

# Acute Angle Cloud

## White Paper

Acute Angle Cloud Team

Version : v1.08

Date : 2018.02.06

Draft for open community review and subject to change

## NOTICE

NOTHING IN THIS WHITEPAPER CONSTITUTES LEGAL, FINANCIAL, BUSINESS OR TAX ADVICE AND YOU SHOULD CONSULT YOUR OWN LEGAL, FINANCIAL, TAX OR OTHER PROFESSIONAL ADVISER BEFORE ENGAGING IN ANY ACTIVITY IN CONNECTION HEREWITH. NEITHER ACUTE ANGLE FOUNDATION LTD. (THE FOUNDATION), ANY OF THE PROJECT TEAM MEMBERS WHO HAVE WORKED ON ACUTE ANGLE PLATFORM OR PROJECT IN ANY WAY WHATSOEVER (THE ACUTE ANGLE TEAM) NOR ANY THIRD PARTY SERVICE PROVIDER SHALL BE LIABLE FOR ANY KIND OF DIRECT OR INDIRECT DAMAGE OR LOSS WHATSOEVER WHICH YOU MAY SUFFER IN CONNECTION WITH ACCESSING THIS WHITEPAPER, MATERIALS PRODUCED BY THE FOUNDATION, OR ACCESSING THE WEBSITE AT [HTTPS://WWW.ACUTEANGLE.COM/](https://www.acuteangle.com/) OR ANY OTHER MATERIALS PUBLISHED BY THE FOUNDATION.

All contributions will be applied towards the Foundation's objects, including without limitation promoting the research, design and development of, and advocacy for a global and unobstructed open source blockchain network system for global information communication, value interconnection and trust exchange, and facilitating the safe and harmonious development of the ecosystem thereon.

This Whitepaper is intended for general informational purposes only and does not constitute a prospectus, an offer document, an offer of securities, a solicitation for investment, or any offer to sell any product, item or asset (whether digital or otherwise). The information herein below may not be exhaustive and does not imply any elements of a contractual relationship. There is no assurance as to the accuracy or completeness of such information and no representation, warranty or undertaking is or purported to be provided as to the accuracy or completeness of such information. Where this Whitepaper includes information that has been obtained from third party sources, the Foundation and/or the Acute Angle team have not independently verified the accuracy or completion of such information. There is no assurance as to the accuracy or completeness of such information and no representation, warranty or undertaking is or purported to be provided as to the accuracy or completeness of such information.

This Whitepaper does not constitute any offer by the Foundation or the Acute Angle team to sell any AAC (as defined herein) nor shall it or any part of it nor the fact of its presentation form the basis of, or be relied upon in connection with, any contract or investment decision. Nothing contained in this Whitepaper is or may be relied upon as a promise, representation or undertaking as to the future performance of Acute Angle Platform. The agreement between the Foundation (or its affiliate) and you, in relation to any sale and purchase of AAC is to be governed by only the separate terms and conditions of such agreement.

By accessing this Whitepaper or any part thereof, you represent and warrant to the Foundation, its affiliates and the Acute Angle team as follows:

- (a) you acknowledge, understand and agree that AAC may have no value, there is no guarantee or representation of value or liquidity for AAC, and AAC is not for speculative investment;
- (b) none of the Foundation, its affiliates, and/or the Acute Angle team members shall be responsible for or liable for the value of AAC, the transferability and/or liquidity of AAC and/or the availability of any market for AAC through third parties or otherwise.
- (c) in any decision to purchase any AAC, you have not relied on any statement set out in this Whitepaper;
- (d) you will and shall at your own expense ensure compliance with all laws, regulatory requirements and restrictions applicable to you (as the case may be); and
- (e) you acknowledge, understand and agree that you are not eligible to purchase any AAC if you are a citizen, national, resident (tax or otherwise), domiciliary and/or green card holder of a geographic area or country (i) in which access to or participation in the AAC token sale or the Acute Angle Platform is prohibited by applicable law, decree, regulation, treaty, or administrative act, or (ii) where it is likely that the sale of AAC would be construed as the sale of a security (howsoever named) or investment product (including without limitation the U.S., People's Republic of China and the Republic of Korea).

The Foundation and the Acute Angle team do not and do not purport to make, and hereby disclaims, all representations, warranties or undertaking to any entity or person. Prospective purchasers of AAC should carefully consider and evaluate all risks and uncertainties (including financial and legal risks and uncertainties) associated with the AAC token sale, the Foundation and the Acute Angle team.

The information set out in this Whitepaper is for community discussion only and is not legally binding. The agreement for sale and purchase of AAC shall be governed by a separate Token Purchase Agreement setting out the terms and conditions of such agreement (the **Token Purchase Agreement**), which shall be separately provided to you or made available at <https://www.acuteangle.com/> prior to the sale of any AAC. In the event of any inconsistencies between the Token Purchase Agreement and this Whitepaper, the Token Purchase Agreement shall prevail.

All statements contained in this Whitepaper, statements made in press releases or in any place accessible by the public and oral statements that may be made by the Foundation and/or the Acute Angle team may constitute forward-looking statements (including statements regarding intent, belief or current expectations with respect to market conditions, business strategy and plans, financial condition, specific provisions and risk management practices). You are cautioned not to place undue reliance on these forward-looking statements given that these statements involve known and unknown risks, uncertainties and other factors that may cause the actual future results to be materially different from that described by such forward-looking statements. These forward-looking statements are applicable only as of the date of this Whitepaper and the Foundation and the Acute Angle team expressly disclaims any

responsibility (whether express or implied) to release any revisions to these forward-looking statements to reflect events after such date.

This Whitepaper may be translated into a language other than English and in the event of conflict or ambiguity between the English language version and translated versions of this Whitepaper, the English language version shall prevail. You acknowledge that you have read and understood the English language version of this Whitepaper.

No part of this Whitepaper is to be copied, reproduced, distributed or disseminated in any way without the prior written consent of the Foundation.

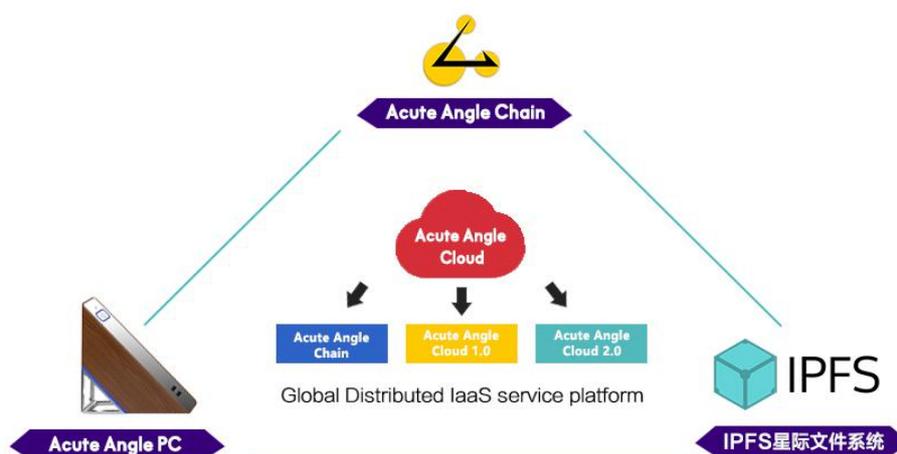
# Table of Contents

<b>Acute Angle Cloud</b> .....	0
<b>White Paper</b> .....	0
<b>Acute Angle Cloud Team</b> .....	0
<b>Version : v1.08</b> .....	0
<b>Date : 2018.02.06</b> .....	0
<b>Draft for open community review and subject to change</b> .....	0
<b>I. Overview of Acute Angle Cloud</b> .....	3
(I) History of Internet.....	3
(II) Blockchain-- Irresistible Trend.....	4
(III) Importance of Acute Angle Cloud.....	4
<b>II. Overview of Acute Angle Chain</b> .....	5
(I) Background and Significance of Acute Angle Chain.....	5
(II) Design Philosophy of Acute Angle Chain.....	6
1. Stability.....	6
2. Safety.....	6
3. Extensibility.....	7
4. Usability.....	7
(III) Working Principle of Acute Angle Chain.....	7
1. Realization of Contract and LVM.....	8
2. Consensus Mechanism.....	9
3. Account model.....	9
4. Value Exchange Protocol(VEP).....	10
(VI) The Application Scenarios of Acute Angle Platform.....	10
<b>III. Overview of Acute Angle PC</b> .....	11
(I) Performance.....	12
(II) Appearance.....	13
(III) Application Scenario.....	13
<b>IV. Development plan of Acute Angle Cloud</b> .....	14
(III) Overview of Acute Angle Cloud 1.0.....	20
1. Operational principle of the Acute Angle Cloud 1.0.....	20
2. Characteristics of the Acute Angle Cloud 1.0.....	20
(IV) Phased upgrading completion of the Acute Angle Cloud 2.0.....	21
1. Problem solved by the Acute Angle Cloud 2.0.....	21
2. Operational principle of the Acute Angle Cloud 2.0.....	21
<b>V. Overview of Acute Angle Coin/AAC</b> .....	23
(I) AAC introduction.....	23
(II) AAC distribution plan.....	25

(III) Ways to get AAC.....	28
(IV) AAC application.....	28
(V) AAC operation mechanism.....	29
1. Algorithm of issued currency.....	29
2. Formula analysis.....	29
3. The coin decay algorithm.....	30
<b>VI. Governance Mechanism and Risk Control.....</b>	<b>31</b>
(I) Governance Mechanism.....	31
(II) Risk management and control.....	32
1. Transaction security.....	32
2. Auditing.....	32
<b>VII. Founding Team.....</b>	<b>33</b>

# I. Overview of Acute Angle Cloud

Acute Angle Cloud is a globally distributed IaaS platform, and is designed to be a basic-layer service platform based on blockchain technology which will realize global distributed cloud computing based on Acute Angle PC, Acute Angle Chain and IPFS (Interplanetary File System) (**Acute Angle Platform**). The Foundation targets to complete the setup of Acute Angle Cloud through Acute Angle Chain, Acute Angle Cloud 1.0 and Acute Angle Cloud 2.0.



1.1 : Figure: Overview of Acute Angle Cloud

## (I) History of Internet

On October 29, 1969, the first node of University of California-Los Angeles (UCLA) was connected to the second node of Stanford Research Institute (SRI) on the ARPANET, marking human's inception of the Internet era. In review of history of the Internet from its current high-speed development, the Internet roughly falls into three development stages: Web1.0 Internet, Web2.0 mobile Internet and Web3.0 intraplanetary Internet.

The Web1.0 Internet started in the 1990s when the Internet just opened to the public. At this point, the technology needed for uploading information was considerably expensive and had to be operated by professionals. Therefore, a large amount of online information was released and searched by media firms, commercial institutions, schools and several authorities. In recent decades, cost and technological difficulty has greatly decreased, leading to our current reality - almost every Internet user can upload information, using documents, voice and video as well as other contents online. Such a change has introduced the concept of Web2.0 mobile Internet.

The Web2.0 mobile Internet is mainly manifested by users' participation or social interaction, the blog space, community websites, peer-to-peer tools, etc. While developing the Web2.0, the founder of the www network, Tim Berners-Lee, and other scientists started to conceptualize the Web3.0 interplanetary Internet.

