

# BHEX

Financial Standard Decentralized Crypto Asset  
Custody and Trading Platform

# White Paper

## I Background

As more people are getting involved into blockchain world, number of token holders are growing constantly, which implicitly pushed up token prices. From Sep 2017 to early 2018, the market cap for all tokens reached 400 billion USD. This groundbreaking blockchain revolution and the associated money-making opportunities are attracting more people and capital into the industry, which induces the creation of more blockchain projects and tokens.

Trading platforms, being at the center of blockchain infrastructure, grew rapidly and exponentially accordingly. Meanwhile, they are facing serious issues and challenges. In order to serve the fast-growing user basis, trading platforms need to match the user experience and security of their counterparts in traditional financial sector. However, this seems to be a long-term goal, given that the crypto trading industry is still lack of even basic industry standards and third-party supervisory; whole industry is still at very early stage, featured by chaos.

Most recently, a number of crypto trading platforms shut down due to security and technical issues. Meanwhile, thousands of new crypto exchanges are emerging, among which many of them are lack of very basic theoretical and practical experiences. Consequently, the solutions these exchanges provided are full of security and credibility issues, causing huge losses to investors. This further hinders the development of the whole blockchain industry into the right direction.

Moreover, even the more established crypto exchanges suffer from the inability to prove asset security and their own credibility, due to the absence of industry standards and third-party supervisory. There is literally no mechanism to protect investors and crypto asset issuers.

Thus, we believe that it is crucial to establish a whole new crypto trading ecosystem, whose credibility and security should be comparable to that of the existing financial trading system. Only then crypto trading platforms could potentially support the future development and revolutions of the whole blockchain industry with a truly reliable infrastructure and mechanism.

## I About BHex

BHex is the crypto trading platform built on top of the Bluehelix family technology solutions. BHex founder, Mr. Ju Jianhua, is the ex-CTO of Huobi; founding team is formed by experienced professionals from traditional financial sector and top IT companies. Whole team devote to reform the existing crypto trading ecosystem, based on multiple years of traditional financial trading system development experience and first-class blockchain trading platform operations background.

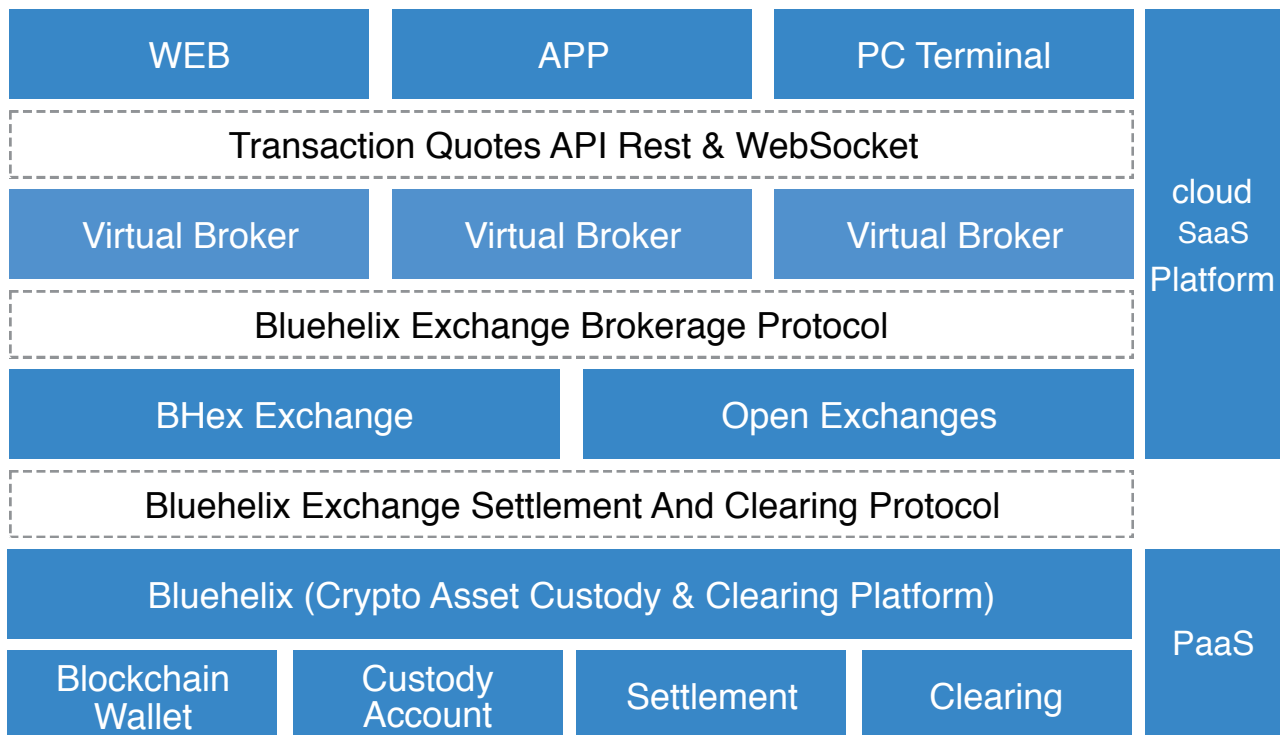
BHex founding team developed the Bluehelix decentralized asset custody and clearing technology solutions, based on blockchain technologies and community consensus mechanisms. Combining cryptography and blockchain technologies, Bluehelix solutions fully support a decentralized association managed system from a technology perspective; the solutions help build a credible and efficient asset custody and clearing system, which then solve the issues of credibility and security in the industry. Furthermore, the Bluehelix technology solutions consolidate the infrastructure for the industry and set milestones for industry standards development for the future.

