides hardware smart chips, SDK and other adaptations, combining cryptography technology,

distributed architecture, and main chain of DPOS consensus, building a secure, decentralized, highly concurrency blockchain network.

Second, the IOTF will solve the data value problem of the IoT terminal, realize the user's data rights and value transactions through the decentralized trading platform, and protect the data value of users and devices.

Third, realize the interconnection of everything and the transaction of terminal value. The value exchange between the terminal and the terminal can be realized by transforming the trusted environment through the block chain of the interconnection of everything.

Finally, the vision of IOTF is to activate the huge Internet of Things, and at the same time use 5G network, 5G Internet of everything, people and terminal to become the composition of IOTF blockchain network, forming a value economic community based on terminal, service, data ownership and ownership as transaction carrier.

Chapter 1 Industry Overview and Block chain Technology

1.1 The Development and present situation of the Internet of Things

Interconnection is the connection of the whole world and the formation of a virtual world. By connecting the information, resources will flow quickly, create new wealth and form a new economy. The IOT is the extension of the Internet, which connects the "everything" through the sensor, (RFID) radio frequency identification and other technologies. Although interconnection changes the traditional economy and brings new life, there are still obstacles to the virtual world and the real world. The Internet of things expands the connection, opens up the virtual world and the real world, and forms a new world of interconnectedness of all things.

Each device in IOT can act as a separate business subject, sharing energy and resources with other devices at a very low transaction cost. On IOT platform, each device can report the status of the device. Such as the Smart watch, the Smart band, your refrigerator, and these devices can collect and transmit data through the Internet to make up our data world.

In 2015, the size of the global IOT market reached $62.4 billion, an increase of 29 percent. The global IOT equipment market is expected to reach $103.6 billion by 2018, the compound growth rate will reach 21 percent from 2013 to 2018, and the number of new connected devices will increase from 1.691 billion in 2015 to 3.054 billion units in 2019.

INTERNET OF THINGS EQUIPMENT ACCESS (100 MILLION)   **GROWTH RATE (PERCENTAGE)**
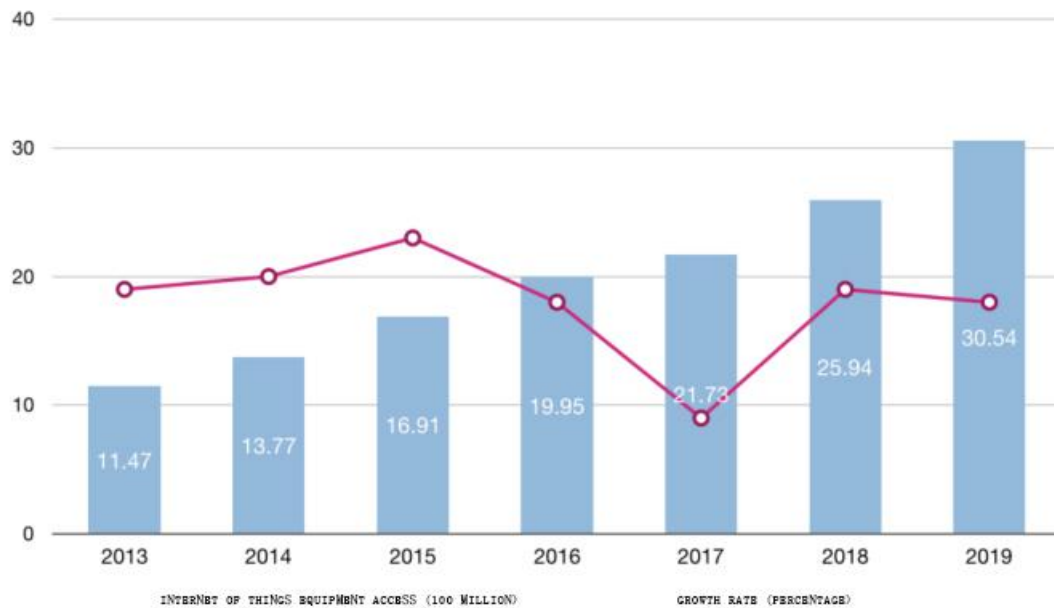
1.2 Problems faced by the Internet of Things Industry

With the continuous progress of technology, the development and application of IOT technology has made remarkable achievements in recent years. However, the Internet of Things technology also faces many problems and challenges. The key issues that are more prominent are as follows:

Waste of terminal resources. The use of a large number of IoT infrastructure is not perfect, resulting in idle resources, and many IoT vendors and users have not benefited from IoT data and terminals.

It is difficult to form a valuable ecosystem. Although more and more terminals solve the needs of users, there is a general lack of operating mechanism and operational ability of IOT enterprises, and the incentive mechanism is also not formed. The mechanism ultimately fails to form a positive circular ecosystem between users and manufacturers.

Defects of the centralization system. There is no mutual trust mechanism between devices and devices. All devices need to be checked with the data in the IOT center, and once the database collapses, it will cause great loss to the entire IOT.