The original intention of the Web3.0 interplanetary Internet is to facilitate communication using devices as terminals, rather than to communicate and aggregate information on the Internet, thus achieving "decentralization". Due to the development of the Internet and other progress in electronic communications, people can talk with almost anyone anywhere in the world.

## **(II) Blockchain-- Irresistible Trend**

On October 31, 2008, Satoshi Nakamoto published the bitcoin white paper- A Peer-to-Peer Electronic Cash System, declaring the inception of value transmission network. Bitcoin has many creditable designs such as tamper-proof, data backup, relative anonymity of those involved, and without any other trusted parties. However, its own transaction performance and Proof Of Work (POW) consensus mechanism gradually revealed some problems. The blockchain technology derives from Bitcoin. In recent years, people have innovated mainly concerning transaction performance, consensus algorithm and safe anonymity of the blockchain, such as promotion of transaction performance by graphene and lightning network; enrichment and improvement of consensus algorithm by Proof Of Stake (POS), Delegated Proof Of Stake (DPOS), and Practical Byzantine Fault Tolerance (PBFT); improvement of transaction safety by Zero-Knowledge Proof (ZKP) and mixing.

As a promising blockchain ecosystem, Acute Angle Cloud perfectly combines strengths of Ethereum and BitShares and solves inherent defects of the existing blockchain system. Acute Angle Cloud is expected to gradually form blockchain economy, promote industrial efficiency and boost efficient and synergetic development of society by setup of basic platform, exploitation of various products, development and iteration of commercialized and implemented projects. Acute Angle Cloud defines new blockchain economy.

## **(III) Importance of Acute Angle Cloud**

Prevention of resource waste

Through virtualization technology, it solves the problem of idle hard disk and cpu resources in the personal computer (PC). Specifically, the Acute Angle Cloud can collect and allocate the user's idle hard disk and cpu resources with full cyclic utilization, forming an integrated application, Acute Angle PC and Acute Angle Cloud, in a chain ecosystem.

- Storage potential

Through distributed storage technology, the issue of storage waste is solved. Data can be automatically re-distributed so as to enhance the utilization rate of storage space and connect all the computing devices with the same file system. The principle behind it is to replace address based content with domain name content. In other words, users find content saved somewhere instead of an address; and the hash of the content is verified instead of the identity of the content creator. It will enable webpage browsing to be faster, safer, more robust and durable.

- Reduction of cost

Through blockchain technology, cloud computing, and IPFS technology, the Acute Angle Cloud creates a distributed IaaS platform. It overturns the high operational and maintenance costs of traditional centralized machine rooms and reasonably utilizes idle resources and shares the returns with users.

Strength: low user cost, globalization, durable storage, and high stability

Can be used as:

- A virtual machine's root file system
- As a server
- As a database
- As a (cryptographic) communication platform
- All kinds of CD

## II. Overview of Acute Angle Chain

The **Acute Angle Chain** is a public chain developed with Achain, a decentralized public blockchain platform, which is used by developers to easily, quickly and safely distribute tokens, smart contracts and blockchain systems. The Acute Angle Chain is committed to building a blockchain network system of global information, which values interconnection and trust exchange. The philosophy and technological mission of Acute Angle Chain is to build an unobstructed blockchain world.

### (I) Background and Significance of Acute Angle Chain

Emerging in the early 21st century, blockchain is acknowledged as the most imaginative technical revolution and with the most potential on a global scale. Blockchain is a decentralized network able to achieve peer-to-peer value exchange, which is referred to as value Internet. Helped by Acute Angle Chain, we can create a decentralized and value-driven world of mutual cooperation and peer-to-peer exchange where an individual is directly connected to another as part of a community or society. The Acute Angle Chain is expected to achieve the aforementioned goals in three stages. First, we build a safe and stable blockchain network with a modularized design method. In this stage, we can implement smart contracts and digital assets. In the meantime, we may introduce the Acute Angle PC - a hardware capable of intelligently testing, monitoring and running an environment of contracts. The Acute Angle PC can ensure that contracts formally running in the Acute Angle Chain are safe, which can prevent events such as DAO. Afterwards, we will use Acute Angle Cloud appeal to meet different industries' needs storage such as insurance, electronic files, digital currency, traceback, and personal credit record. In this stage, we will create a blockchain network in continuous evolution, easy to use, low cost and susceptible to customization. In the end, with Acute Angle Coin (AAC) generated by the Acute Angle Chain, we connect user information and might even get through to other networks (perhaps non-blockchain) to make data

interaction, thus building a cyberspace of interconnection and multidimensional data correlation. Through multidimensional data such as personal credit, assets, production and consumption data, we can better integrate community consensus, individual behavior and value exchange. Carrying value in the ecosystem, the digital currency is named by Acute Angle Chain as AAC. Using the AAC can allow us to share CDN services, idle hard disk resources, original resources and other basic blockchain services.

## (II) Design Philosophy of Acute Angle Chain

Acute Angle Chain takes stability, safety, extensibility and availability as a design priority. By introducing a modularized virtual machine, smart sandbox, value exchange and fork mechanism, we created an evolving blockchain network, easy to use, low cost and properly customizable. Furthermore, in theory, the Acute Angle Chain can reach 1,000 TPS of available performance by optimizing block intervals, block capacity and consensus algorithm. As one of the two core parts of Acute Angle Cloud, Acute Angle PC has a triangle-based ID design which is more solid and safer and internal triangle structure design to build a Web3.0 Interplanetary Internet where every Acute Angle PC user serves as a node of the Acute Angle Cloud. As node numbers increase, the distributed cloud space of the Acute Angle Cloud will reinforce to creation of a distributed cloud computing system. The Acute Angle Cloud believes that technical innovation can address interpersonal trust issues and create a new network of productive relations to better integrate community consensus, individual behavior, and value exchange.

### 1. Stability

Stability is essential to ensure the availability of the Acute Angle Chain. The built-in blockchain network is characterized by its decentralization; but decentralized networks are generally more complicated and full of uncertainty. Therefore, we abstract and simplify the blockchain via a modularized design tool and by separately building a modularized virtual machine - Lua Virtual Machine (LVM) - to run smart contracts. This structure has two main strengths: one is optimizing LVM performance, directly improving efficiency of contract performance and decreasing the interference created by the system; the other is to weaken the correlation between the blockchain network and smart contracts' performance. In other words, even though there might be something wrong with the contract's performance or virtual machine it can still operate exceptionally well, the stability of the blockchain network can thus be assured.

### 2. Safety

PoW contributed tremendously for the safety of the bitcoin network. Whereas, mining demand and computation difficulty is mounting, almost all the rights are centralized to miners and mining pools. Through professional cooperation, they have already become a highly centralized "central server" in fact. If over 51% of the computation was put together it would be able to, in theory, control most bitcoin transactions; the well-known DOS (Denial of Service) attack is an example of this. In addition, its high-power consumption is criticized as well. Compared with the PoW pattern, the PoS pattern is still evolving, its orientations are mainly

established in safety and application. Compared with the PoW, PoS is safer, however, its safety level is directly connected to the number of users mining in the network. DPoS is an improvement of PoS; together with Achain, the Acute Angle Chain will use DPoS to improve transaction efficiency and increase network stability and security. On the condition that the Acute Angle Chain is as safe as DPoS, theoretically, it may enhance block response and increase network stability and safety. In addition, Acute Angle Chain creatively puts forward a smart sandbox mechanism. Any contract released by anyone must undergo test runs in the smart sandbox at first where the Acute Angle Chain may make full-path automation tests on the contract and monitor its running state in a sustainable way. If its health deteriorates or shows any loopholes, the network shall make judgment by itself to terminate the contract in order to prevent any defective contracts from damaging the blockchain ecosystem.

### **3. Extensibility**

Extensibility is put forward to solve the information island problem of incompatible blockchains. Firstly, we believe that upgrading and forking are effective approaches of network evolution, with a main chain and some sub chains taking shape after forking. Technically, main chain and sub chains are completely equivalent, which are arranged with different identifications on the basis of community consensus. Each sub chain may be properly customized according to different commercial applications and VEP is constructed among sub chains, which works in a similar way to a gateway and via which, sub chains can interact with information and exchange value. Such cooperation can form a blockchain ecosystem of multiple applications. Furthermore, non-blockchain online data is incorporated into the Acute Angle Chain ecosystem, supplemented by smart contracts, to respond to events in the real world.

### **4. Usability**

Acute Angle Chain introduces two methods to present its usability. One is providing blockchain as a service (BaaS) platform and improve the accessibility to both enterprises and individuals. It simplifies blockchain to be easily applied by network forking, data customization, release and upgrade of smart contracts, monitoring of assets and transactions, supplemented by visualization. The other is multilingual support provided by the Acute Angle Chain, such as Lua, C++ and Java, to enable developers of different platforms to easily build on it.

## **(III) Working Principle of Acute Angle Chain**

Based on Achain fork network, Acute Angle Chain connects numerous forks via value exchange protocol (VEP) and even gets through to other networks (maybe non-blockchain) to make data interaction to build a cyberspace of interconnection and multidimensional data correlation.

Built on a BaaS platform, the Acute Angle Chain greatly lowers the threshold of developers via a visual interface and multilingual support. Everyone can create his/her own application by forking to better motivate community developers to innovate. If a community boosts activeness and AAC value rises, the community will enhance its appeal to attract more developers and users to get involved. Such a positive feedback effect will make the Acute Angle Chain ecosystem increasingly better.

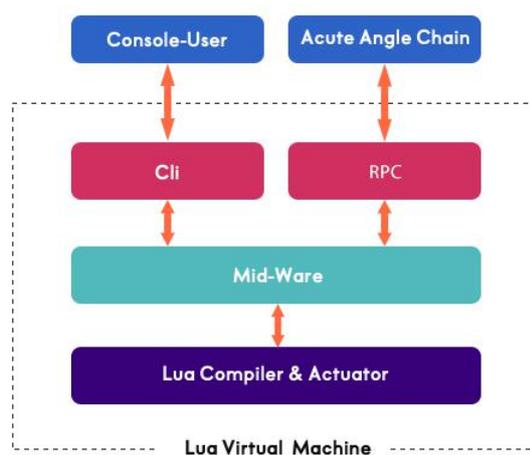
## 1. Realization of Contract and LVM

Traditional smart contracts are restricted to input and output of chain data, as a result only some simple application scenarios are supported. On that account, the Acute Angle Chain allows interaction of chain and non-chain data in addition to chain data and supports event response to state change of chain and non-chain data. In the real world, commercial applications are, for the most part, complicated - reflected in data structure and logic rules. Lua is a Turing-complete programming language, whose compiler and bytecode virtual machine are designed and optimized in a targeted way in the blockchain. Therefore, the Acute Angle Chain prioritizes Lua as the smart contract programming language in the blockchain, which supports being statically compiled to bytecodes and actuated in the blockchain network on demand. The life cycle of such contracts in the blockchain network falls into five stages.

- (1) Create Lua source codes;
- (2) Compile such source codes to gpc bytecodes by compiler;
- (3) Register temporary contracts by gpc bytecodes and charge such contracts;
- (4) Call contract API;
- (5) Upgrade or destroy contracts;

In the above life cycle, registration, call, and upgrade of contracts need to consume tokens. On one hand, actuation of contracts must occupy computer resources, blockchain capacity and network traffic and reward resource providers; on the other hand, the threshold of network attack is raised in economic means to reduce risks.

