Pearl Wallet White Paper

Pearl -- The best EOS blockchain wallet in mobile.
（v1.0, Rico, Gearld 2017/12 updated）

Summary

Pearl is a mobile portal based on the EOS blockchain network. It includes Instant messaging, EOS wallet management, mobile payment, and distributed deployment for smart contract of DApp. It aims to build a super application on EOS and an entrance for DApp.

Nowadays, mobile apps are leading a big trend, there are over 3.2 billion mobile users over the world. These users together are composing a huge market, therefore, blockchain should not only live on the PC. It should lives on people's pockets so that anyone could use it anywhere, just like We're using Facebook and Twitter.
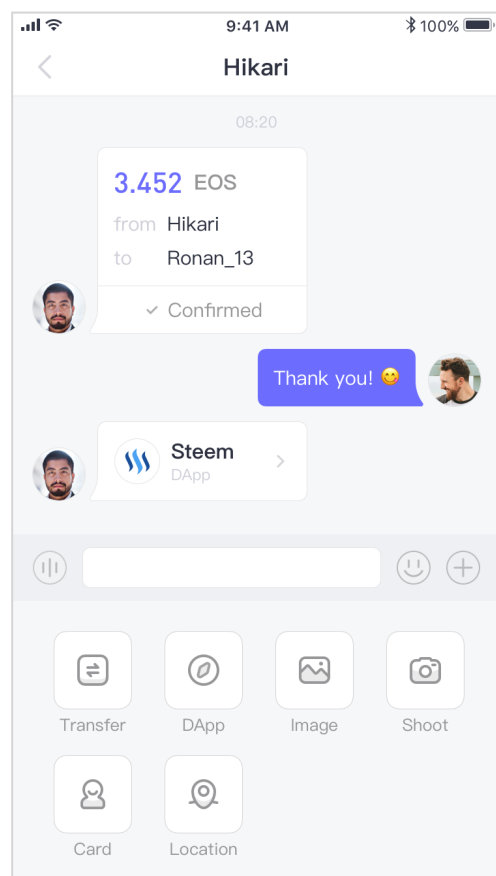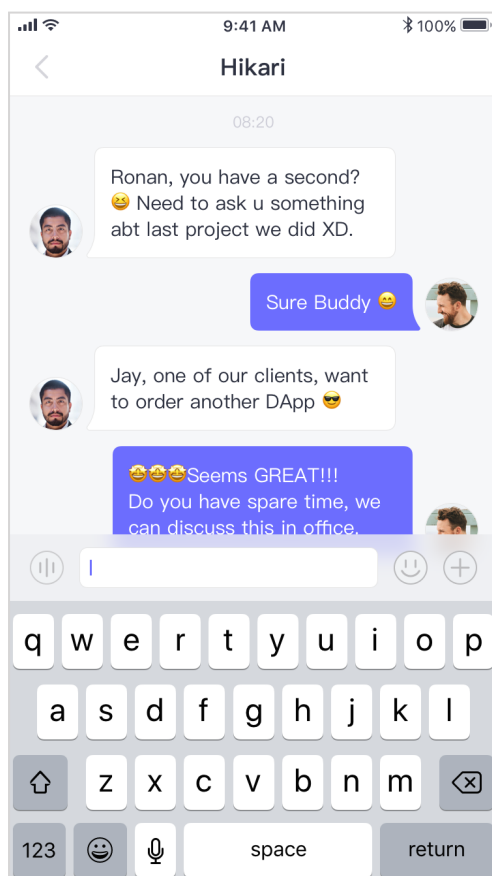
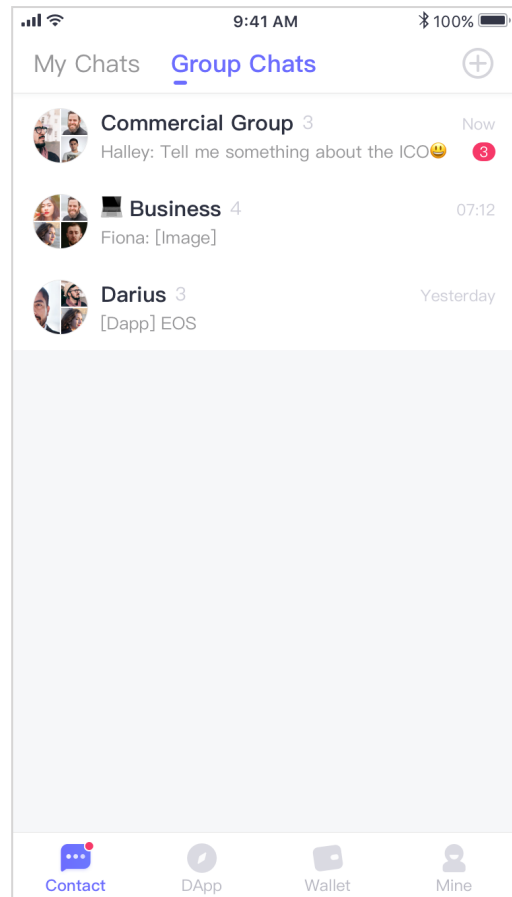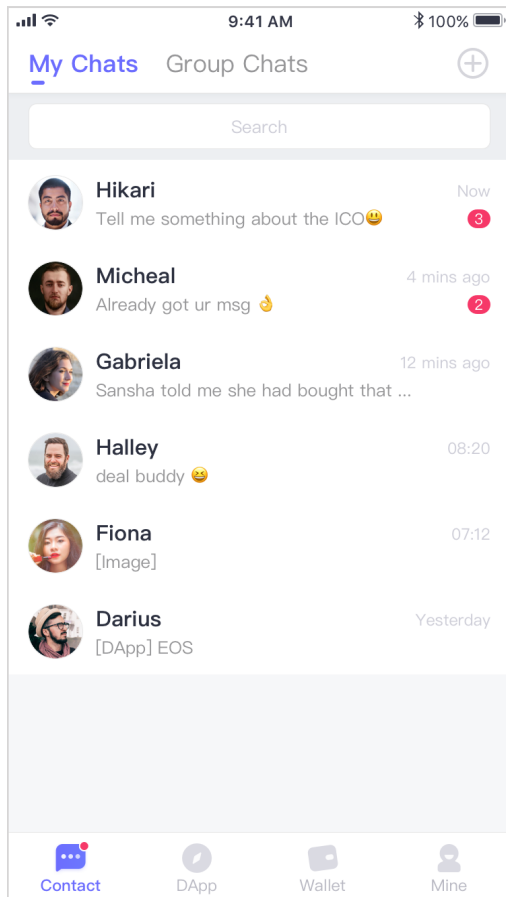# Table of Contents