A large amount of valuable data created by users is idle or stolen. Most of the centralized networking platforms of terminal equipment enterprises or service providers have the right to collect and analyze user data and control user equipment without authorization from users, which poses a great threat to user privacy and security.

1.3 5G brief introduction, why do we need 5G

4G LTE mobile data services are still developing rapidly in terms of coverage and speed capabilities. So why do we need 5 gigabytes, especially 4G LTE connections are already faster than home fiber connections.

We'll explain everything in the following, but you know, a variety of experiments have been carried out on 5G, and 5G smartphones will be fully available in 2019. Motorola has just released the latest flagship Moto Z3, which will go on sale in 2019 and will become the first smartphone in the United States to support 5G networks through Mods accessories. 5G networks will gradually begin to appear in our lives in the coming years.

It is worth noting that 5G does not fully represent mobile phones. In the future, laptops and tablets will also have built-in 5G network connections. In fact, there are already laptops that support 4G network connections. With the support of 5G in the future, our life will completely abandon the wired network and have home broadband that relies entirely on cellular networks.

What is 5G

5G is the name of the current next generation mobile data connection and is the next generation of 4G. 4G is still accelerating, but there are several main advantages to switching to 5G networks, which we will explain below.

The 5G will provide incredible high-speed broadband speed, but

more importantly, no matter where you perform every function you want, no matter how many people you connect at the same time, it will have enough capacity to ensure all operations.

The 5G will run on a new hyperspectral band that uses higher frequency signals than 4G. The new band will be much smaller than it is now, which is crucial to the use of the Internet of Things. However, the signal will not be transmitted far away, so more access points will be needed closer (described in more detail later).

Professor Andy Sutton, chief network architect at EE, argues that the goal of 5G is to become completely "invisible". It should be a "right there" technology, just like electricity. It will enable device manufacturers to implement the Internet of Things because it will always exist and can be utilized without regionalization.

Why do we need 5G

One of the main benefits of 5G technology over 4G is not only its transmission speed, which may be between 10 Gbps and 100 Gbps, and more importantly, low delay.

Currently, 4G delays range from 40 milliseconds to 60 milliseconds, which is low delay, but not sufficient to provide real-time response. For example, multiplayer games require lower delays to ensure that the remote server responds immediately when you press a button.

The potential ultra-low delay of 5 gigabytes may be between 1 millisecond and 10 milliseconds. For example, this will allow you to watch a live broadcast of an audience on a football field and another shot angle to watch the game, matching the situation on the court without any apparent delay. This will also open a door for virtual reality and AR applications to provide services in real time.

Capacity is also an important factor. As time goes on, the Internet of Things becomes more and more important, and electronic devices and items use intelligence and interconnection that they have never had before. The pressure on bandwidth will continue to grow. That's why 5

G is needed to provide millions of new connections to networking technology.

The Internet of Things era: equipment explosion growth

Analysts predict that by 2020, everyone in the UK alone will own and use 27 connected devices. There will be 50 billion connected devices around the world. These technologies range from existing technologies, such as smartphones, tablets and smartwatches, to refrigerators, cars, augmented reality glasses, and even smart clothes.

Some of them will require a large amount of data to move back and forth, while others may only need to send and receive small packets. 5G systems themselves will understand and recognize this and allocate bandwidth separately, so that there is no unnecessary pressure on a single connection point.

As part of the "heterogeneous network", these points or units will be used in LTE-A, technology will be added and improved to adapt to 5G. Wherever the user is, the cell automatically talks to each device to provide the best and most efficient service.

The larger network units will be used in the same way as they are now and will cover a wide range of areas, but urban areas will also be covered by smaller units installed on lampposts, on the roofs of shops and houses, and even in bricks in new buildings. Each will ensure that the connection will be standardized and appear to be standard.

4K streaming video capacity is also important for the future of video streams. EE expects 76 percent of its data traffic to be used for streaming video by 2030. Most of them are 4 K ultra high definition, or even 8 K resolution.

4G data rate can solve this problem. It is expected that 14 Mbps connections should handle streaming media 4 K video and 18 Mbps 8 K video. But if everyone does this at the same time, as statistics show, it will be difficult for the network to meet demand.

Other non-consumer areas will also get better services in 5G, but as

EE itself acknowledges, some applications of low latency and high capacity networks have not even been taken into account. You need to have enough technology to solve its problems.

Finally, another major benefit of 5G technology is that standards and spectrum bands will be retained globally. In the UK, for example, your 5G phone will use exactly the same system and spectrum band as the United States, South Korea and anywhere else.

1.4 Application of Block chain Technology in Internet of Things Industry

Block chain technology is called distributed account book technology, which is a kind of interconnection database technology, which is characterized by de-centralization, openness and transparency, so that each can participate in database records. After the advent of intelligent contract technology, blockchain will evolve from the recorder of information to the executor of the transaction. Low-cost transactions can greatly reduce the cost of value exchange, and the combination can develop scenarios that could not have been imagined before. Block chain technology can not only provide an appropriate solution for recording the data of all IoT units, but also ensure that the data is recorded, and then it can not be changed.