In order to actuate contracts more steadily, we build an independent LVM module whose structure is as follows:



2.1 Acute Angle Cloud LVM Construction

LVM covers four modules. Contracts are compiled in the form of command line via console-user.

- (1) Cli (command line interface) is a processing module of contract command lines, which receives and transmits input to the mid-ware and feeds processed results at the bottom back to the console.
- (2) RPC (remote procedure call) module receives Lua actuation requests from the blockchain network and sends such requests to the mid-ware and returns results to the blockchain network upon completion of actuation of contracts.
- (3) Mid-ware synchronously transmits commands and requests from Cli and RPC to Lua compiler and actuator at the bottom to compile and actuate. And it returns compiling or actuating results to Cli or RPC.
- (4) Lua compiler & actuator compiles, runs Lua actuating environment, receives and actuates Lua scripts, and feeds actuating results back to the mid-ware.

In an active blockchain network, contracts are frequently called. In order to guarantee steady and efficient operation of such contracts, LVM has two design principles: one is to reduce time to start and close process as possible; the other is to ensure that results of all calls of any operation at different nodes in different time must be consistent with each other. In addition to Lua, LVM may also support compilation of C#, Java, solidity (contract editing language of Ethereum) and other advanced languages to involve developers of different platforms.

## **2. Consensus Mechanism**

The blockchain needs a consensus mechanism for normal operations due to its distributed characteristic. At the moment, extensively applied consensus algorithms include PoW (Proof of Work), PoS (Proof of Stake), PBFT (Practical Byzantine Fault Tolerance), and DPoS (Delegated Proof of Stake). From a safety and practicality standpoint, the Acute Angle Chain chooses DPoS and improves the consensus mechanism on its basis. RDPoS not only inherits the advantages of DPoS - no need to consume additional resources to distribute revenue - it can also decide whether to validate the agent's or the node's smart contracts results according to the transaction status of the network.

If one holds tokens in the Acute Angle Chain, he/she can not only contract issuance, network forking and other basic blockchain services but also get involved in voting, so as to become a proxy node to provide services and get token rewards. The token is named AAC for Acute Angle Chain, and the holder of each AAC is called an owner, which assigns corresponding voting weight according to the quantity of AAC held. The proxy node shall be voted by the owners. The top 99 proxies will take turns in verifying the transaction in the sequence decided by all proxy nodes and will be guaranteed not to be tampered. The proxy can get benefits if it operates normally. However, it will be punished if it operates abnormally or does not operate. The proxy only packs the Hash value of the result transaction, and such value will be verified by all nodes voluntarily. Other than the rapid verification of smart contracts, it also reduces the congestion of the whole network. In addition, we have made some optimizations on the consensus algorithm, in order to avoid the fixed proxy node and gradually become a centralized network.

## **3. Account model**

In the blockchain network, the account address was designed to provide safety. The address creation offer follows the following steps: public key, private key as follows: private key—>public key—>account address. All three items use the Secure Hash Algorithm (referred to as SHA), which can ensure safety. Hash is the extraction of information with less output than input and fixed length. Based on current technical measures, the hash with strong encryption is irreversible. i.e., the private key information cannot be deduced by using his account address. The detailed generation process of the private key, public key and account is as follows: The creation of a private key, public key and account can be divided into two kinds of accounts based on the byte length of the account address, main account and sub-account.

#### **4. Value Exchange Protocol(VEP)**

VEP refers to standard protocol between different blockchain networks. As mentioned above, the applications that can be loaded on a network are limited, but when different networks connect to form a larger network, this leads to an exponential increase in value. Firstly, how do single network nodes trust other nodes at first? The biggest advantage of the blockchain network is to provide reliable information queries, and such reliability is embodied on the distributed account book and consensus. A blockchain network is a kind of community established by many participants according to a consensus. Under this consensus, a mutual trust relationship between nodes is developed; such a consensus mechanism is also required for taking a blockchain network as the node and forming connections among several blockchain networks. Due to the equality, reliability and demand of different networks, the collaboration becomes difficult. Moreover, bad nodes exist in every network. Thus, the preset rules before collaboration are particularly important.

VEP has created rules on how to collaborate. It registers the information of each chain and provides services to the chain in letter list for query and connection requests. VEP supports two kinds of application circumstances, i.e., cross node interaction and cross chain contract request. The former develops interaction between contracts indirectly by checking the status change of data saved on the node or external data and tries to generate new information.

For example: unpaid loans due in accordance with the contract will affect the individual credit. A loan record can be saved in the blockchain A, while the credit data can be saved in the blockchain B. Individual identity information may come from an external public database. While the latter refers to mutual invocation between contracts. A simple case is that, the total value is always constant after exchanging the Tokens of the two chains.

## **(VI) The Application Scenarios of Acute Angle Platform**

Scenario---Supply chain finance:

Supply chain finance refers to a financial service with the lowest risk controlled by information integration under financial institutions (generally refers to banks) managing

capital flow and logistics of medium and small sized enterprises in the up and down stream by focusing on core enterprises, which is one of the industries with fast development. Due to a great number of participants, different kinds of information are saved in each link, which means that commodity information of supplier is stored in the warehouse information of supplier, shipment information is grasped by logistic company, capital information is distributed in bank system, and transfer information is grasped by core enterprise. Because of information asymmetry and non-transparent of information required by collaboration, the effective supply chain credit system is hard to be established. Due to high cost of credit establishment, the financial institution has to operate prudently responding to risk control. Thus, some high quality items are often missed.

Acute Angle Platform is able to help enterprise and financial institution to reconstruct credit system and establish more efficient supply chain finance. Endorsing the core enterprise, the blockchain platform for warehouse, logistics, digital bill and enterprise credit can be developed through Acute Angle Chain, which can realize commodity, warehouse, logistic and accounts receivable commonly witnessed by the up and down stream enterprises and financial institutions on the supply chain. The issuance, approval, transfer, splitting and acceptance of digital bill shall be triggered by each participant of supply chain through contract, with trigger condition based on change of data status of warehouse, logistic blockchain and core enterprise database, and prepared by the contract of each participant. The behavior of compliance or violation of the rules will be ALL recorded in the credit blockchain, which can not be tampered.

By utilizing the technical advantages of Baas and smart sandbox, Acute Angle Platform can help enterprise realize rapid arrangement. By rapidly establishing blockchain network that is not used with low cost, developing connection protocol by VEP and achieving event driven by integrated data, all participants can verify the reality of data together, so as to ensure smoothness of capital transferring in supply chain and improve efficiency of cooperation.

### **III. Overview of Acute Angle PC**

The Acute Angle PC is a piece of hardware that establishes reward and punishment systems for users through smart contracts based on IPFS peer-to-peer hypermedia protocol storage. The Acute Angle Chain public chain management's digital capital.



3.1: Acute Angle PC

IPFS connects all computing devices under the same document system. In a way, the definition of IPFS is similar to Web. Actually, IPFS is more like a bit stream group that can exchange objects at the same Git warehouse. In other words, IPFS provides a content-addressable block storage model and content-addressable hyperlinks, creating a generalized Merkle DAG (Directed acyclic graph). In this data structure, we can establish an edition control system, blockchain, or even a permanent world-wide-web. IPFS has combined distributed hash table, block switching with inspirit mechanism and a self-authenticated name-space. IPFS has no single point failure, and there is no need for mutual trust between nodes.

The Acute Angle PC is a hardware product based on blockchain technology. It uses a distributed cloud storage, idle hard disk space shared with cloud computing and smart hardware with bandwidth obtained digital assets. The product has a 128G SSD hard drive, and can be connected with an external hard drive storage device. It can provide comprehensive and sustained CDN service for Internet business through idle resources provided by users, and speed up its service for a series of innovative and valuable giant businesses such as Download Platform, UGC Acceleration Platform, Stream Media Platform, Dynamic Acceleration Platform; in the future, the Acute Angle Cloud will develop more extensive service capabilities to provide users in the Cloud with a CDN Acceleration Service which can better satisfy the needs of Internet businesses. The users can not only earn Acute coins by sharing idle storage space and bandwidth through the Acute Angle PC, but also obtain community awards, Acute coins and share technological innovation dividends easily by sharing content.

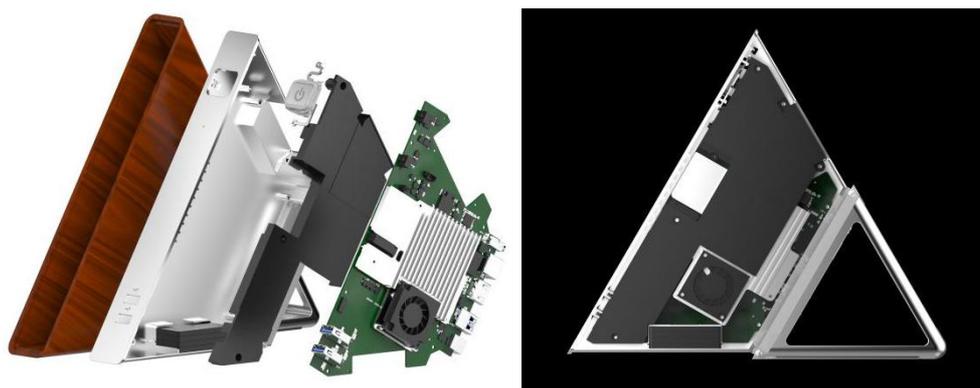
## (I) Performance

The Acute Angle PC has Windows 10 Home Operating System, the latest Apollo N3450 14nm quad-core microprocessor by Intel, 8+64G internal memory, solid node storage with capacity of 128G or larger, which is safe and high-speed with node storage. Compared with 20 nm CPU with the same performance, it saves energy by 40% and its size is reduced by 60%,

which saves resources and of low energy consumption; it supports dual-band WIFI of 2.4g/5ghz, ensuring users can mine coins more efficient and faster.

### **Power consumption:**

Nowadays, the electricity consumption of mainstream desktop computers is about 0.3 kWh, it may be even higher for high-power desktop computers. However, the electricity consumption of the Acute Angle PC is only 0.03 kWh, which is 10% of an ordinary desktop computer mainframe, or even lower. Mining online all day, low costs, high yields.



3.2: Internal structure of Acute Angle PC

## **(II) Appearance**

We define the appearance of Acute Angle PC as a triangle, to show the trust, stability and security of blockchain spirit.

## **(III) Application Scenario**

### **1. Surfing the Internet and entertainment**

The Acute Angle PC is a hardware device based on the Win10 and integrating various functions such as office, surfing the Internet and entertainment. The Acute Angle PC can perform all the functions of an ordinary PC.

### **2. Sharing storage**

The Acute Angle PC can provide a large, safe, reliable and low-cost CDN cloud storage service and provide data reliability. Users can save information on it and access the Internet, connect it to an external hard drive to expand its capacity and processing ability; there are various storage types to choose from to optimize storage cost comprehensively.

### **3. Mining**

The Acute Angle PC is based on the Acute Angle Chain's ecological mechanism. Users can contribute their own idle broadband, storage and computer capacity to obtain awards

offered by the AAC.

#### **4. Easy maintenance due to uniformity of devices**

The internal structure and configuration of every Acute Angle PC is highly uniform at the time of delivery, ensuring scientific, high efficient and safe operation of all Acute Angle PCs, so as to precisely understand users' needs and optimize maintenance strategies.