Core features and advantages of Pearl

Instant Messaging

1.1 Chatting
Instant messaging is one of Pearl's core feature and killer feature. Pearl is a useful IM tool that allow you to send voice, text, images and even tokens to your friends. Pearl is also a DApp center, you can share your favorite DApp to your friends, you can also invite them to participate in a DApp game and play together.

Pearl also support group chatting, every user can create their own chat groups, add any users to the group. By sending DApp to the group members, you can even launch a vote or play game together. We will try our best to make the experience of IM even better than Telegram.

1.2 Data transport and communication mechanism

All Pearl messages are encrypted with HMAC algorithm. By transmitting with the network of EOS blockchain, the message can break through any constraint on network. The liberty of speech in some countries are growing badly, with these tech to ensure the privacy and security of the message is important.
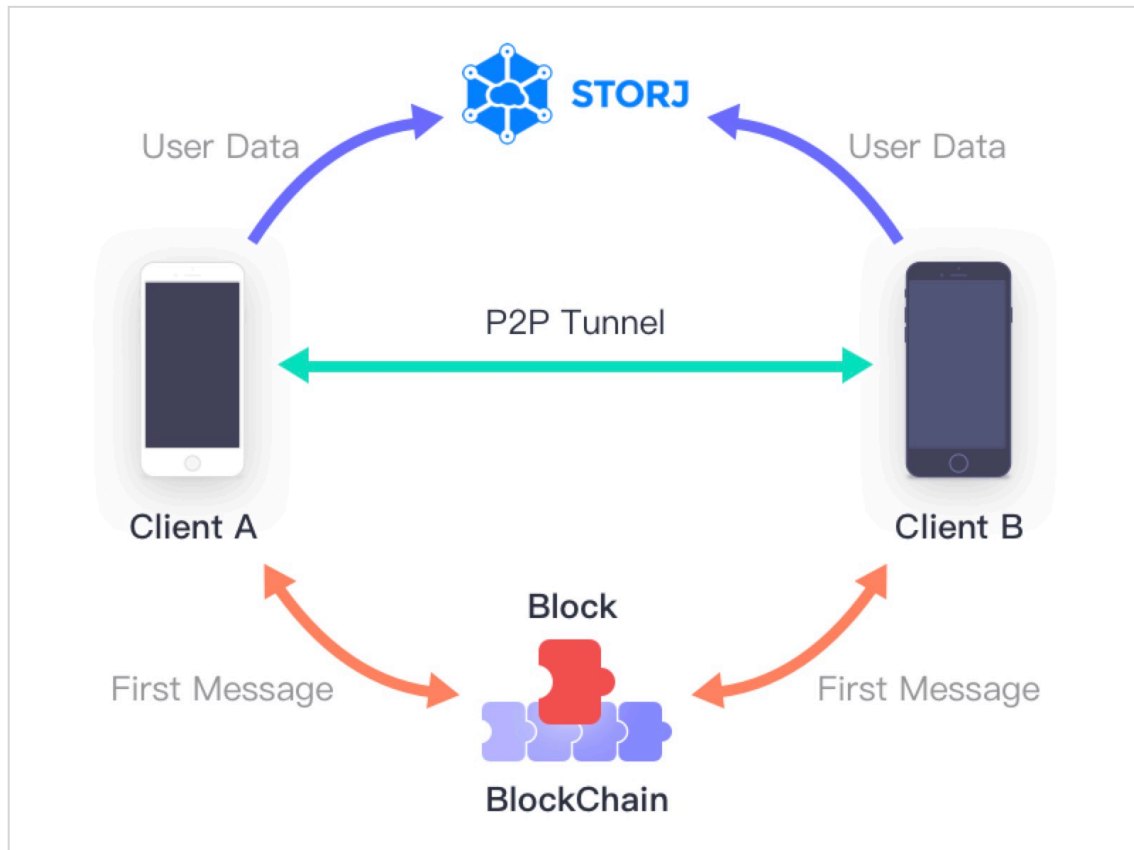
The communication mechanism of Pearl is similar to the lightning network.

To avoid problems like excessive power consumption, overheating and excessive cellular data consumption on mobile devices. We will implement a lightweight client of the EOS network without having to download the entire blockchain data of EOS.

At the same time, in order to reduce the delay and enhance the reliability of the message, when the first message of the user is sent successfully through the blockchain, the sender of the message will receive the network information of the receiver in the receipt of the message, and then they will directly establish a peer-to-peer Message channel, the following messages will be sent through this channel, thus effectively reducing the overuse blockchain. However, there is no way to store user's messages in the blockchain, we introduced Storj as our supplementary storage solution so that all user's messages are effectively stored and users can always delete any messages they don't need.