In view of the current problems in the industry, block chain technology will be used to solve the following problems:

(1) The distributed account book ensures that the data is not tampered with, uniqueness;

(2) Smart contracts ensure transaction reliability and efficiency.

(3) The structure of point-to-point distributed data transmission and storage;

(4) The encryption protection and verification mechanism of data in distributed environment;

IOTF will build a block chain system based on the value flow of the IOT as a nuclear demand.

The IOTF uses the blockchain to change the existing IoT industry centralized trading platform, and enhances the ecological value of the Internet of Things by using IOTF Token to realize the value quantification and value circulation of terminals and data within the platform.At the same time, as an IoT industry value chain, IOTF combines various scenarios of the Internet of Things industry to provide deep coverage and application, and applies blockchain technology to more new businesses.

1.5 5G, The Internet of Things and block chains need to interact

Monitoring the growth of 5G, the Internet of Things and blockchain technologies will be critical, as these three superior technologies will shape the future of us and the Internet.

Because all three technologies are designed to work together and interact with each other, it is difficult to discuss them only from the impact of the first two technologies on the latter. So what is the potential of combining these three emerging technologies?

Perhaps the biggest wave of technology sweeping the world right now is the adoption of the latest cellular network technology, 5G, and experts and non-professionals have been waiting for a long time. Although global 5G coverage is expected to be implemented in 2020, some companies have begun to implement their own plans. Verizon, for example, has announced that it has achieved 5G coverage in about 19 cities in the United States and will have more coverage by 2020.

If that 4G long-term evolution technology is great, then 5G is greater: the newer network technology can transfer data at a rate of up to 10 Gb/ second, while the rate of 4G is 100 Mb per second. 5G will ensure faster network speed, lower latency, and greater networking

device capacity.

These advantages make Internet of Things devices the beneficiaries of this new technology, especially smaller, lower-power devices. Faster speed means faster transmission of data over the network. In addition, 5G excellent connectivity means that more Internet of Things devices will benefit from it.

Internet of Things technology allows daily use of tangible objects to connect to the Internet and transmit data through algorithms to better serve users. The world has seen a surge in smart devices such as televisions, furniture, vacuum cleaners, air conditioners and so on.

Smart homes already exist and are operated entirely by built-in algorithms. Fraunhofer Institute estimates that smart homes have a potential savings rate of 40 percent in terms of heating costs. This goal applies both to the family and to industry.

The idea of a smart city is not far from being realized. The dream of a smart city is not just to reduce emissions and energy costs. McKinsey estimates that smart cities can reduce commuting time by 15 to 20 percent and emergency service response time by 20 to 35 percent with smart roads. As mentioned earlier, 5G will provide these smart homes, smart cities and more smart devices with powerful ways to realize their true potential.

Once intelligent devices, especially low-power devices, have a development platform, the Internet of Things will gain great impetus. Because it becomes more convenient to operate these devices, there will be more devices, and even more people will be willing to adopt them. The world is reaching a point where individuals will have a hard time living without the Internet. In fact, the United Nations has declared Internet access a human right since 2016.

However, while the combination of 5G and the Internet of Things has proved to be happy, there are still legitimate concerns, especially in terms of security and privacy, which is an opportunity to harness the

talent of the block chain.

Today, many people know something about virtual money, such as Bitcoin, Ethereum, Swisscoin and so on. But only a few people really master the technology behind it: Blockchain. Blockchain is a decentralized database platform for storing linked transaction data blocks, so it is named.

The dispersion of block chain means that it can resist most security problems. Compared with the traditional client-server system, its advanced encryption provides more powerful anti-hacker protection. And that's why it's very safe to use virtual currency for online trading and payment.

The Internet of Things and 5G have great potential, but can only be realized by injecting block chain technology. Although 5G provides connectivity coverage for Internet of Things devices and transactions, block chain processing security and ensuring the protection of users and transaction data. In fact, the trinity will be very powerful, because each part will strengthen the other.

With the introduction of blockchain, skill network will be greatly promoted. Earlier this year, a Chinese doctor used a robot to perform the world's first 5G remote operation on a patient thousands of kilometers away.

As we see a significant improvement in global health care services, more of this is expected to happen. For obvious reasons, security in this area is critical-implementing blockchains in health care will make remote processes more secure.

In addition, it is expected that the extensive adoption of 5G-driven smart devices means that the blockchain will have more data than ever before, which has greatly contributed to the globalization of technology.

However, the block chain that must handle more data is likely to lead to scalability issues. This technology stores the transaction data in a block linked by a chain, and it takes about 10 minutes to build each

block. What happens when more data needs to be processed and processed? As a result, the block size is greatly increased, resulting in more response times.

To sum up, although 5G provides speed for Internet of Things devices, integration with block chains may actually slow down data and transaction processing. This is the expected challenge of integrating 5G and the Internet of Things into the block chain, and the specific solution does not seem obvious. Perhaps, 5 gigabytes of speed or better cellular technology will balance this slower processing speed.