## **IV. Development plan of Acute Angle Cloud**

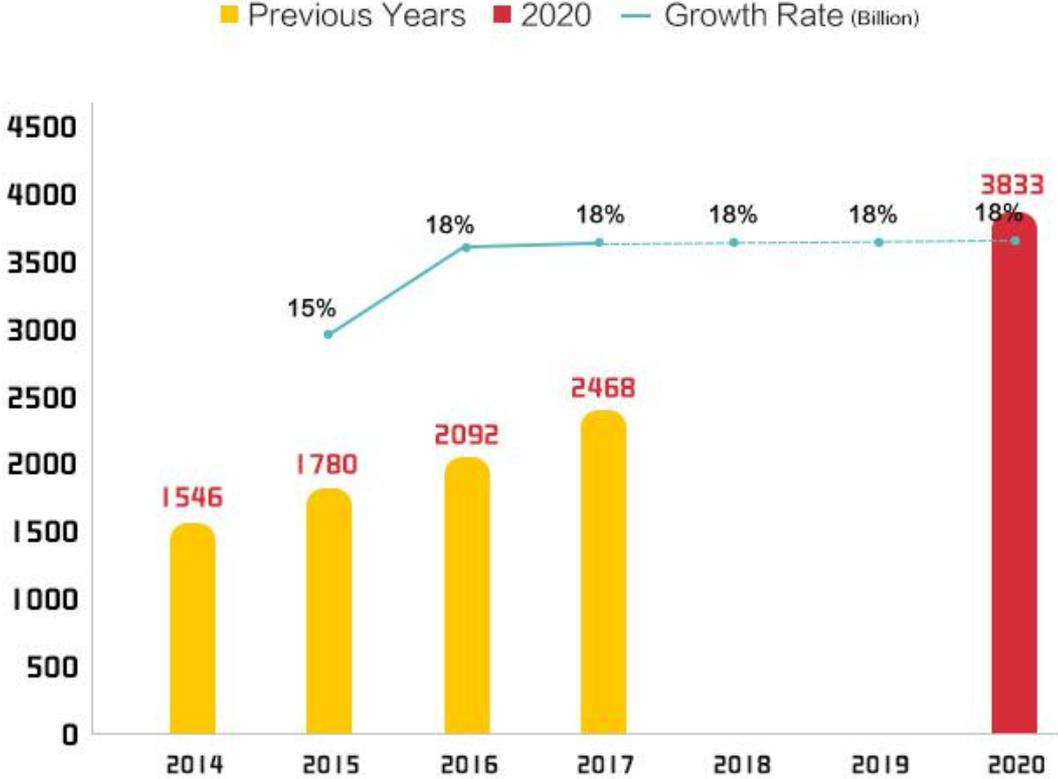
### **(I) Overview of traditional IaaS service platform**

IaaS stands for Infrastructure as a Service. Consumers can get services from a complete computer infrastructure through the Internet. Service based on Internet (such as storage and database) is a part of IaaS. Other types of services on the Internet include PaaS (Platform as a Service, PaaS) and SaaS (Software as a Service). PaaS offers full or partial application development that users can access, while SaaS provides complete turnkey applications, such as Enterprise Resource Management through the Internet. Security vulnerability may also exist at IaaS, for example, what the service provider does offer is a shared infrastructure, that is, some components, such as CPU Cache Memory, GPU etc. for users of the system are not isolated completely, which would lead to a consequence, i.e, when an attacker succeeds, all servers open their doors to him/her, even with hypervisor used, the operating systems of some users' computers can also get the uncontrolled access right of the basic platform. Solution: Develop a strong partitioning and defending strategies, and IaaS suppliers must monitor the environment to see if there are any unauthorized modification or activity.

As a cloud service gaining popularity in recent years, it has unique advantages compared with conventional and locally deployed IT mode. The cloud service is characterized by supporting access at any time, resource sharing, self-service, instant use on demand and pay-as-you-go and can meet enterprises' needs of use in a flexible and variable way so as to reduce the cost to use, so it has won the favor of enterprises. As estimated by Gartner, an international research and advisory body, the global public cloud service market has a huge scale, which reached US\$209.2 billion in 2016. The figure is expected to hit US\$246.8 billion in 2017 and exceed US\$383.3 billion in 2020.

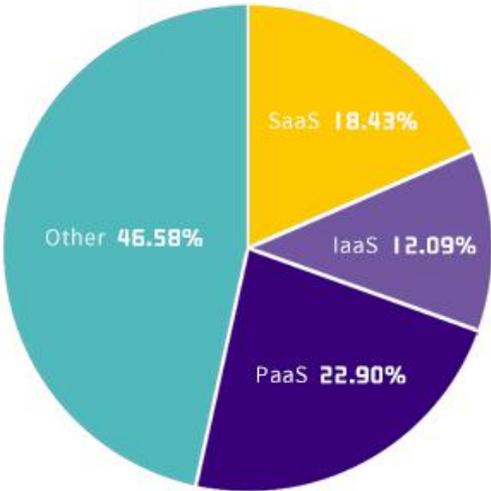
In 2016, the market size of global cloud service reached RMB209.2 billion and is expected to maintain a compound annual growth rate of 18%.

### Global Cloud Service Market Scale



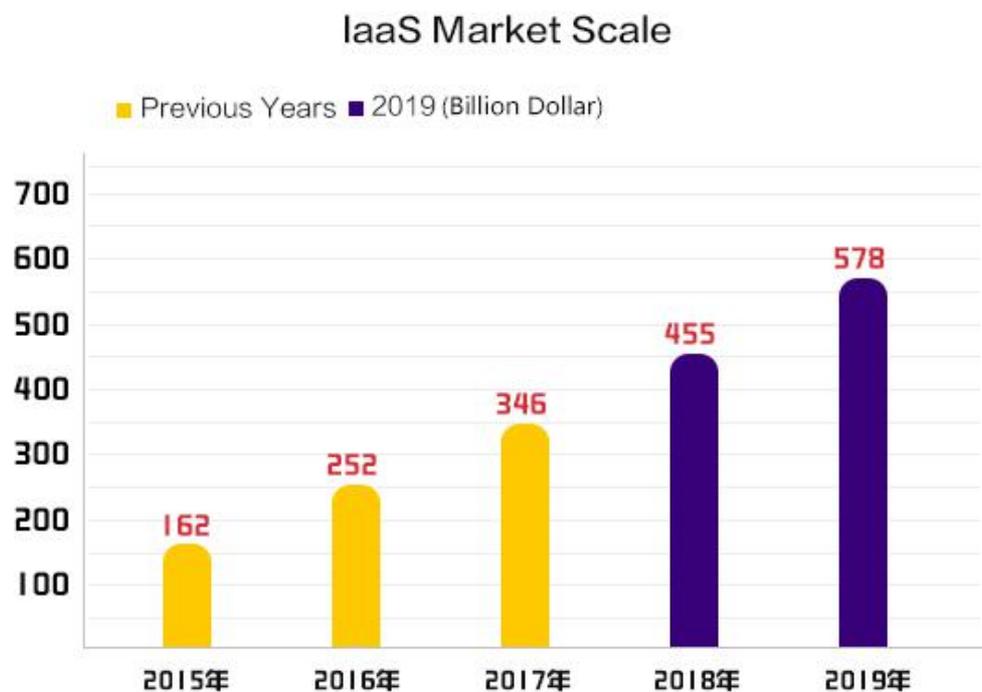
4.1 : Global Cloud Service Market Scale

In 2016, among the segment markets, the market share of IaaS accounted for 12.09%. Due to the late start, it enjoys a huge space for growth.



4. 2 : Cloud Service Market Shares in 2016

The size of IaaS in 2016 reached US\$25.2 billion, with a growth rate of 56%, far more than 18% for cloud service and 20% for SaaS. By 2021, it is anticipated to maintain a rapid growth, with a compound annual growth rate of 29%.



4.3 : IaaS Market Scale

## (II) Differences between Acute Angle Cloud and traditional IaaS platform

Fog is a para-virtualization frame model of service computing between cloud computing and personal computing. Fog computing focuses on small clouds such as Personal Cloud, Private Cloud and Enterprise Cloud, which is totally different from cloud computing. Fog computing pays great attention to quantity which helps its success, and every computing node plays a role regardless of how weak its capacity is. Fog computing has several obvious features: low latency and location awareness, broader geographical distribution, application suitable for mobility, and support of more fringe nodes. These features make deployment of mobile services more convenient, which can satisfy broader connection of nodes. Cloud computing is a computing mode which takes advantage of the Internet to use resources such as storage devices of shared computing facilities and applications anywhere, anytime, conveniently and on a need basis. It consists of four basic parts: Cloud Platform, Cloud Storage, Cloud Terminal and Cloud Security. It can be divided into Public Cloud, Private Cloud, Hybrid Cloud etc. from the user standpoint. It can be divided into Infrastructure as a service

(IaaS), Platform as a service (PaaS) and Software as a service (SaaS) from the service level. The problems of the cloud computing industry are mainly: 1. computing needs increase explosively, while cost of bandwidth remain high, leading to the increase of relevant industrial operating costs, which becomes a handicap for the development of a global industrial chain; 2. the cost of traditional CDN self-built nodes is high, and its progress is slow, which does not match with the increase of computing needs; 3. traditional model's utilization of broadband is not sufficient, resulting in a large number of resources unused and wasted, which is also the main reason for exacerbated contradiction between computing needs and computing ability.

But fog computing adds a layer between the terminal and the data center, which is called network edge layer. It's like adding another small server or router with a memory, to process and save data not required to put into the "Cloud" directly thus reducing pressure to the "Cloud", improving efficiency and transmission rate and reducing time delay.

Compared with cloud computing, the framework adopted by fog computing is more distributed, and closer to the network edge. Fog computing concentrates data, data processing and application on the devices of the network edge, instead of saving almost all of them into the cloud like cloud computing. The storage and processing of the data is more dependent on the local device, but not the server. Therefore, the cloud computing is the new generation of centralized computing, and fog computing is the new generation of distributed computing which corresponds to the feature of "internet decentralization" and solves the problem that the cloud computing market currently faces.

With P2SP technology, Acute Angle Cloud can provide shared computing services to the enterprises. The Acute Angle Cloud would utilize the blockchain technology to build a fair and transparent incentive mechanism, compelling ordinary individuals to participate in the share and exchange of the data resources, opening shared computing services of the Acute Angle Cloud to individual users comprehensively, which makes each common user a resource node of the decentralized shared computing system and able to benefit from it.

Due to low cost, instant access, flexible change and pay-as-you-go etc. of cloud service, the rapidly growing O2O, e-business, game and social network etc. have taken a lead in realizing the change from traditional self-built servers to cloud servers. Along with the further outburst of online video, video cloud migration has been popular currently. The survey shows the schedule for cloud migration of different sectors as follows. Cloud service is still at an early stage, but the settlement in security will result in more sectors to implement their cloud migration. The cloud migration is expected to cover government administration, health care, finance, industry and other sectors in five years.