1.3 Storage of user data on blockchain

We also made improvements to cover the shortage of blockchain that can not store a large data. We will use Storj as a supplementary storage solution for the EOS blockchain to store the user's data. All the user's data is encrypted and stored on the cloud we build. Users can also close the cloud storage option.
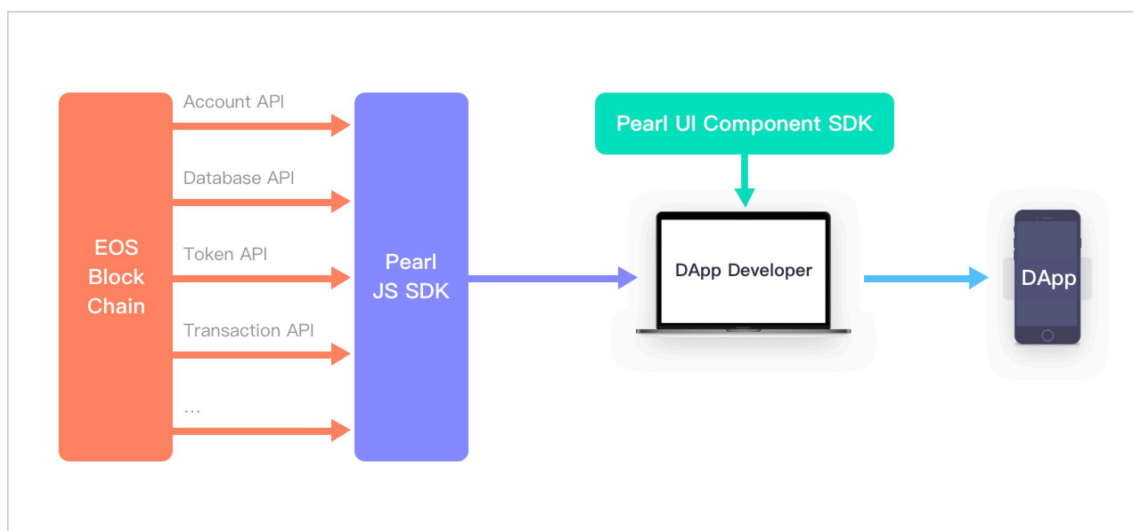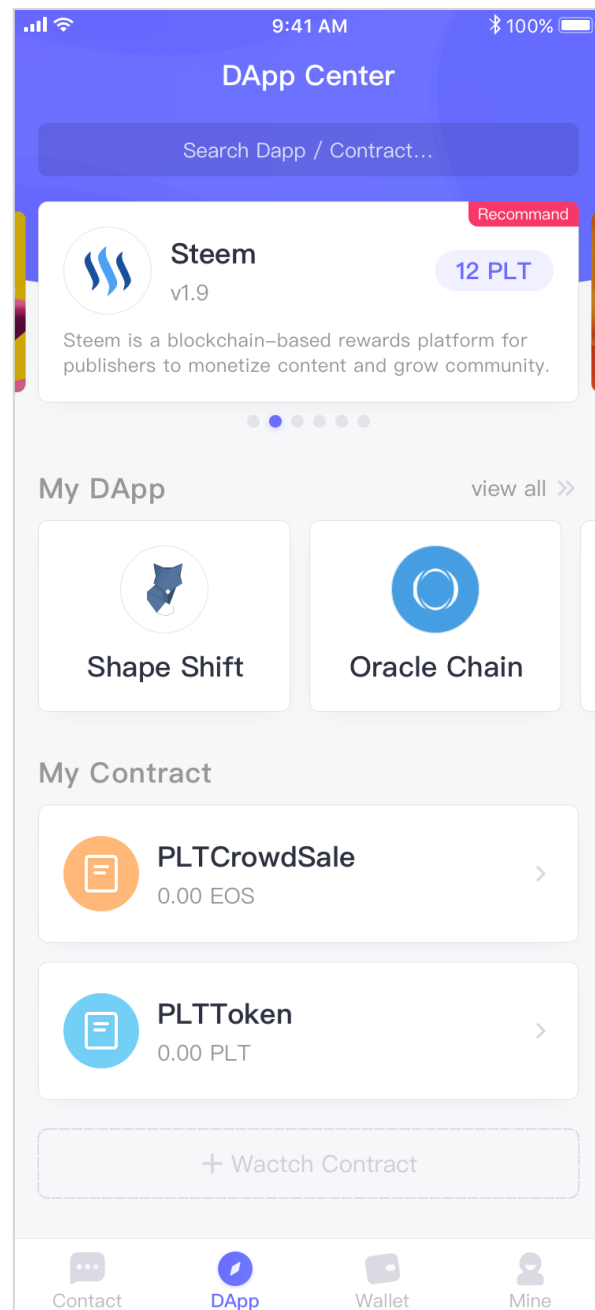

DApp Center

2.1 DApp Center

In Pearl, We'll build a blockchain App Center where blockchain developers can post or sell their apps to earn PLTs. PLT is a token Pearl.
We will release a simple and efficient SDK that will allow developers to develop DApp with blockchain features runs universally without having to know the complex knowledge of blockchain.

2.2 DApp Center Mobile SDK

Pearl will help developers to quickly and easily build blockchain mobile applications. With our rapid development framework and SDK, the DApp you developed can be easily released to PearlWallet's DApp center.

Our SDK provides a standard set of graphical components and encapsulates the basic blockchain interfaces, such as account information and block information. At the same time developers wouldn't need to care user's data storage, these will be done by Pearl. In Pearl's DApp Center you can find the latest and most interesting DApp, if you are a developer you can also develop a paid application with our SDK, publish and sell it at DApp Center, users can use PLT to subscribe or buy your app. Also, if you are a professional user, you can also deploy your own smart contract in DApp Center, or perform smart contract.