Now that the development of 5G and the Internet of Things is unstoppable, we urgently hope that engineers and developers can find ways to solve or bypass the scalability problem of block chain, so that the three technologies can realize their consistent maximum potential.

Chapter 2 Technical Architecture of IOTF Project

2.1 IOTF system architecture

IOTF system architecture is divided into IOT layer, connection layer, main chain, contract layer, application service layer.
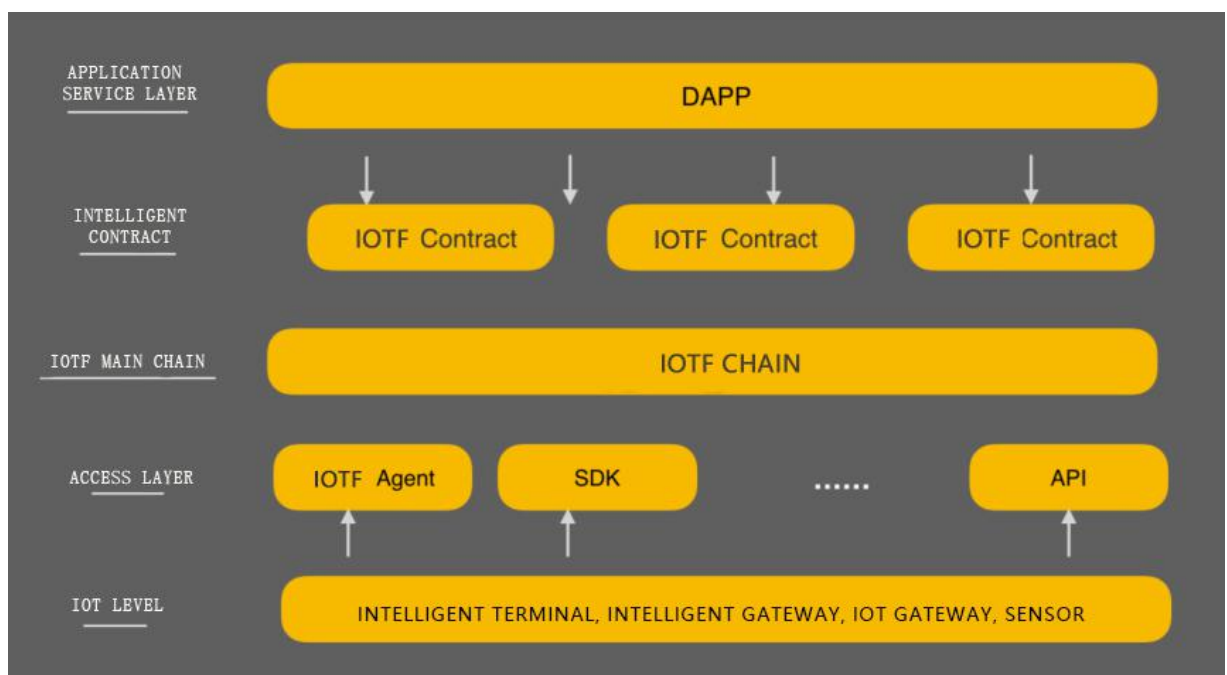
Description of the system architecture:

IOT layer:

IOTF will cooperate with manufacturer to enhance the terminal value and make the benefit sharing as the premise, and constantly construct the cooperative chain.

Connecting layer:

IOTF provides a series of smart chips, SDK and API to help developers connect to block chains and build a decentralized chain.

Main chain:

The IOTF main chain optimizes the DPOS consensus mechanism,

improves the performance, and can meet the Internet of Things concurrent environment.

Contract layer:

Intelligent contracts should be carried out in the field of the Internet of things to achieve commercial contracts. According to the different scenarios, the intelligent contract module which can carry on the preset logic can be added selectively.

The application service layer:

Developers can develop and submit DAPP according to the platform's development rules and business guidelines, and according to the relevant specifications.