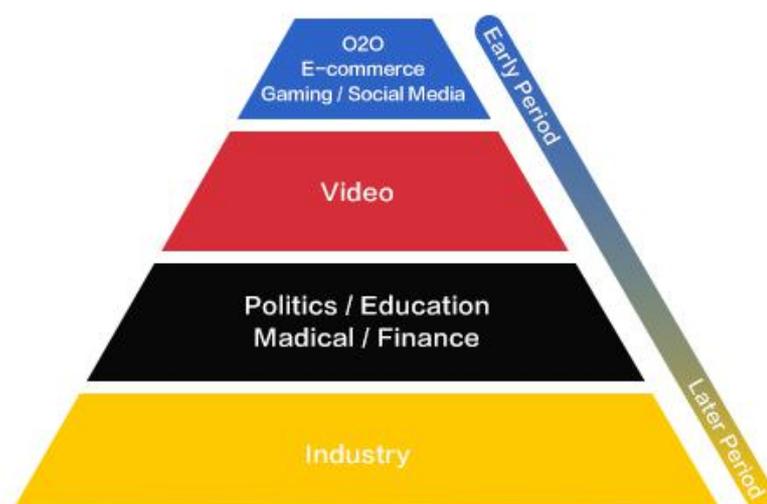


图 4-1 : Cloud Service Usage Timeline for Different Industries

According to a Global IaaS report issued by Gartner, Amazon AWS, Microsoft Azure and Alibaba Cloud are among top three ones globally, with the market share of 44.2%, 7.1% and 3% respectively. Amazon takes a dominating position, but Alibaba grows most rapidly.

While IaaS is becoming more mature, the competition in the future will lie in scale. The one which has a wider layout of data center in earlier stage and more close to end users will be ahead of its rivals.

The three major cloud service providers are actively building their ecosystem. Amazon AWS is joining hands with other mainstream IT producers; Microsoft Azure is opening for further supporting Linux; Alibaba Cloud is taking the advantage of the ecosystem which has been built by Alibaba. Ecosystem has been a major force to drive the growth of cloud service IaaS.

## Analysis of competition:

1. The cloud service directly to the customers remains immature. Acute Angle Cloud allows everyone to be a crucial point of distributed cloud network and builds an ecosystem based on customers' application, so, it enjoys a great competitive edge and commercial value.

2. The concern for security and privacy is still the greatest resistance for adoption of public chain. However, the block chain technology and IPFS technology have solved the problems of data storage and privacy.

3. The cost for centralized physical storage can be reduced, but the cost in manpower, operation and maintenance is hard to be curtailed. In contrast, the distributed cloud storage does not need centralized servers, so the cost will be reduced significantly.

4. The centralized servers are for the purpose to ensure data security. IPFS can further reduce the system's redundancy and ensure the files to be more secure through block chain.

## Acute Angle Cloud's Future:

Acute Angle Cloud will continue to improve the product form, present more mature block chain products to users and constitute a fully-covered cloud ecosystem service. So far, Acute Angle Cloud platform is composed of several parts, with various parts coordinated to each other:

- 1) Acute Angle Cloud
- 2) Triangular host computer
- 3) Acute Angle Chain
- 4) Acute Angle Coin
- 5) Acute Angle Coin Wallet

2015 - Commence the R&D of product hardware

Q1 and Q2 of 2016: Submit the Acute Angle PC project for approval and complete the exterior ID of Acute Angle PC hardware

Q3 and Q4: Finish the internal structure of Acute Angle PC

2017:

Q1 and Q2 of 2017: Q2-AAC Phone 1EVI&AAC Phone2 Concept

Q3 - Complete the mold-making of Acute Angle PC & Acute Angle Cloud project approval and initialization

Q4 - Complete the functional test of Acute Angle PC & white paper of Acute Angle Cloud

2018 :

Q1 Plan to launch Acute Angle Coin Wallet, complete mining incentive plan and main chain test network construction.

Q2 Plan to complete Acute Angle Chain network construction and stress test.

Q3 Plan to launch Acute Angle Cloud Alpha

Q4 Plan to launch Acute Angle Cloud Beta and start putting into commercially use on a small scale

	2015	2016	2017			2018			
			Q1-Q2	Q3	Q4	Q1	Q2	Q3	Q4
Acute Angle PC	Start of product R&D	Completion of Acute Angle PC hardware appearance ID and internal structure MD		Completion of Acute Angle PC moulding	Completion of small batch of function test of Acute Angle PC	Completion of Pre-sale and 20K units AcuteAngle PC production	Completion of global distribution and 50K units of AcuteAngle PC production	Completion of 100K units of Acute Angle PC production	Build more strategic partnership Completion of 300K units of Acute Angle PC production
Acute Angle Cloud				Start of AcuteAngle Cloud project	Completion of Acute AngleCloud White Paper	Plan to launch Acute Angle Coin Wallet, complet mining incentive plan & main chain testing network construction	Plan to complete Acute Angle Chain network construction and stress test	Plan to launch Acute Angle Chain network Acute Angle Cloud Alpha	Plan to launch Acute Angle Cloud Beta and start putting into commercially use on a small scale

图 4-5 : Acute Angle Cloud's future plan

### (III) Overview of Acute Angle Cloud 1.0

Acute Angle Cloud 1.0 is the global distributed file storage system which takes the Acute Angle PC as the storage node and based on IPFS peer-to-peer hypermedia distributed protocol

#### 1. Operational principle of the Acute Angle Cloud 1.0

Each file and its block are given a unique fingerprint named encrypted hash.

- IPFS deletes the files with same hash value throughout the network, and judges which files are redundant , and traces the version history of each file.
- Each Acute Angle PC node just stores the contents that they are interested in and some index information, which is helpful to locate the source.
- When finding files, they can be located through the hash value.
- Use the IPNS (decentralized naming system), each file name could be named with a readable name. Through searching, the file would be easy to find. What the IPFS envisions is not only to turn all the network terminal nodes into a Browser or Client, but anyone could be the operator of the network and storage server.

#### 2. Characteristics of the Acute Angle Cloud 1.0

- It is based on the content-address, not the domain name address. Each file (content) is unique, one file connected to the IPFS network would be given the only encrypted hash value based on its computing content. This would change our habit of utilizing domain names to access the network.
- Supply history version controller (such as git) of the file, and using the different versions of the stored file to the multi-node.
- The Acute Angle Chain operating in the network of IPFS is just the hash value table used for storing the internet files. The content (file) address on the link will be queried while accessing the network each time.
- Utilizing the token Acute Angle Coin to compel the user to distribute more shared space for storing data. The miners obtain the Acute Angle Coin through supplying open disk space,, available calculation force and so on for the network, while the users could pay for the stored and encrypted file in the decentralized network with Acute Angle Coins.
- Shared incentive mechanism of Acute Angle Cloud can lower the cost of the data storage for the users.
- The Acute Angle Cloud 1.0 help build a safer network.

## (IV) Phased upgrading completion of the Acute Angle Cloud 2.0

### 1. Problem solved by the Acute Angle Cloud 2.0

Acute Angle Cloud 2.0 strives to distribute the Acute Angle PC into the world through the ecology incentive, to approach the unified IaaS infrastructure service. Realize economic globalization of the distributed cloud storage, provide server service, CDN accelerated service, file storage service and database service for individuals or small and medium-sized enterprises in low storage price.

### 2. Operational principle of the Acute Angle Cloud 2.0

Realize global distributed IaaS service platform through network, virtualization, operational system, Acute Angle PC、OpenStack、Acute Angle Cloud 1.0.

#### **Compute:**

A set of controller would be served in the whole life cycle for single user or using groups in the case of managing virtual machine, and supply virtual service according to user's need. Responsible for the operations of virtual machine including set up, startup, shutdown, on-hook, pause, adjustment, remove, restart, destroy, and configuring CPU, internal memory and other information specifications.

#### **Object Storage:**

Swift refers to the system realizes object storage in the large scale extensible system through built-in redundancy and high error tolerance mechanism, allowing for storing or retrieving files. It can provide image memory for the Glance, and volume backup service for the Cinder.

### **Persistent Object Storage:**

The Acute Angle Cloud 1.0 could realize object storage with the advantages of high error tolerance, extensible, more secure and open based on content-addressable and peer-to-peer hypermedia protocol. And provides image memory for the Glance, and volume backup service for the Cinder.

### **Image Service:**

The search and retrieval system of virtual machine image supports multiple virtual machine image formats (AKI, AMI, ARI, ISO, QCOW2, Raw, VDI, VHD, VMDK) with the functions of uploading image, deleting image and editing the image basic information.

### **Identity Service:**

Keystone.With the functions of providing identity verification, service regulations and service ticket for other services of OpenStack, manage Domains, Projects, Users, Groups and Roles.

### **Network & Address Management:**

Supply network virtualization technology for cloud computing, and providing network connection service for other services of OpenStack. Supply interface for the users, and define Network, Subnet and Router, configure DHCP, DNS, load balancing and L3 service, and the network support GRE and VLAN. Plug-in architecture support many mainstream network manufacturers and technologies, such as OpenvSwitch.

### **Block Storage:**

Provide stable data block storage service for running instance, and its plug-in driver architecture is available for the set up and management of block devices, such as set up volume, delete volume, on-hook and unload volume on the case.

### **Lasting Block Storage**

Acute Angle Cloud 1.0 provides stable and persistent data block storage service for the running instance.

### **UI Dashboard:**

Web management Portal is used to simplify the service operations for the user, such as: startup, distribute IP address, configure access control.

### **Metering:**

Like a funnel which could collect almost all the things happened inside the Acute Angle Cloud 2.0, and provide data support for billing and monitoring and other services.

### **Orchestration:**

A collaborative deployment method defined by module is provided to achieve automatic deployment under operation environment of cloud infrastructure software (computing, storage and network resource)

**Database service:** It provides extensible and reliable relational and non-relational database engine service for users under the environment of Acute Angle Cloud 2.0.

## V. Overview of Acute Angle Coin/AAC

### (I) AAC introduction

The Acute Angle Coin/AAC is issued with the cap of 1 billion. In addition to obtaining token appreciation, investors holding AAC will also be able to use the token as payment for the Acute Angle Cloud platform. Users can use the Acute Angle Coins to pay for a series of services including memory space, content inquiry, application and development, etc.

Based on the economic Cloud computing and blockchain technology, AAC ensures cost and return equivalence of user shared computing resources and contents through smart contracts, smart regulations and reporting system, and it cannot be denied or tampered with; Through the decentralized book record, all transactions are insured to be true, open and transparent; through blockchain registered user copyright and modification records, users' copyrights are protected from infringement.

The AAC will become a medium for users to exchange shared computing resources, ensure users' rights and interests and provide computing resource equivalence. The total daily issuing amount of Acute Angle Coin is limited, and it is distributed through a community reward mechanism.

In particular, you understand and accept that AAC:

- (a) is non-refundable cannot be exchanged for cash (or its equivalent value in any other virtual currency) or any payment obligation by the Foundation or any affiliate;
- (b) does not represent or confer on you any right of any form with respect to the Foundation (or any of its affiliates) or its revenues or assets, including without limitation any right to receive future revenue, shares, ownership right or stake, share or security, any voting, distribution, redemption, liquidation, proprietary (including all forms of intellectual property), or other financial or legal rights or equivalent rights, or intellectual property rights or any other form of participation in or relating to Acute Angle Platform, the Foundation and/or its service providers;
- (c) is not intended to be a representation of money (including electronic money), security, commodity, bond, debt instrument or any other kind of financial instrument or investment;
- (d) is not a loan to the Foundation or any of its affiliates, is not intended to represent a debt owed by the Foundation or any of its affiliates, and there is no expectation of profit; and

- (e) does not provide you with any ownership or other interest in the Foundation or any of its affiliates.