With the help of Bluehelix technology solutions, BHex trading platform is equipped with comparable level of business, technology and supervision abilities to that of traditional financial solutions. Admittedly, BHex trading platform can serve its customers with superior level of credibility and security. Apart from this, BHex adopts an innovative virtual broker model, better serving its business partners. BHex also seeks to develop new business, fully compliant to local regulations, around the world by introducing innovative and bespoke derivatives products.

BHex is also featured by its openness. It is designed to be a truly open platform, adopting SaaS cloud computing model, based on Bluehelix protocols embedded on underlying structure. The openness and virtual broker system design let business partners focus primarily on marketing and user growth, avoiding heavy upfront costs in technology development, security management and liquidity creation.

# BHex Platform Introduction

## Platform Structure



## Bluehelix Custody and Clearing Technology

BHex is backed by innovative Bluehelix technology solutions. Bluehelix is designed to fully solve the credibility and security issues of existing centralized crypto trading platforms. Asset custody and clearing is managed and supervised by the whole community through BHPOS consensus mechanism. More specifically, this involves committing transaction data onto blockchains, cold/hot wallet segmentations, multi-signatures and community asset clearing consensus mechanism.

## BHex Exchange Platform

BHex does not hold any of investor assets as an exchange itself. It focuses on core trading business including cash trading, margin trading, futures trading and OTC markets. Assets are fully managed through Bluehelix custody and clearing mechanism, which avoids various kinds of exchanges frauds. We believe it is widely accepted that technology solution is the key solving credibility issue rather than traditional credit accumulation.

## Virtual Broker SaaS Platform

Considering that many players in the industry, especially those with good user

flows, do have the demand for opening their own crypto trading business, BHex adopts a SaaS cloud computing model and it could accelerate the process of operating crypto trading business without paying the huge upfront development cost. Then naturally partners are able to release their capital from development expenses and focus primarily on their core business.

In traditional financial world, exchanges are not directly exposed to retail customers; instead exchanges provide services to end customers through institutions, namely brokers. Exchanges should be focusing on security, risk management and financial products innovations. This model better serves and protects end investors and customers. Consequently, BHex designed the virtual broker system. Virtual broker system will be fully opened to business partners who are able to bring in good user flows, and business partners could easily convert their user flows advantage into real cash income. BHex virtual broker system could be embedded into partners' existing website or APP. In other words, branding and user flows still belong to business partners; BHex is prevented from stealing these resources from partners and partners is blocked from embezzlement of retail customers' assets by the underlying technology design.