2.2 Smart chip IOTFAgent.

IOTFAgent(hereinafter referred to as IA) is built on the basis of a special safety chip. The structure diagram is as follows
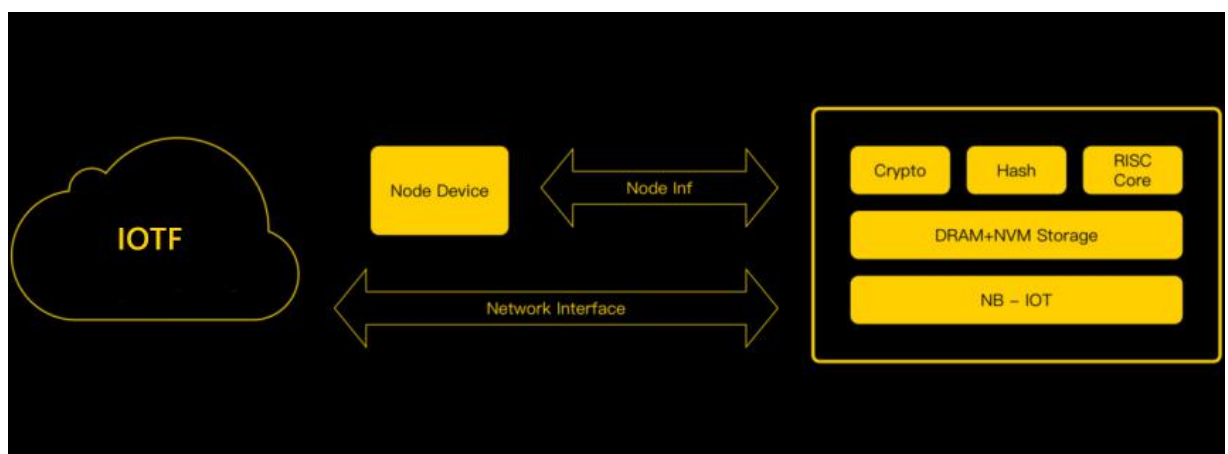
IA is designed on the basis of safety chip, which provides better security and performance power consumption characteristics, and can also achieve better shape and size, which is more conducive to system integration. The trusted computing system at the hardware level improves the trust level of the shared network as a whole, which provides a reliable basic guarantee for the development of the shared

network.

IOTF concatenates the whole state through IOTFAgent. Each IOTF node has one and only one IOTFAgent based on a specific intelligent chip. The kernel functions of IA, include node authentication, node asset management, service measurement and distribution control, service price evaluation, service billing and settlement. IOTF connects these nodes through IA to realize shared value exchange.

Node authentication

IA certifies the legitimacy of shared nodes. IA, as the security unit of shared network authentication, has the basic legitimacy of shared network grant. At the same time, IA also undertakes the function of verifying the legitimacy of the equipment system related to the node for the node with the nature of the information device.
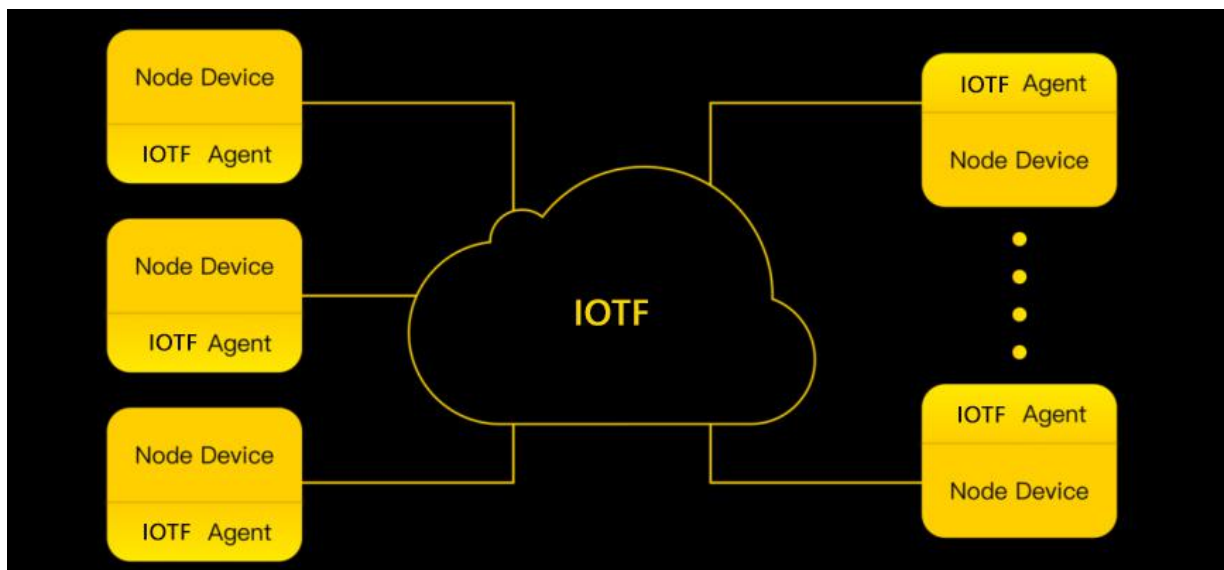
Node asset management

IA is responsible for receiving, paying and keeping the digital monetary assets of the node. IA is also responsible for managing other assets owned by the node in the shared network, such as the data asset information stored in the shared storage, the shared service information being provided, and so on.

Service description

IA represents the node to provide the shared service information provided by the node, including the type of service, service definition and so on.

Brokering a deal

IA represents the node to provide service quotations, including supply quotations and demand quotations, and to coordinate brokering transactions within the scope of fair rules on the basis of supply quotations and demand quotations.

Service metering and distribution control

IA cooperates with the shared network to accurately measure the services provided or accepted by the node in a fair manner, record the unsettled service measurement information, and coordinate the process and steps of providing or receiving the service by the node. For example, in the process of sharing storage services, coordinate the transmission of data, confirm that the node stores data for regular health inspection and other tasks.