EOS Wallet

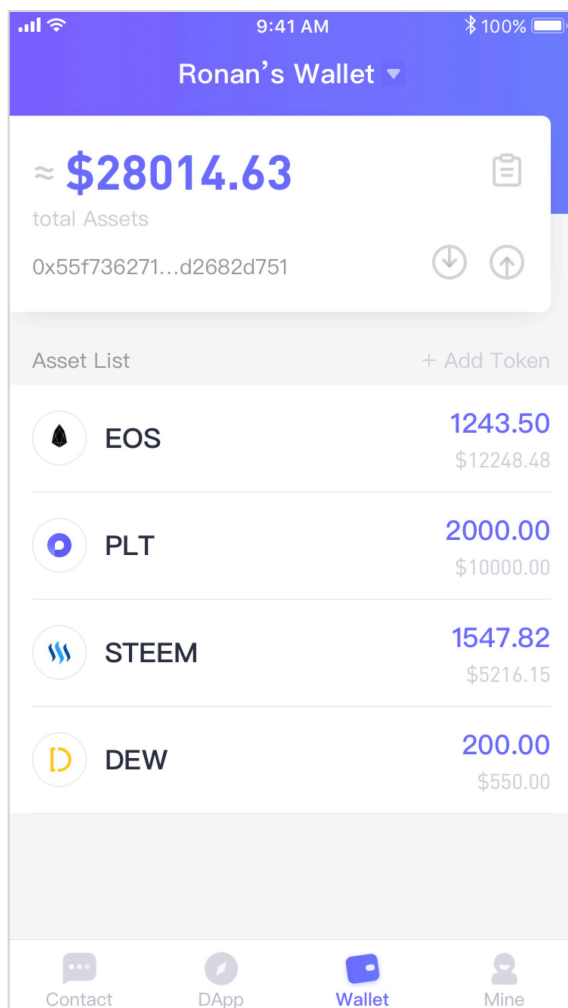### 3.1 Wallet and token management

Pearl is an EOS wallet, it will support token management for EOS network. At the same time we will access the decentralized exchange, users can exchange any EOS tokens through the wallet.

3.2 Payment

If users have other digital currencies in, we will convert to EOS in real time via the EOS cross-link agreement. We will also actively look for some offline business cooperation, increase the use of EOS tokens in life scenarios.

3.3 Token investment tracking

Using Pearl to manage you tokens, money and investing, Pearl will have direct access to decentralized exchanges through protocols to make it easier for users to trade their digital currencies. We will record one user's every transaction process of digital currency, such as buy and sell price, user can very easily track their investment status.

Comparison of Pearl and Status.im

In the Ethereum network there is a project called Status, which has many similarities with us, but based on the EOS network Pearl is more suitable for Instant Messaging than the Status.

Pearl's advantages:

1. EOS network can support high concurrency, so that it can carry IM tools that send messages frequently, as well as a large number of users trading requests, Ethereum, however, is suffering from network congestion, if not effectively improve the network throughput, it can not afford the requests take by IM.

2. Users of the EOS network do not need to consume Gas to take any action, Ethereum does. It is unacceptable to send a piece of message with high price to miner and fuel.

Differences between Pearl and Status:

There are some differences between Pearl and Status. Status focus on Instant Messaging, and Pearl want to become an EOS mobile application platform. We spend a lot of time to provide DApp developers with SDKs for adapting mobile phones and simplifying their development and deployment process, and if they deploy to our DApp Center we will also reward with PLT tokens.

The usage of PLT

In Pearl, PLT tokens will have many scenarios. such as:

1. Buy stickers in chat, orraise money in group chat

2. Send a small amount of reward to friend

3. Make a payment in DApp. When developers publish DApp plugged our SDK, they can pay with PLT.

4. EOS is a DApp operating system. When DApp reaches a very large number of times, it produces many low-quality DApps. We can vote with PLT tokens to ensure high-quality DApp access to our platform.

5. Pay for data storage and other consumption in Pearl

Roadmap

By now, our project has entered a stage of rapid development. The coding of product design and basic framework has been completed. After the main EOS network get online in 2018, we will also release a public test version of Pearl (currently we have in-house tested some features).

2017 Q4

2017 / 08	Team established
2017 / 09	EOS project research and evaluation
2017 / 10	Setup Pearl project, EOS network performance testing
2017 / 11	Pearl project main frame structure, product design
2017 / 12	JS SDK development based on EOS Dawn2.0
2017 / 12	ICO preparation

2018 Q1

2018 / 01	Open ICO
2018 / 02	PLT tokens open for trading
2018 / 03	Release of the private test version

2018 Q2

2018 / 05	Open source on Github
2018 / 06	Beta version released (dependent on the main EOS network release time)