## Bluehelix Open Protocol

In terms of system openness, BHex is also pioneer in the industry. The protocols linking custody and clearing platform, exchanges and virtual brokers are part of the whole ecosystem. For those partners with appropriate technical background, BHex will be opening to the protocol level, sharing source codes to featured partners, helping them forming their own competitive advantages.

## System Core Indicators

	Capacity	Performance	Delays
<b>Matching Engine</b>	500mm OrderBOOK	> 4million TPS	Realttime
<b>Order Processing</b>	Cluster Scale-out	30k/s per Host, Unlimited Cluster	99.9%<4ms
<b>Settlement</b>	Cluster Scale-out	10k/s per Host, Unlimited Cluster	99.9%<4ms
<b>Quotes Delay</b>	Cluster Scale-out	Realttime Market Quotes	99.9%<2ms
<b>Clearing</b>	Cluster Scale-out	Realttime Reconciliation, 30sec - 60sec	99.9%<1min
<b>Availability</b>	Cloud Computing Based	Online Time >=99.99%	Online Upgrading
<b>System RTO</b>	No Single Node For Whole System	Master/Slave Switch Time	RTO < 1min

## **High Performance & High Availability Sharding Technology**

In order to serve exponentially growing user basis, a scale-out scalability is crucial to the underlying structure. BHex tech team is formed by BAT level professionals, with rich experience in system and structure design. Consistency and transaction delay problems in blockchain environment are solved with the help of delicately designed sharding technology solutions. Whole system is quite robust even when some of the nodes are no longer functioning, which provides a solid foundation for future extendability.

## **System Security**

System security involves cybersecurity, user security, crypto asset security and company internal management. Layered architecture tackles cybersecurity issue, while SSL technology and risk management system are implemented to control risk for user security. BHex team has the most outstanding security experts, who design the whole security system together with outside advisors. The Bluehelix decentralized custody and clearing solutions further assist conquering crypto asset security issue. In terms of internal management, BHex team is equipped with top internal risk management system and company regulations, minimizing the likelihood of internal misbehaviors and misconducts.

## I Platform 9 Core Advantages

1. The security brought by decentralized asset custody and clearing
2. Fundamentally solves the credibility issue of existing exchange operations
3. Solves the dilemma between credibility of centralized platforms and performance of decentralized platforms
4. Reduces cost of token listing and associated asset risks
5. Solves liquidity segmentation problem by liquidity sharing among exchanges
6. Virtual broker model helps partners to convert user flow into cash income
7. Improves the profitability for exchange entrepreneurs
8. Optimizes trading costs and trading efficiency
9. Becomes the infrastructure for blockchain assets circulation and stimulates real applications

## I Profit Model

### **Exchange Income**

Receives 0.1% transaction fee from exchange users.

### **Virtual Broker Income**

Receives 10% of trading commissions from virtual broker partners.

### **Open Exchange Platform Income**

Receives 10% of trading commissions from exchange partners.

### **Globalization and Compliance**

BHex will be operating globally and fully compliant to local regulations and laws. BHex will also collaborate with local partners for potential fiat services, maximizing the Bluehelix custody and clearing technology advantages.

# I BHT Token

## Economic Model

BHT token is the ERC20 token issued by BHex, for supporting operations of BHex and Bluehelix custody and clearing ecosystem. BHT token holders enjoy following privileges:

- Receives 80% of the trading commissions from BHex exchange, open platform brokers and open platform SaaS exchanges proportional to BHT holdings
- Obtains the rights to use BHex virtual brokers and exchange SaaS service when depositing BHT as collaterals to the platform
- Participates into the Bluehelix custody and clearing association election when depositing BHT as collaterals to the platform, successful candidates enjoy proportional income from asset custody and clearing platform
- Exclusive rights to vote for custody and clearing association when depositing BHT as collaterals to the platform, successful voters enjoy proportional income from asset custody and clearing platform
- Being able to participate into platform operations including token listing voting and getting air-drop tokens
- Point card system for prepaying transaction fees
- Enjoys the potential value appreciation of BHT on secondary market
- The mechanism of BHT token on Bluehelix custody and clearing platform:
- The custody and clearing platform is developed and maintained primarily by BHex founding team for now. Since BHex has already received capital support from BHT token fund raising, there is no need for another separate token for custody and clearing platform.
- There is no need to create another token based on the mechanism of the custody and clearing platform. The key to the whole economic ecosystem is the mechanism of election and income allocation of the association. Theoretically any asset class with value, such as gold, silver, BTC or BHT token, could serve the purpose. Considering the asset locking period when participating into custody and clearing platform, it is preferred to choose an asset whose value is closely linked to custody and clearing platform operations.