Billing settlement

IA manages the settlement, installment payment, tail payment, etc. on the basis of established brokerage contracts.

2.3 IOTF Public chain

IOTF Chain adopts DPoS as its consensus mechanism, and improves and optimizes it. It can realize the distribution of rights and interests after block production without consuming additional calculation, and it can also dynamically determine the execution result of intelligent contract by agent or all nodes according to the transaction state of the network.

IOTF Chain will issue Token as an important economic segment of community incentive and consensus mechanism. Holding Token can not

only obtain block chain basic services such as contract release, bifurcation, but also participate in voting, and become a proxy node to provide services to receive Token awards. The holder of each token is called an equity, and the corresponding voting weight is assigned according to the number of tokens held. The proxy node is elected by the equity vote. The top 99 agents with the largest number of votes take turns verifying the transaction, and the order is determined by all the proxy nodes together and cannot be tampered with. If you act as an proxy, you can get a profit, but if you do something abnormal or not, you will be punished.

After optimization, the consensus mechanism can step forward to improve the ability of the transaction. For example, for some intelligent contracts with longer holding time, or where the internal state space accounts for more. The proxy packages only the Hash value of the resulting transaction, which is validated by all nodes. While the full intelligent contract is quickly verified, it also reduces the congestion of the whole network. In addition, we do some optimization on the consensus algorithm to avoid the fixed proxy node and avoid the gradual evolution into the centralized network.

At the same time, IOTF Chain supports the IOT_Coin protocol. Each IOT vendor can issue its own token based on this agreement.

2.4 Intelligent contract

IOTF provides a Turing Complete smart contract. IOT merchants can publish smart contracts for each of them to build value-added services.

With the help of modular design, we abstract and simplify the block chain, and construct the modular virtual machine Lua Virtual Machine (LVM) intelligent contract separately, which can bring two benefits. Optimizing the performance of LVM can directly improve the contract

enforcement efficiency and reduce the disturbance caused by system coupling. It is to weaken the correlation between block chain and intelligent contract operation status, even if there is a problem with contract enforcement or virtual machine operation is abnormal, the stability of block chain network can still be guaranteed.

2.5 Data asset platform

The interaction between the terminals and people enables the physical world and the living data to be collected by the IOT device. The IOTF believes that users are the sole owners of these data and advocates returning data ownership and revenue rights to the users themselves. Data production, storage, transaction and so on need to be authorized and accessed by distributed storage technology to protect the privacy and security of customers. Customers have the right to price transactions. The IOTF data asset platform analyzes and filters through big data analysis technology to provide matching data resources to data demanders. The demand side can use the Token and obtain the user's consent. The IOTF data Asset platform aims to increase the value of the data and return the value of the data to the user.

Take the scene of the vehicle terminal as an example, the user generates data such as mileage and destination every day, and the data is recorded on the main chain after authorization and consent. The user can obtain Token as a reward, and the data asset platform will integrate the resources into the data analysis according to these data, and ensure that the data is true and effective. The analyzed data can provide data services for lending, insurance, etc., and the demander uses the data to pay a certain amount of Token rewards to the data provider, the user itself. It will greatly shorten the process of building trust between users and enterprises, and improve the efficiency of cooperation.

2.6 Distributed application DAPP

Distributed (DApp) is our service product to customers, and our partner can carry out business. These services are easy to use as long as the user has a wallet.

Customers can create transaction services, set transaction terms, and receive payments. Buyers can view and obtain service information as needed, and can purchase services using tokens supported by the service (including IOTF).

DApp will provide fully functional services, all our code, protocols and specifications will be open source, and we want others to expand the code to create more applications.

Chapter 3 IOTF Application scenario

3.1 Ecological Application of Intelligent hardware in Internet of Things

The IOTF provides a decentralized blockchain technology platform for realizing data value sharing for IoT smart terminals. The IOTF uses the original IOTFAgent smart chip, in response to problems such as idle resources and difficult ecologicalization of current smart terminals, the Token mechanism is used to activate the use value of products and the sharing ecology of data. The IOTF Foundation will form a shared cooperative alliance to support a variety of hardware and software devices. The development protocol supports the introduction of third-party development teams to bring the IOTF to a wider range of application scenarios.

At present, IOTF has carried out ecological cooperation with manufacturers including routers, robots, air purifiers, AI speakers and other categories.
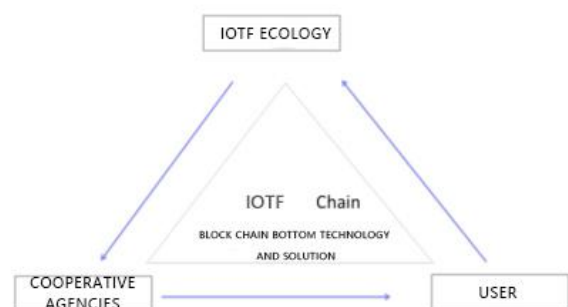
IoT digital currency asset issuance:

Individuals or enterprises that have new digital asset publishing requirements for different IoT application platforms can quickly release digital currency and apply them to the business through the IOTF asset-issuing smart contract - IOT_Coin.