2018 Q3

Product stability improvement
Final version released
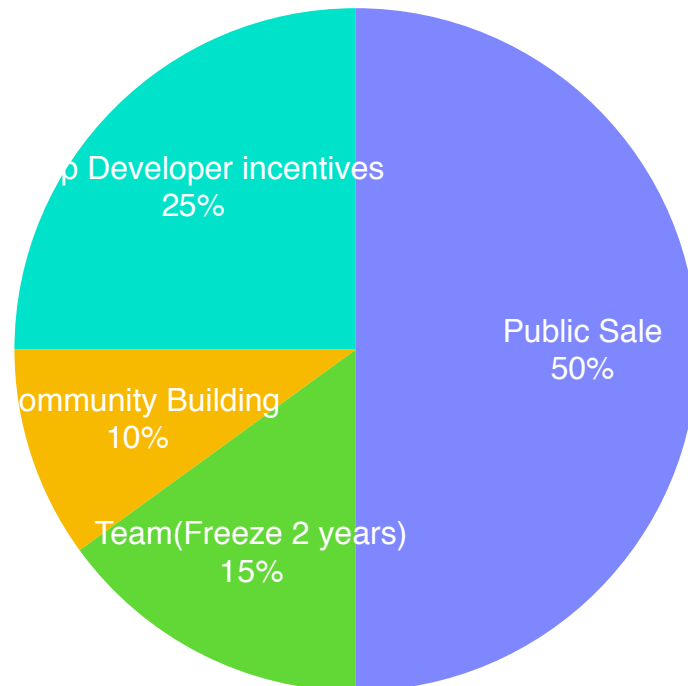DApp development tools improvement

2018 Q4

Performance improvement and product iteration

Token Distributed

1.Total Supply

1000000000 PLT

Legend: Public Sale, Team(Freeze 2 years), Community Building, DApp Developer incentives

DApp Developer incentives 25%
Public Sale 50%
Community Building 10%
Team(Freeze 2 years) 15%

How to participate:

1.ETH purchase:
According to the official website to send ETH to specify the address automatically convert PLT to the account

2. EOS or SNT purchase：
According to the official website to send EOS or SNT token to the specified address, within 48 hours will receive the PLT token.

(Note that please do not send the token directly from the exchange to the contract address. You can purchase it with a wallet such as Mist, Ethereum Wallet, MyEtherWallet, Metamask, imToken etc.)

3.Token trading：

After the ICO is over, the token will be open for trading.
We are actively contacting major exchanges including bitfinex, huobi.pro,
binance.com, etc.

ICO Opening Time：

2018 / 01 / 05 - 2018 / 02 / 05

Price：

Early Bird : 2018 / 01 / 05 — 2018 / 01 / 15
1ETH = 40000PLT

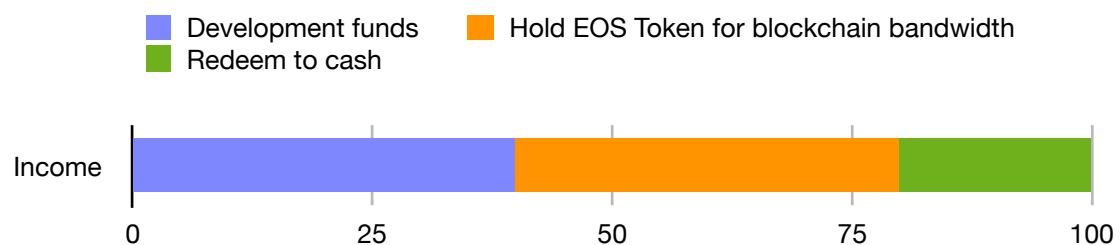Early Bird Stage 2 : 2018 / 01 / 15 — 2018 / 01 / 25
1ETH = 30000PLT

Public ICO : 2018 / 01 / 25 — 2018 / 02 / 05
1ETH = 20000PLT

(The purchase price of EOS is based on the exchange rate of ETH in real time.
The purchase of token other than EOS is not supported.)

HardCap： **20000 ETH**

ICO raised fund usage：

Development funds   Hold EOS Token for blockchain bandwidth
Redeem to cash

Team introduction

Rico: CEO
Full stack developers, years of experience in the development of blockchain, Pearl core developers, technical experts

Gearld: Co-founder 、PM
Product Manager, Designer, Mobile App Developer

Song Liu:
Full stack development engineer, front-end development expert

Daido Moriyama:
Blockchain development engineer, Ruby expert

Dorothy Smith:
Blockchain development engineer, mobile App development engineer

Xu Zhou:
Market manager