The BHT token issued by BHex is selected for the custody and clearing platform entrance token, since BHex founding team initiated the whole platform design and development and team will also be responsible for maintenance and technical support in the near future. This decision also aligns with the long term interest of the whole ecosystem.

## Issuance Plan

The issue size is strictly 2.1 billion BHT token, which would never be increased in all circumstances. Allocation plan below:

Allocation	Percentage	Description & Usage	Locking & Vesting Mechanism
Institutional Investors	10%	Institutions private sales, Bluehelix association member recruiting; For product development	10% vested immediately after trading on secondary market. For the 2 years locking period version, rest vests quarterly and linearly. For the 6 months locking period version, rest vests monthly and linearly
Seed Retail Users Bonus	15%	Bonus for early stage seed retail users; For attracting retail users and marketing	No locking period and distribute to early retail users who bought transaction fee point card, as a gift
Investors Protection Fund	10%	For contingency and potential risks, to protect users and investors	Long term locked, vested out only when necessary
Angel Investors	10%	Distribute to angel investors	Vests yearly and linearly in a total period of 4 years
Team	20%	Allocate to founding team and operations team	Vests yearly and linearly in a total period of 4 years
Community Ecosystem	35%	Preallocate for BHex user community and Bluehelix open platform association and whole ecosystem	Locked for 4 years and vests no more than 1/4 each year

# I Team Introduction

## Founding Team



### **Ju, Jianhua**

*Founder & CEO*

Being a serial entrepreneur, Mr. Ju is the ex-CTO of Huobi from April 2014, where he built the core tech team for the company and led the trading system and core products development. The system built then supported Huobi to become the industry leader. Mr. Ju also led the technology development for innovative business lines including USD business, futures market, Caimao Securities and Huobi Pro, under the Huobi brand. Later in May 2017, Mr. Ju joined leading fintech company Xiaoying Technology, as the Vice President of Technology. Prior to that, Mr. Ju served as CTO for multiple leading IT firms including Damai.cn and YOKA, he also developed a Level2 securities trading system based on Shanghai Stock Exchange standards. Mr. Ju is an active contributor to the mainstream IT community, being the co-chairman of the global ArchSummit for 2 consecutive years and co-chairman for GIAC in 2018. Mr. Ju has rich experience in areas including fintech, blockchain, crypto asset, cyber security and startups.



### **Tang, Fulin**

*Director of Technology*

Fulin was the chief architect for leading fintech company Xiaoying Technology, where he was responsible for technology architecture, infrastructure and big data platform. Prior to that, Fulin was chief architect for leading mobile internet company Xueqiu, where he led the development for Xueqiu securities and market quote system. Before that, Fulin was on the Sina Weibo technology committee.



### **Jiang, Kailiang**

*Chief Blockchain Architect*

Kailiang was core developer for WeBank BaaS blockchain platform. Prior to that Kailiang led the Tencent QQ game back end development. Kailiang specializes in blockchain infrastructure development and distributed system architectures.



## **Xu, Ke**

### *Director of Platform Systems*

Ke was chief architect at Tencent and Baidu, specializing in high performance computing and concurrency. Ke was graduated from Tsinghua University.



## **Yan, Hui**

### *Director of Business Operations*

Hui was the executive and chief editor at largest IT community CSDN, where he was responsible for contents, products and operations. Hui was also the executive director at CTO Club and the founder of Ycpai, a leading community for IT entrepreneurs.



## **Cheng, Tianyu**

### *Director of Media and Public Relations*

Known as the “Niujiuojia”, Tianyu is a proactive and popular media commentator. Equipped with 18 years of IT media, community, consulting and public relations experience, Tianyu was chief editor at Chianbyte and public relations director at Qunar, a leading online travel platform in China.