3.2 Application of Internet of Things sharing economy

With the development and popularization of cloud computing, deep learning and blockchain technology, the demand for computing becomes more and more urgent. More and more enterprises expand the computer room horizontally to increase the operation of the computer room.

In fact, there is a kind of computing power that is wasted most of our time, and these computing power comes from the electronic devices that every one of us has, essential to life - personal computers, even - smart phones. These smart devices often fail to achieve 100% of their performance 90% of the time. In contrast, if we can put 90% of the idle computing up, it would be a very strong computing resource.

The IOTF connects the entire ecosystem through smart chips. Each IOTF smart chip installed on the smart terminal is an independent node. These intelligent terminals are linked through the IOTF chain to realize shared value exchange.

3.3 Application of Internet of Things data transaction

Take the intelligent meteorological device terminal as an example. The device has a variety of spherical objects with different sensors, equipped with temperature, humidity, light, pressure, ultraviolet and other sensors, can measure the nearby real-time weather conditions. After the purchase of the equipment, you can start taking real-time pictures of the situation. More importantly, users can share these pictures through a variety of channels, become a meteorologist among friends. As long as you want, you can post real-time information via WeChat, Weibo or email. The whole sharing process is often simple.

This is the resource sharing driven by pure interest and hobby, and

the data obtained by the sharing terminal is not obtained, but there is no obvious reward mechanism, which leads to the frequency and inactivity of data sharing. Therefore, there is no final effect of sharing.

The IOTF plans to enter into a strategic partnership with the equipment manufacturer to support the rapid access to meteorological equipment terminals through the agreement, and calculate the value of the user's shared data through smart contract terms to achieve token returns.

3.4 Internet of Things intelligent terminal asset transaction

The intelligent contract based on block chain includes the mechanism of transaction processing and preservation, as well as a complete state machine, which accepts and processes all kinds of intelligent contracts, and the state processing and saving of transactions are completed on the block chain. After the transaction and event information is passed into the smart contract, the resource status in the contract resource set will be updated, which in turn triggers the smart contract for state machine judgment.

Taking the parking lot intelligent terminal trading scheme as an example, using the contract scheme defined by the IOTF, the parking gates and vehicles support the intelligent contract mechanism, and the gate control device can initiate parking charging information and payment in the blockchain network. Token quantity, etc.; The vehicle can automatically perform Token settlement transactions with the parking control equipment, the whole process is fast and efficient, and the transaction information is recorded in the chain. The vehicle itself as a smart terminal can also obtain Token rewards through other contract terms such as the data owned by the trading vehicle itself, thus forming an ecological loop of positive Token circulation.

Chapter 4 Product and project planning

4.1 Products planning

- 2018 . 8

IOTF project kickoff

- 2019 . 6

Release IOTF intelligent hardware blockchain ecological solution

- 2019 . 12

Release IOTF Ecological Mall

- 2020 . 2

Release Smart chip IOTFAgent

- 2020 . 3

Intelligent hardware products cooperation solution release, strategic cooperation with multiple intelligent hardware manufacturers to promote a variety of IOTF cooperative products
- 2020 . 6

IOTF Chain Beta version release online

- 2020 . 8

IOTF Chain wallet release online

- 2020 . 10

IOTF Chain support Intelligent contract release and modulation, support IOT_Coin Protocol

- 2020 . 12

Data asset platform online, support data contract transactions

- 2021 . 5

Form integrated IOT industrial block chain application solution and expand ecological network

4.2 Project and ecological cooperation

The IOTF will work closely with IoT vendors to enhance the use of terminal value for the benefit sharing, and continuously build a cooperative ecosystem.

# Chapter 5 The Economic Ecology of IOTF TOKEN

5.1 Introduction to TOKEN

The Token of IOTF is named "IOTF" with a total global distribution of 1 billion tokens "IOTF". The distribution plan for IOTF is as follows:

10%-Cornerstone investment, for IOTF development, market expansion, operation promotion, etc.

30%-Foundation, for the follow-up development of the foundation. Participants will be rewarded according to the time and contribution points, and the participants will be locked for 24 months.

15%-Team, reward team's work for maintaining IOTF technology and operational development. This part of the token will be locked by the smart contract and unlocked among 24 months.