The contributions in the token sale will be held by a separate entity after the token sale, and contributors will have no economic or legal right over or beneficial interest in these contributions or the assets of that entity after the token sale.

To the extent a secondary market or exchange for trading AAC does develop, it would be run and operated wholly independently of the Foundation, the sale of AAC and Acute Angle Platform. The Foundation will not create such secondary markets nor will it act as an exchange for AAC.

## **Market Analysis of AAC**

### **Superiority**

The constant AAC circulation totals 1 billion, issued in a limited way without additional ones (for distribution, please see white paper on Acute Angle Cloud official website);

2. AAC is not a groundless "air currency" but a kind of virtual digital currency generated through smart contract, with the series of resources shared by users through use of triangular host computers. The virtual information has been capitalized and the right is confirmed by block chain technology.

3. AAC is a digital asset of Acute Angle Cloud under the entire ecosystem of Acute Angle Cloud. Acute Angle Cloud is a basic service platform based on triangular host computer, Acute Angle Chain and IPFS Interplanetary File System for achieving a global distributed cloud computing. Being built through Acute Angle Chain, Acute Angle Cloud 1.0 and Acute Angle Cloud 2.0, it enjoys a promising prospect for development, and it is well-founded in offer pricing and not prone to evaporate.

4. The holders of AAC can exchange shared services such as shared cloud disk, shared cloud computing and shared CDN etc. with AAC on Acute Angle Cloud platform.

5. AAC can be exchanged with other virtual currency as a virtual currency and has a negotiable nature.

6. The issue of AAC is limited per day, but, as time goes by, the more personnel engaging in coin mining will result in more difficulty in gaining and holding of the AAC.

### **Weakness**

AAC was born in the first year when virtual digital currency emerged, however, as virtual digital currency is not under supervision, the market is disorderly. The market of virtual digital currency is severely polarized. AAC, as a rising star of virtual digital currency, if it intends to catch up from the behind, it needs to lay a sound user foundation, make users with confidence and trust and spend a lot of manpower and material resources to cultivate the users' belief.

### **Opportunities**

More and more service and start-up businesses are attempting to exploit such a market opportunity. However, there are still fewer participants, so, there is still a large space for new practitioners. Due to little competition, the market size is adequate to reduce the risk to the minimal level. The sector of encrypted virtual digital currency is showing an optimal momentum to have the existing strong new enterprises to enter the market. AAC, as a virtual digital currency with perfect ecosystem, it is provided with hardware, platform and ecology and has strong adhesiveness of users, high dependence, broad prospect and recyclable circulation value, so, it is a rarely excellent virtual digital currency.

### **Threats**

Along with the popular utilization of block chain technology and encrypted virtual digital currency, more and more block chain form products will emerge on the market. The value of product will depend on the users' recognition and support to the brand. The development of AAC is at an early stage of the market. Due to the jumbled market of virtual digital currency, quite a few users have been deceived by inferior virtual digital currency due to their attempt, so their degree of trust and secondary acceptance is not high and they do not understand why AAC token is more secure and reliable than the existing virtual digital currency.

### **Strategy**

AAC, as a virtual digital currency with hardware, platform and ecology, it needs to seize the intermediate opportunities, fill in the gap of market and technology, respond to the users' needs, build up trust of transaction, promote the token circulation, improve the product form and elevate the product value.

### **Short-term goal**

Our short-term goal is, as a platform for offering long-term service, to put at least 10 authoritative exchanges online. Through putting online, we try to expand our regional coverage, make sure the product in conformity with the market demand, promote the AAC's circulation on the market and ensure AAC to have the basic value.

### **Long-term goal**

Our long-term goal is to be a builder of global IaaS distributed service platform and a participator to popularize the encrypted virtual digital currency. We will achieve this goal by making use of encrypted virtual digital currency (AAC) for exchanging Acute Angle Cloud platform cloud service.

## **(II) AAC distribution plan**

Along with development and maturity of Acute Angle Platform, Acute Angle Cloud will gradually support a value system with AAC as the circulating medium, which includes trading and payment memory space, content sharing, application development and other settlements and recharge. We believe that in the near future, with the development of sharing economic Cloud computing and blockchain technology, AAC will have more application scenarios.

When users participate in activities started on the platform, the smart contracts will automatically generate AAC. The total amount of AAC for the first pre-generation is RMB 1 billion. Without pre-mining, the proportion generated from mining is up to 45%, which should be acceptable for miners and create a healthy ecosystem. To ensure good operation of the Acute Angle community, maintain community healthy development and construction of application platform, the remaining part will be left for the foundation, initial team, overseas ICO and private sales, with the specific distribution as follows:

1. Mining generation: 45%

45% of the total issuing amount will be put in the user market in the method of Acute Angle PC mining mechanism, and AAC will be issued as incentives for mining.

2. Project Foundation Reserve: 25%

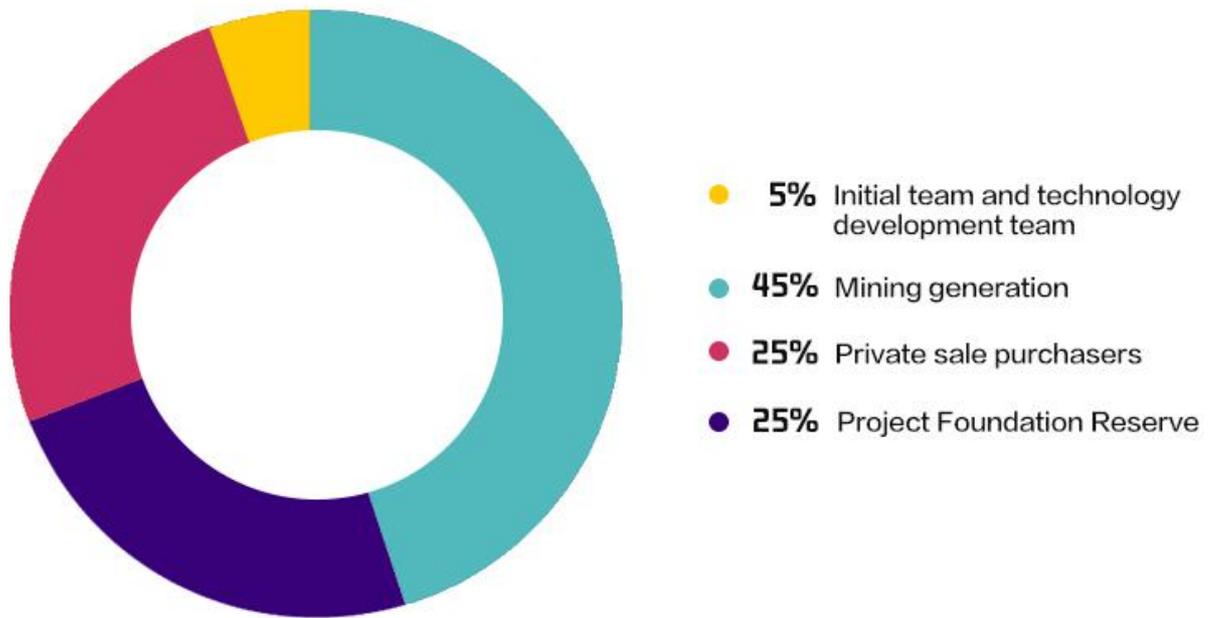
25% of the total issuing amount will be kept by the Foundation as reserves, which shall be used to support technical development of subsequent projects, community operation, business cooperation, publicity expenses and project ecological consummation. Usage of this portion of the proceeds requires the Board of Directors of the Foundation to pass resolutions, as well as advance publicity.

3. Private sale purchasers: 25%

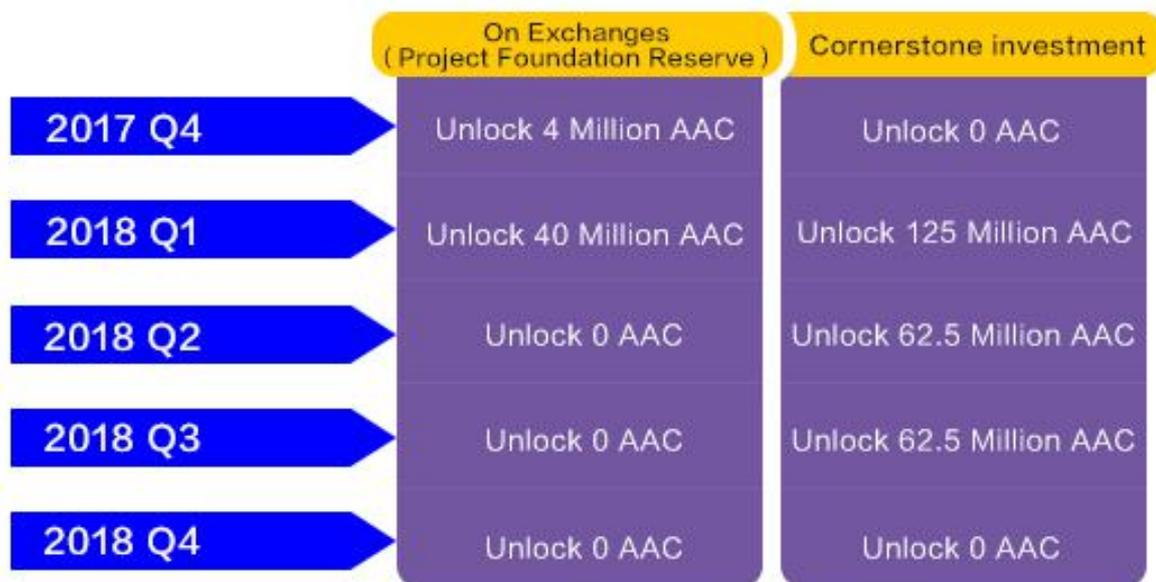
25% of the total issuing amount will be issued to early private sale purchasers to kickstart the process of team construction, platform operation and other aspects. There will be a lock up period for private sale purchasers. 50% will be locked when issuing, and starting from one month after the token is online for trading, 25% of which will be unlocked in the first 3 months, and the rest 25% will be unlocked in the next 6 months.

4. Initial team and technology development team: 5%

5% of the total issuing amount is given to the initial team and development team as reward, which will be locked until the token is open for trading for one month, after that, 0.25% of AAC will be unlocked in every month for the next 20 months.



5.1: AAC distribution plan

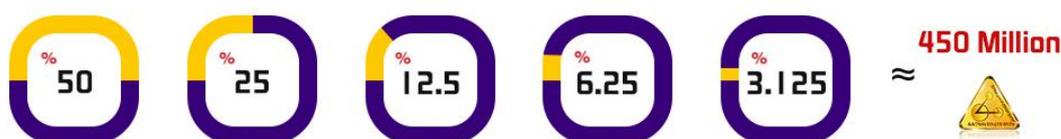


5.2: Plan for releasing of AAC foundation reserve and cornerstone investment

### AAC mining production plan

All the locked AAC will be unlocked step by step according to the schedule.

The AAC will be unlocked according to the proportion of each category (team, foundation etc.). As the time goes on, the dividend will be reduced and the value will be upgraded due to scarcity.



5.3 : AAC Mining Production Plan

2018 -  $450,000,000 \times 50\% = 225,000,000$  AAC

2019 -  $225,000,000 \times 50\% = 112,500,000$  AAC

2020 -  $112,500,000 \times 50\% = 56,250,000$  AAC

2021 -  $56,250,000 \times 50\% = 28,125,000$  AAC

...