## **Qi, Zongchao**

### *Director of Business Development*

Zongchao had extensive experience in steel and iron ore trading in primary market. He was Asian head for iron ore business at Mercuria Group; he was the chief manager in greater China area for iron ore business at Trafigura in Singapore. Zongchao was also the founder of XTecher, an innovative tech entrepreneur media serving millions of users. Zongchao held an BSc degree in computer science from University of Arizona.



## **Wang, Boli**

### *Director of Financial Products*

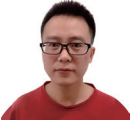
Boli was with the EFS cross asset structuring team in Barclays Capital in New York, where he specialized in exotic derivatives pricing and designing. Boli held a BSc degree from the Hong Kong University of Science and Technology and an MSc degree from Columbia University.



### **Bai, Yang**

#### *Director of Platform Operations*

Yang was a high yield bond trader, sitting on the fixed income trading floor in Societe Generale in New York. Yang held an BSc degree from Peking University and an MSc degree from Columbia University.



### **Hou, Junwei**

#### *Director of IT Operations*

Junwei is an expert in database management and IT operations. He was leading database management and IT operations team at Meituan and Bianlifeng. Prior to that, Junwei was senior DBA at Sina, and he was one of the core contributors in the Mysql community.

## **Advisory Team**



### **Chen, Chen**

#### *Exchange System Advisor*

Mr. Chen is the major contributor and designer of the equities and futures trading system for Shanghai Stock Exchange. Mr. Chen has more than 10 years of rich experience in system design and he is specialized in high performance and high availability system and architecture design. Mr. Chen graduated from Tsinghua University and held a master degree in financial systems engineering from UCL.



### **Fang, Xiaodun**

#### *Security Advisor*

Mr. Fang was the chief security architect at Baidu and built the Baidu security team. Mr. Fang was also the founder of Wuyun Platform and he is a proactive contributor in security area. Currently Mr. Fang's research interest is in blockchain security.



### **Wu, Qianhong**

#### *Cryptography Advisor*

Prof. Wu had ever been research director of URV in Spain, and is now a full professor of top university of China. His main research areas are public-key cryptography, blockchain and cryptocurrency, with over 30 invention patents and more than 130 peer-reviewed papers, including over 40 in top journals and conferences. He is a co-director of Youth Work Committee of Chinese Association for Cryptologic Research, and serve as in the Cryptographic Protocol Committee, the Cryptography Application Committee, the blockchain Expert Committee of CZE, a standing committee member of the Blockchain Committee of CCF.



## Yang, Fan

### *Clearing System Advisor*

Mr. Yang was core contributor in the design of EFT system for Guangzhou branch of the central bank of China in 1996. In 1998, Mr. Yang initiated the idea of E-wallet at Shanghai Pudong Development Bank. In 2013, Mr. Yang leaded the development for the China Life Insurance Company actuarial consulting system. Later in 2014, Mr. Yang served as the external expert at the central bank of China for the mobile payment security system.

## Angel Investors



### **Huobi**

Huobi is one of the largest crypto asset trading platforms and crypto asset financial service providers in the world.



### **OKCoin**

OKCoin is one of the largest crypto asset trading platforms and crypto asset financial service providers in the world.



### **Plum Ventures**

Plum Ventures was founded in 2014, and since then it was the most proactive and professional institution in tech sector. Currently it is managing over 1.2 billion RMB angel fund and 0.5 billion RMB growth fund.



### **Node Capital**

Node Capital is a venture capital focusing on blockchain industry; it is also the very first institutions who participated into the blockchain industry in the world.



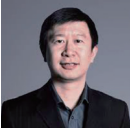
### **Yintai Investment & Finance**

Yintai Group was founded by Mr. Shen Guojun in 1997, and it is a giant conglomerate with multiple public listed companies and over 100 subsidiaries.



### **City Holdings**

City Holdings was founded in 2000, and it is a conglomerate focusing on real estate investment, merge and acquisition, etc.



### **Tang, Yue**

Mr. Tang Yue is very successful entrepreneur, being the founder of leading fintech company Xiaoying Technology. Prior to that, Mr. Tang was the founder of eLong, which is a Chinese mobile and online travel agency and listed on NASDAQ. Mr. Tang was also the founding partner of Blue Ridge Capital China. Mr. Tang has rich experience in capital market and had worked for Bulge Bracket firms including Merrill Lynch for multiple years in New York.



