

# 2020 Ecological Construction Plan of NetCloth

NetCloth Network is not only a Blockchain Project, but the ecological construction plan of decentralization. We will issue our annual main line of ecological construction each year. In 2020, we plan to implement the construction of NetCloth ecosystem directed by the construction of NetCloth Chain infrastructure and APP ecosystem.

## Ecological Construction of Netcloth APP

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Website: <https://chat-app.netcloth.org>

NetCloth APP is the entrance of network which is the first ecological APP based on NetCloth network, developed by the NetCloth foundation. Step by step, in 2020, we will establish the fundamental function of full application scenarios based on instant messaging function. Based on the speed of upload and download brought by 5G and the trend of Mini programming of application, we hope that network users can use all the scenarios as long as downloading one application in the future. Following are the concrete approaches of implementation.

### 1. Instant Messaging Function

So far, the functions of basic encrypted one-to-one chat and group chat have already been finished and more fundamental functions which related to social intercourse will be developed in 2020.

### 2. Multi-currency Digital Asset Wallets

By ECC, NetCloth will generate account address which is compatible with mainstream blockchain account systems (eg. BTC, ETH, atom, etc.). When users log on the asset device, they can activate decentralized multi-currency wallet with just one button with the realization of the function of one account managing the multi-currency in the meanwhile.

### 3. Distributed Application Platform

So far, NetCloth has realized the first distributed application platform based on blockchain by

IPAL module. Starfish nodes can build the front end of the open application platform by Html 5, and bind with blockchain by IPAL declaration. Starfish nodes are able to choose autonomously the applications to launch with the much lower threshold of launching application than the traditional application platform.

App client device will open the entrance of application platform.

Traditional App Store	NetCloth Distributed App Platform
<ul style="list-style-type: none"> <li>Many limited statements, even overlord terms</li> <li>Face the risk of operation from operators</li> <li>Be weak to defend the external attack</li> <li>Hard to attract core users</li> </ul>	<ul style="list-style-type: none"> <li>Permission-less, no threshold</li> <li>Contents are fully customized by Service nodes</li> <li>Decentralized network without the risk of operators' credit</li> <li>IPAL, An efficient tools for searching core users</li> </ul>



## 4. Mini App

After kicking off the distributed application platform, mini apps could enter autonomously the distributed application platform of various starfish nodes. NetCloth APP will develop access components successively in order to facilitate the access of various mini apps to the application platform.

The first mini app related to cryptocurrency market will be launched followed by NetCloth Official node, stay tuned.

## 5. Data Storage

The second phase of the mainnet of NetCloth is called container which could be able to realize different kinds of storage functions (more details can be found in section 5.2 of white paper) . NetCloth app will synchronously update the mainchain and gradually update the data storage functions, such as chat records, files transmitted in instant messaging, storage files in devices and so on.

Achieved Functions	Under Development
<div>IM Module</div> <ul style="list-style-type: none"> <li>P2P Text Messages</li> <li>P2P Short Voice</li> <li>Send Photo/Emoji</li> <li>Group Chat</li> </ul>	<div>Cryptocurrency</div> <ul style="list-style-type: none"> <li>Multiple Cryptocurrency wallet</li> </ul>
<div>Distributed App Platform</div> <ul style="list-style-type: none"> <li>IPAL Module</li> <li>Alpha testnet</li> </ul>	<div>Mini App</div> <ul style="list-style-type: none"> <li>Mini App Portal</li> <li>Mini App Plugin</li> </ul>
	<div>Data Storage</div> <div>  Local Data Safe box          Distributed Files Storage       </div>

# Infrastructure of Public Blockchain

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## 1. Game Sidechain

Game sidechain will become the first one in ecology and there will be more sidechains marching different scenarios in reality.

As the expansion of the performance and capacity, the sidechain is mainly applied for ecological construction of NetCloth Network. Relying on the decentralized consensus of the mainchain, the sidechain can adopt the method of partial decentralization to greatly improve the transaction efficiency in order to adapt to large-scale and highly concurrent business applications.

Compared with accounting on the mainchain, the sidechain can reduce the transaction fees of the application as well as improve the transaction efficiency. At the same time, it can better isolate the business data and reduce the storage burden of the mainchain.

In order to enhance the safety of the sidechain, starting a sidechain need a verifier of the mainchain first. While the verifier of the sidechain on the duty of packing the side chain block, he should regularly store the block headers on the mainchain.

The asset interaction between the sidechain and the mainchain is realized by the smart contract on the mainchain. The Assets issued on the sidechain which is generated in proportion to NCH assets need to pledge NCH.