Note: For calculating method of AAC generation, please see operating mechanism of AAC

### (III) Ways to get AAC

The AAC is generated through shared Acute Angle PC resources such as hard drive, upstream bandwidth, CPU computing ability and other ecological reward mechanisms. It is mutually decided by combining the Acute Angle Chain interactive behavior in specific block cycles. Users can purchase the Acute Angle PC, and activate the Acute Angle Coin incentive's plan to get the AAC by executing tasks;

- Users can contribute with upstream bandwidth, shared spare hard drive memory space, CPU computing ability, hard disk literacy, multi-dimensional scoring algorithm for equipment stability to acquire AAC;
- Users can also participate in official activities of the Acute Angle Chain and acquire AAC according to the activity's rules.

### (IV) AAC application

#### ■ Cloud storage service

The required Cloud storage space shall be exchanged according to the demand of actual storage size, time and number of backups;

#### ■ Shared Cloud computing service

Safe and stable Cloud computing services shall be exchanged. Super-large scale distributed underlying architecture, decentralized and special Cloud encryption technology shall be provided as the Cloud service for users.

#### ■ Shared CDN service

Based on a high quality network infrastructure and Cloud computing technology, low-cost and extensible Internet content distribution services with high performance shall be exchanged.

Along with the development of shared economic Cloud computing and blockchain technology, the AAC will have more application scenarios, including:

### ■ Shared service of entertainment sharing

Users can acquire the AAC via the Acute Angle PC or by receiving rewards from participating in official activities, by exchanging various unique content published by other users on the entertainment shared platform.

### ■ Open platform for Acute Angle application

Applications developed on the platform can be purchased using AAC.

## (V) AAC operation mechanism

Everyone is the transmission node for peer-to-peer digital transmission, users can use the digital asset acquired from shared idle resources as the reward. Each Acute Angle PC will become a node and independent server for data memory and transmission, and connect the global blockchain believers together.

### 1. Algorithm of issued currency

AAC implements multi-dimensional scoring for incentive based on Acute Angle blockchain PC hardware ability, upstream bandwidth, shared memory size, effective online duration and other contributions. Acute Angle PC score represents its contribution in the same day, and AAC generated from the same day is distributed to Acute Angle PC in the whole network according to the score weight.

Acute Angle PC score  $A = (\text{hardware ability hardware factor} + \text{bandwidth factor} + \text{memory factor of memory value}) \times (\text{effective duration} / 24 \text{ hours} \times \text{effective duration factor})$ ;  
total amount of the issued currency in the same day =  $C_t$ ;

Production formula:

$$\frac{A_1}{A_1 + A_2 + A_3 + \dots + A_n} * C_t$$

### 2. Formula analysis

Hardware ability:

CPU efficiency and memory of Acute Angle PC. Currently, Acute Angle PC generation has consistent hardware ability, with the ability value of 1, CPU factor weight of 20, and memory factor weight of 10;

Bandwidth:

Upstream bandwidth measured in trusted nodes. To encourage the participation of distributed nodes, the decay factor of bandwidth factor is 10 at 1-8M, 5 at 9-20M, and 1 at 21-100M; if the bandwidth is above 100M, it's calculated as 100M using the staircase progressive algorithm (see below for details);

Storage:

About the storage space available for mining measured from the trusted node, in order to encourage users to share their idle storage resources, the storage value is 0 when the storage space is less than 200G, the storage value is 1 when the storage space is greater than 1000G, and the storage value is 2 when the storage space is greater than 1000G. The storage factor is 5;

Read and write:

The read-and-write is 1 when the read-and-write speed is 1MB / S-99MB / S; the read-and-write is 2 when the read-and-write speed is 100MB/S-200MB/s; the read-and-write is 3 when the read-and-write speed is above 200MB/s. The read-and-write factor is 10;

Effective duration factor:

The effective time factor is 1, the effective online duration is 24 hours for 7 consecutive days, the effective time factor is 1.1, during which, the effective time is interrupted. Then the effective time factor will be recalculated from 1.

Online duration:

The trusted node aggregates the effective online duration of the previous days every day, calculates the score of the entire network, and distributes the AAC.

### Acute Angle PC Score Algorithm Example:

**1.** When the upstream bandwidth is 1M, the storage space is 100G, the read-and-write speed of hard disk is 20MB / s, and the on-line duration is 12 hours;

$$\text{PC Score} = [1 \times (20 + 10) + 1 \times 10 + 0 \times 5 + 1 \times 10] \times (12 / 24 \times 1) = 25$$

**2.** When the upstream bandwidth is 10M, storage space is 500G, the read-and-write speed of the hard disk is 50MB / s, and the online duration is 24 hours;

$$\text{PC Score} = [1 \times (20 + 10) + [8 \times 10 + (10 - 8) \times 5] + 1 \times 5 + 1 \times 10] \times (24 / 24 \times 1) = 135$$

**3.** When the upstream bandwidth is 100M, storage space is 1500G, the read-and-write speed of the hard disk is 100MB / s, and the online duration is 24 hours;

$$\text{PC Score} = [1 \times (20 + 10) + [8 \times 10 + (20 - 8) \times 5 + (100 - 20) \times 1] + 2 \times 5 + 2 \times 10] \times (24 / 24 \times 1) = 280$$

**4.** When the upstream bandwidth is 100M, storage capacity is 1500G, the read-and write-speed of hard disk is 100MB / s, the online duration is 24 hours; the total duration is 7 \* 24 hours;

$$\text{PC Score} = [1 \times (20 + 10) + [8 \times 10 + (20 - 8) \times 5 + (100 - 20) \times 1] + 2 \times 5 + 2 \times 10] \times (24 / 24 \times 1.1) = 308$$

### 3. The coin decay algorithm

1) Decay period y:

The period for each yield reduction  $y = 1$  year (365 days)

2) Decay factor  $d$ :

The proportion of each reduction adopts the halving method,  $d = 50\%$

3) The initial amount of coins  $C$ :

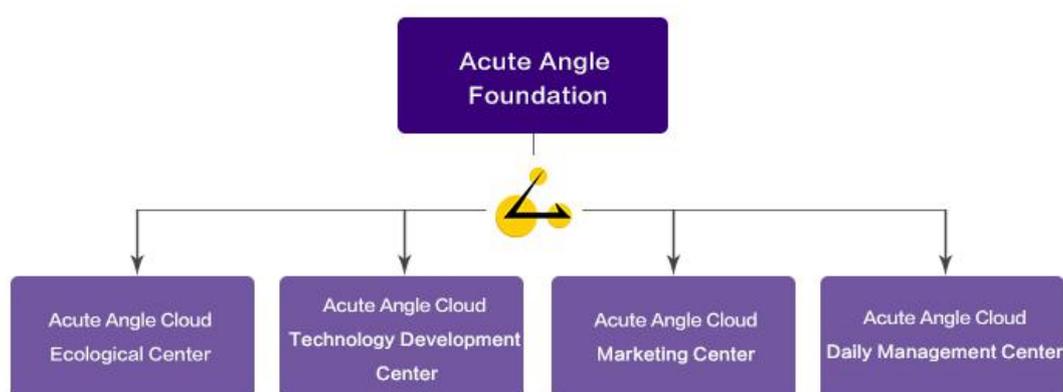
The number of coins rewarded per unit time when starting to dig coins is calculated based on the total amount and the  $C=62w / \text{day}$

The total number of coins generated from mining = the yield of playing coins produced in each block is halved every 365 days, then the total number of coins generated from mining indefinitely approximates about 450 million.

## VI. Governance Mechanism and Risk Control

### (I) Governance Mechanism

The Foundation's object is to promote the research, design and development of, and advocacy for a global and unobstructed open source blockchain network system for global information communication, value interconnection and trust exchange, and facilitating the safe and harmonious development of the ecosystem thereon. The Foundation will assist to manage the general issues and prerogatives of open source community projects by developing good governance structures. The main design goal of the governance structure of the Foundation is the sustainability of the open source community project, the effectiveness of management and the security of the funds raised. The Foundation is consisted of the ecological center, technology development center, marketing center and daily management center.



6.1: Organization Chart of Acute Angle Chain Foundation

The Board of Directors of the Foundation is responsible for the management and decision-making of major issues, including the appointment or dismissal of executives and center leaders, and the important decision-makings. Members of the Board of Directors serve a term of three years and can be reelected. The Board of Directors shall have one chairman,

which was decided by votes of the other directors.

The first Board of Directors will be selected by the members of the Foundation.

Ecological center is responsible for exploring the feasibility of combining Acute Angle Platform with the industry in order to achieve commercial practices. The key exploring areas: supply chain finance, big data, social networking, cross-border transactions and other fields.

Technical Development Center

Technology Development Center is responsible for the development, testing, launching and auditing of the underlying technology. Technical Center members communicate with Token holders in the community and hold technical exchange meetings from time to time;

Marketing Center

Marketing Center is responsible for the promotion and publicity of technologies, products, communities and open source projects.

Daily management center

Daily management center includes the managements on finance, legal affairs, personnel and administration etc. Finance center is responsible for the use and audit of project funds;

The legal center is responsible for the examination and formulation of all kinds of documents to prevent all kinds of possible legal risks; the administration and personnel department is responsible for the personnel work such as the personnel and compensation as well as the schedule & administration work.

## **(II) Risk management and control**

### **1. Transaction security**

Acute Angle Platform will ensure the security of user accounts and funds through security measures such as block chain consensus and non-tampering technologies as well as digital signatures and end-user encrypted wallets. It will provide financial-grade security services. After the efficient integration of data storage and network resources, data, applications and transactions are integrated into the blockchain cloud to build a network environment for the secure transaction. At the same time, there are a number of other ways to ensure that Acute Angle Platform is safe and trustworthy.

### **2. Auditing**

The Foundation autonomous committees must maintain a high standard of business practices for honesty and ethics, abide by the relevant laws and regulations and industry self-discipline principle, and provide transparent financial management. The Foundation will invite internationally renowned third-party auditors to audit and evaluate the fund use, costs, profit distribution, etc. of the Foundation every year, and disclose the evaluation results and audit results of these third-party organizations.