### **Yuan, Dawei**

Mr. Yuan Daiwei is the founder of Coldlar. Before that Mr. Yuan was co-founder of Huobi, and served as the academic committee member in Peking University Fintech Innovation Lab.



### **Sun, Zeyu**

Mr. Sun Zeyu is the founding partner for Genesis Capital and the co-founder at Coldlar.

# Platform Operations Timeline



## I Risk Disclosures and Disclaimer

You acknowledge and agree that there are numerous risks associated with purchasing BHT, holding BHT, and using BHT for participation in Bluehelix.

- **Uncertain Regulations and Enforcement Actions**

The regulatory status of BHT and distributed ledger technology is unclear or unsettled in many jurisdictions. It is impossible to predict how, when or whether regulatory agencies may apply existing regulations or create new regulations with respect to such technology and its applications, including BHT and/or Bluehelix. Regulatory actions could negatively impact BHT and/or Bluehelix in various ways. The Foundation (or its affiliates) may cease operations in a jurisdiction in the event that regulatory actions, or changes to law or regulation, make it illegal to operate in such jurisdiction, or commercially undesirable to obtain the necessary regulatory approval(s) to operate in such jurisdiction. After consulting with a wide range of legal advisors and continuous analysis of the development and legal structure of virtual currencies, the Foundation will apply a cautious approach towards the sale of BHT. Therefore, for the crowdsale, the Foundation may constantly adjust the sale strategy in order to avoid relevant legal risks as much as possible.

- **Inadequate disclosure of information**

As at the date hereof, the Bluehelix is still under development and its design concepts, consensus mechanisms, algorithms, codes, and other technical details and parameters may be constantly and frequently updated and changed. Although this white paper contains the most current information relating to the Bluehelix, it is not absolutely complete and may still be adjusted and updated by the team from time to time. The team has no ability and obligation to keep holders of BHT Token informed of every detail (including development progress and expected milestones) regarding the project to develop the Bluehelix, hence insufficient information disclosure is inevitable and reasonable.

- **Competitors**

It is possible that alternative networks could be established that utilize the same or similar code and protocol underlying BHT and/or Bluehelix and attempt to re- create similar facilities. Bluehelix may be required to compete with these alternative networks, which could negatively impact BHT and/or Bluehelix.



- **Failure to develop**

There is the risk that the development of Bluehelix will not be executed or implemented as planned, for a variety of reasons, including without limitation the event of a decline in the prices of any digital asset, virtual currency or BHT, unforeseen technical difficulties, and shortage of development funds for activities.

- **Loss of Talent**

The development of the Bluehelix depends on the continued co-operation of the existing technical team and expert consultants, who are highly knowledgeable and experienced in their respective sectors. The loss of any member may adversely affect the Bluehelix or its future development. Further, stability and cohesion within the team is critical to the overall development of the Bluehelix. There is the possibility that conflict within the team and/or departure of core personnel may occur, resulting in negative influence on the project in the future.

- **Security weaknesses**

Hackers or other malicious groups or organizations may attempt to interfere with BHT and/or Bluehelix in a variety of ways, including, but not limited to, malware attacks, denial of service attacks, consensus-based attacks, Sybil attacks, smurfing and spoofing. Furthermore, there is a risk that a third party or a member of the Foundation or its affiliates may intentionally or unintentionally introduce weaknesses into the core infrastructure of BHT and/or Bluehelix, which could negatively affect BHT and/or Bluehelix.

- **Other risks**

In addition to the aforementioned risks, there are other risks (as more particularly set out in the Terms and Conditions) associated with your purchase, holding and use of BHT, including those that the Foundation cannot anticipate. Such risks may further materialize as unanticipated variations or combinations of the aforementioned risks. You should conduct full due diligence on the Foundation, its affiliates and the Bluehelix team, as well as understand the overall framework and vision for Bluehelix prior to purchasing BHT.

## **| Contact BHex**

For investment and business partnership collaboration,  
please email at [bd@bhex.io](mailto:bd@bhex.io)