45%-Ecological construction, for IOTF mining system.
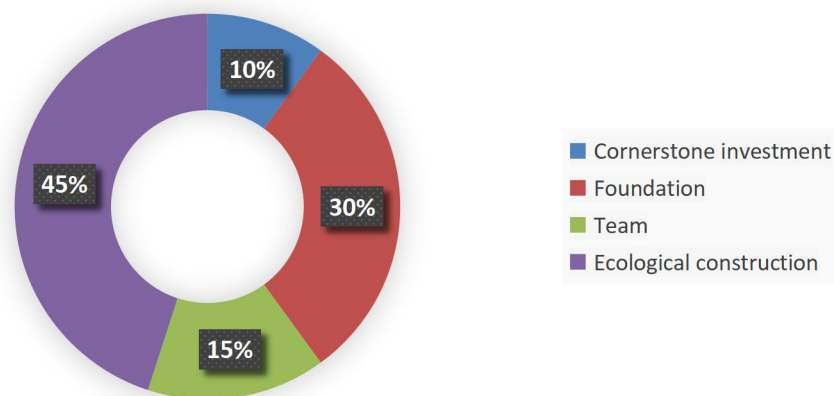
Cornerstone invest up to 100 million, 1 USDT = 30 IOTF

5.2 TOKEN Value

• The IOTF Token of IOTF is based on a variety of intelligent hardware in the IOTF sharing eco alliance, relying on the digital assets of IOTF Chain.

• Encourage users to use smart hardware devices through IOTF Tokens, sharing device idle resources; At the same time, users can obtain various services such as exchange, function upgrade, value-added and content of intelligent hardware products provided by IOTF eco partners.

• As the number of distributed nodes continues to increase, the value of the IOTF network will become larger and larger, eventually building a block chain intelligent device alliance.

Chapter 6 Introduction to the IOTF team

Norman Noel

Senior technical expert in Wind River; proficient in GPU computing, networking, machine learning and blockchain applications. 13 years experience in software development, worked as R & D manager and pre-sale engineer at Siemens, Ericsson. Responsible for leading the technical optimization direction of IOTF protocol in IOTF team. Responsible for the design and development of IOTF block chain software, and play a key role in the rapid development of IOTF.

Ming Dong

One of the members of IOTF system development, senior software architect, CTO of Kuai Lai carpool APP, used to work for United Overseas Bank Singapore and Bank of Shanghai in charge of system development and maintenance. Own a wealth of development experience in the field of Internet of Things vehicle networking.

Bruno Lin

Chief Operating Officer of the IOTF Foundation, an experienced investor in finance and securities trading. Since 2012, he has been working on Bitcoin and block chains. He used to be a member of the R3 (Banking Block chain Alliance) Architecture working Group.

Eddy Liu

IOTF cornerstone investor, early believer of Bitcoin, former supplier of BITMAIN, founder of BTCMAMA. He has abundant industry resources in the field of Blockchain and Internet of Things. Good at integrated marketing planning. Provide strategic support for IOTF team during developing.

Chapter 7 IOTF Global Ecological Fund

IOTF Global Ecological Fund is a block chain "parent fund" with IOTF global ecological investment as the core, which manages the financial assets in the field of block chain. Mainly engaged in the ecological construction of the blockchain field with the IOTF global system as the core, IOTF global ecological investment, and distribute and manage fund financial products, media information, blockchain IPO, equity investment, and token economic research, etc. The first "parent fund" that links the entire industrial chain in Blockchain.

IOTF Global Ecological Fund focuses on high return cash flow investment projects, invests around the construction of IOTF ecosystem, and strictly controls the proposed investment projects from the perspective of business model, bottom assets, founding team, industry stage and so on.

Its investment is positioned in three main directions:

1. Blockchain projects with high cash flow returns;

2. Focus on the project investment with IOTF ecology as the core, and improve the construction of IOTF ecosystem.

3. Focus on block chain financial industry value investment projects.

The strategic objectives of the IOTF Global Ecological Fund will be divided into two phases:

The first stage: to build IOTF global as the core of the block chain industry Internet of Things ecological alliance;

The second stage: will be committed to building a decentralized asset circulation network.

In the future, the IOTF Global Ecological Fund will continuously incubate the financial ecology of digital assets, and

continuously incubate the comprehensive trading platform of digital assets in the whole industrial chain, take IOTF as the sole economic token of IOTF ecology to continuously play the ecological momentum, create the world's first digital asset whole industrial chain ecosystem, enable the blockchain value circulation, and reconstruct the new pattern of the global Internet of Things ecological market.

Chapter 8 Statement on risk control

8.1 Disclaimer

This document is used only for the purpose of communicating information and does not constitute an opinion on buying and selling IOTF. Any similar proposal or levying will be made under a trusted clause and subject to applicable securities law and other relevant laws. The above information or analysis does not constitute an investment decision or specific recommendation. This document does not constitute any investment advice, investment intention or abetting investment in the form of securities. This document does not constitute or be understood as providing any buying and selling behavior, or any invitation to buy and sell any form of securities, nor is it any form of contract or commitment. IOTF expressly indicates the intention of the user to explicitly understand the platform. Risk, once involved, participants express understanding and acceptance of the project risk, and are willing to bear all the corresponding results or consequences for this purpose.

8.2 Risk prompt

Many digital asset exchanges stop operating because of security issues. We attach great importance to safety, but there is no absolute 100% safety in the world, such as various losses caused by force majeure. We promise to do everything possible to ensure your transaction is safe. The IOTF project white paper must be carefully read before participating in the project. You should not participate in the IOTF project unless you fully understand everything in the white paper, the project vision, and the risk of possible failure.