## VII. Founding Team

### 1. Core Team

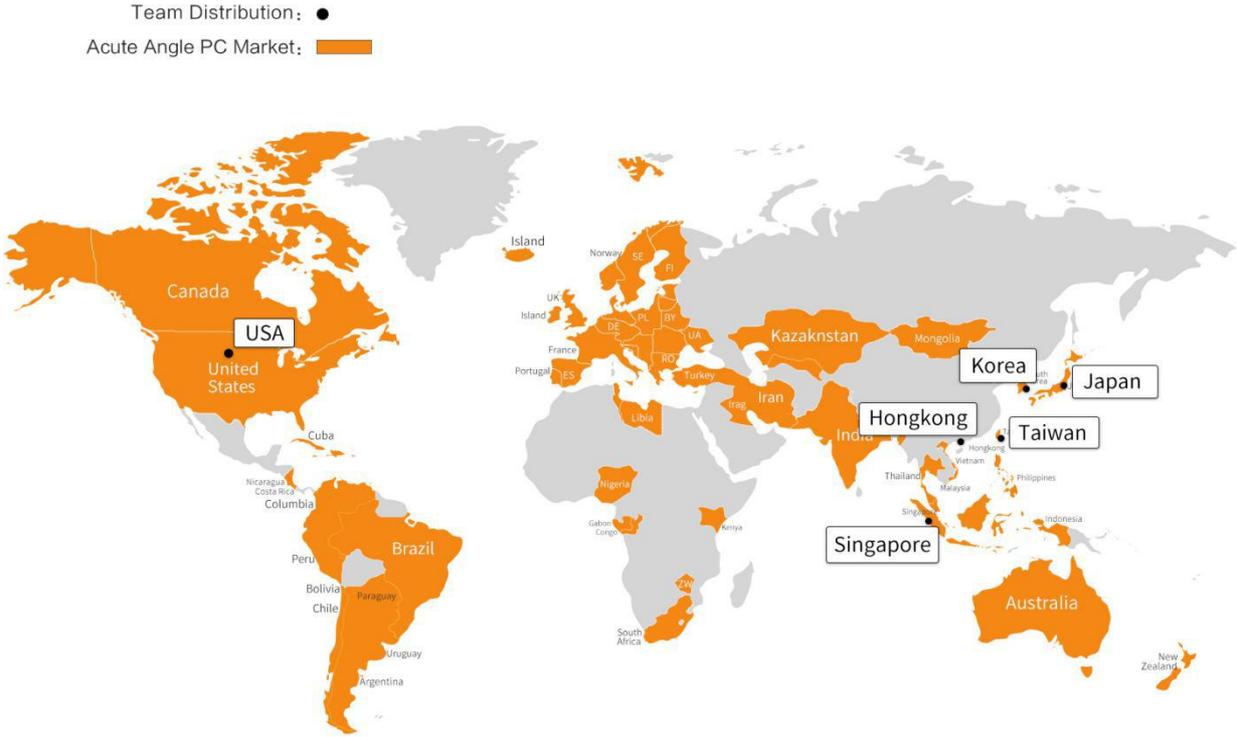
Member	Introduction
<p>Gao Shengli Founder</p>	<p>He is a computer geek, an enthusiast, a severe believer of the Blockchain and one of Phase I students in Dune College of Zero2IPO Group. In 2014, he was concerned with the development and application of blockchain technology. He has 17 years of practical and managing experience in the definition and development of computers and intelligent hardware products, the supply chain production and the brand marketing. During working in the ViewSonic, he led to develop and launch the world's first RIM tablet and the world's first iris mobile phone. In 2015, he started his own business and devoted himself to the research and development of personal computers. Starting with the performance and appearance of computer hardware, he constantly iterated and never stopped his research on the application of blockchain technology. He eventually completed the world's first triangle computer based on blockchain technology.</p>
<p>Zhi He Co-Founder/CTO</p>	<p>As a technology geek, he has engaged in research and development work for six years and has been involved in leading a variety of desktop programs, large sites and cross-platform apps. His representative work, JiuYou Windows Developer Service Platform was the world's largest developer service platform of Microsoft Corporation. His team was selected to be the Global Strategic Partner of Microsoft Corporation in 2014. The representative work, Fogpod Enterprise Smart Cloud Router was led by the former Global Vice President in Cisco. He is proficient in PHP, C #, Javascript, Lua and other development languages. After working for 4 years in the front line in many start-up companies, he has rich experiences in technology tackling. In 2015, he began to focus on blockchain technology and was committed to building the top blockchain project.</p>
<p>Michael Lin Co-founder</p>	<p>From China Taiwan, twenty years of product development, supply chain management and resources production and qc management experience, has served in several international companies such as Panasonic, Viewsonic as the quality control, product development, supply chain management, etc.</p>

<p>Qifei Fan Co-founder</p>	<p>He has a 12-year experience of product development , 10-year experience of product planning and project management. He has led and participated in dozens of successful projects with sales volume of more than 1 million, and he worked in a number of well-known listed companies (Foxconn International Holding / Coolpad (Group / Group Sense Limited / Coship Elec., Etc.) on technical management positions, so he has a profound understanding of consumer electronics products and markets and could complete the product planning in connection with the market and quickly respond to market changes, integrate upstream and downstream resources and develop the products according to market changes.</p>
<p>Ke Wang Co-founder</p>	<p>She has 8 years of experience in Internet operation. She has ever served as the assistant president and chief operating officer in MainOne Inc.in charge of the overall operation of the whole company. After that, she joined the ViewSonic as the marketing director and responsible for promotion and marketing strategy of ViewSonic mobile phone and tablets across the country. She led the team to complete many 10-million grade crowdfunding projects, and has rich experience in brand operation and product crowdfunding.</p>
<p>Jinyan Yang</p>	<p>Lawyer, deputy director of Beijing Yizhun law firm. Doctor of China University of Political Science and Law, postdoctor the Supreme People's Court Law Institute, has served as legal consultant of dozens of startups, investment institutions, and legal experts in block chain.</p>
<p>Feng Lin Regional Director for North America</p>	<p>Now settled in the United States, professional athletes experience for many years, 2013 national cycling champion (Beijing), established the athletes foundation since 2015 in Los Angeles. As a chairman, familiar with the north American market, successfully operated communication evens of China and the United States. Great teamwork and experience in market operation.</p>
<p>Charles Rego International Operations Director</p>	<p>A graduate of Columbia University, and studied Financial Economics. He has been in China for nine years developing and launching localized programs for the Chinese early education market. Charles speaks six languages, and uses his unique global outlook and experience in the international sphere to create productive cross cultural dialogues, and develop cooperation with overseas markets.</p>
<p>Jack Dong Regional Director for Southeast Asia</p>	<p>Graduated from marketing major James Cook university, Australia. More than 10 years of experience on financial industry in Singapore, operated several blockchain industry team to establish the compliance of the entity, has the rich experience in global marketing.</p>

<p>Daoji Quan Regional Director for Japan and South Korea</p>	<p>Graduated from Dongbei University of Finance and Economics, 15 years experience in project management and overseas operation communication products, the world's first DSDS Coolpad smartphone 728 product manager, China's first LTE iris recognition smartphone product manager, has globally especially in Japan and South Korea project bidding, delivery, and operating experience, proficient in Japanese and Korean language between the two countries. Familiar with channel layout, channel integration, pre-settlement, etc., and has experience in project investment and financing of large multinational enterprises.</p>
<p>Zhen Wang Senior Front-End Engineer</p>	<p>He has a 3-year experience in front-end development with representative works of Fogpod enterprise smart cloud routing app, Acute Angle browser and other cross-platform apps . He is proficient in Javascript, xcode, nodejs and other development languages.</p>
<p>Meng Tian senior industrial designer</p>	<p>Years of experience in product ID design. She has worked in domestic well-known design company, domestic famous optical lens module, optical system research and development company. Participated in the design and development of dozens of projects, including military products, video products, electronic digital products, smart home products, food and wine packaging, medical products and sports equipment. Dedicated to designing innovative, practical, aesthetically beautiful, and enduring products</p>
<p>Niu Huijun Marketing Director</p>	<p>8 years experience of 4A advertising company, 8 years of international famous IT brand marketing experience, rich media resources, leading the team to plan and organize many large-scale events, event marketing. She has been the media director of the excellent technology (China) co., LTD., responsible for the brand positioning, marketing strategy, product promotion and channel marketing of the excellent display, projector and commercial products.</p>
<p>Cherria Operation Director</p>	<p>Five years global mainstream electric business platform product planning and marketing experience, familiar with media, has rich media resources, leading organizations planning large-scale activities many times, product launches, in charge of Ziyi Zhang, Haita Du live product release and multiple product launches, etc.</p>
<p>Yujing Zhang Business Manager</p>	<p>She has three years of experience in oversea market operation, has participated in a number of overseas product crowdfunding projects and is familiar with the promotion and construction of overseas markets.</p>
<p>Mingxin Xu Senior planner</p>	<p>She has three years of planning experience in domestic and foreign crowdfunding field, works as the planning director of a number of online hot products and is familiar with the planning strategy of Online-Offline integrated marketing.</p>

## 2、Consultant Team

Member	Introduction
Yi Jin	He is the former Vice President in Zero2IPO Group (largest integrated service provider in VC / PE investment area in China), the former investment director of the JD Finance, the director of JD entrepreneurial ecology and the operating director of Shanrong e-commerce platform in China Construction Bank. As a "Post 85s" e-business entrepreneur, he financed 30 million to build a company, then his company was successful acquired. He's a distinguished lecturer in Tencent University, JD University Finance College, Peking University, Tsinghua University, Renmin University of China, Sun Yat-sen University, Shanghai University of Finance and Economics, Xi'an Jiaotong University, Qingdao University and other universities.
Yalian Cao	General Manager of IP3 Technology, MBA of University of Wisconsin, Madison, Business School and EMBA of Cheung Kong Graduate School of Business. He has extensive and diversified engineering management experiences in electronic machinery management and NPI industry for 15 years at least and he can effectively improve the productivity and operational capability with special engineering experiences in system and component evaluation.
Clarence Guo	Clarence is a practising advocate and solicitor in Singapore. He is a director at a boutique law firm, Tzedek Law LLC. He has assisted major local and international banks, funds and fund managers, large real estate developers and owners, as well as young start-up companies. In particular, he specialises in assisting fintech start-ups and has developed much expertise with companies dealing with blockchain technology / virtual currencies.
Sven Yu	Has ICT industry experience for nearly 20 years, and helped establish Communication Technology magazine and Yidong Xianfeng magazine. Have long-term in-depth communication with The ICT industry upstream and downstream supply chain, including OEM/ODM, SI/ISV and distribution of leaders in retail distributors, global executives interviewed hundreds of renowned ICT suppliers in China, and hundreds of ICT industry chain partners. Founder and chief editor of the TechGate.
Marceel Marchena	He's the Founder & CEO of Quiksnip. He provided overseas marketing programs to many companies in Los Angeles and knows about the methods and modes of overseas market operation.



7.1 : Team Distribution and Acute Angle PC Market

### 3、 Key supporters and private sale purchasers

**Institutions:**

- Link Capital
- China Creation Ventures
- Node Capital
- Star Capital
- GongShi Technology
- JD Venture

**Individuals:**

- Metaverse Foundation Founder - Xiahu Chu
- XingHe Capital President - Yuhang Guo
- TongXi Capital Founder - Yijia Zhu
- BCD China Consultant - Linke Yang

- Stars Capital Co-founder - Jingchao Liu
- MailTime&MDT founder - He Huang
- Hash Capital - Huaiyang Zhu
- Coldlar Co-founder - Zeyu Sun
- KEX Founder - Xiaogang Yin
- KuaXue Founder - Shuai Qiao
- Blockchain Investor - Yitian Du

And more

## Version History

1. Acute Angle Cloud White Paper v1.0 2017/12/04
2. Acute Angle Cloud White Paper v1.1 2017/12/12
3. Acute Angle Cloud White Paper v1.2 2017/12/14
4. Acute Angle Cloud White Paper v1.3 2017/12/20
5. Acute Angle Cloud White Paper v1.4 2018/01/02
6. Acute Angle Cloud White Paper v1.5 2018/01/09
7. Acute Angle Cloud White Paper v1.6 2018/01/16
8. Acute Angle Cloud White Paper v1.7 2018/01/19
9. Acute Angle Cloud White Paper v1.8 2018/02/06

Please go to our website for more : [www.acuteangle.com](http://www.acuteangle.com)