



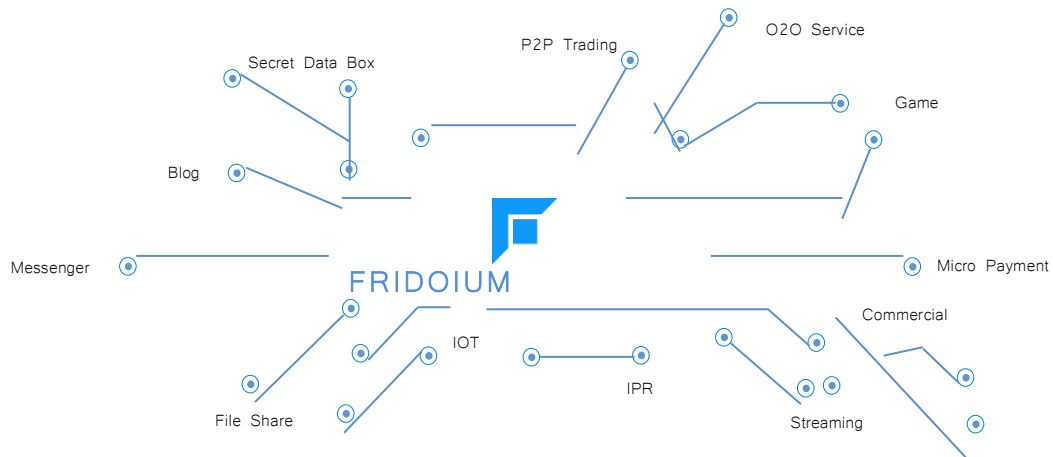
Yasunaga (Japan) JamesPark(Korea) HuangXiaoKun(China)

White Paper Ver 0.1

1. Introduction

Fridium Team consists of a businessman in IT with over 20 years of experience who has worked with the goal of realizing true freedom in internet activities, a security specialist and many talented developers. As such, we fully understand the infinite scalability of blockchain crypto- economy generated through a decentralized P2P network. We make the most of the advantages of blockchain and put our many ideas to use in addressing any weaknesses.

The project of the Fridium Team starts from two points.



1. A unique ecosystem of Fridium.

The Fridium block-Chain Ecosystem, developed with proprietary technology and know-how, helps develop various blockchain projects (dApps) for security services, financial services, IoT services and games by providing scalability and an innovative environment.

It will be developed using a easily understandable programming language go, js, python, ts, rust. For laymen users, we will support blockchain services that can be easily manipulated through the interface. Fridium Ecosystem will provide a transparent reward system to all members who create, participate in and use projects. Thousands and tens of thousands of node systems throughout the world will be operated in this way. This will provide the highest level of security and stability to all services that will be developed and operated from Fridium Ecosystem.

2. Platform services that use messenger based on blockchain.

The Fridium Team will cater to messenger services worldwide. Of the over 3.5 billion users of messengers (which will likely reach 5 billion by year 2020), those who are concerned about personal data security (e.g. personal information, chat history, data files and transport pathways), as well as those who do not wish their data to be used by a third party but enjoy anonymity will be our target customers. It will be a user-oriented messenger.

- Easy access through any device.
- The highest level of security offered, where chat history is protected through digital signing of each user. Even the development team cannot view it.
- Anonymity is guaranteed as users can access it with a simple click without having to register their personal data.
- An integrated payment system (reduction in transaction costs and simplified process)

The blockchain network of Fridium will set a new standard for secured messenger activities and provide a turning point for innovative services.

1- 1. Recognizing the issue

The number of internet users is increasing by each year, and is estimated to reach 5 billion by year 2020. But this also leads to security issues. According to IC3, a crime report center run by the FBI, there were a total of 298,728 cyber crime cases reported in 2016, with damages estimated to be around 1.3 trillion Won. But given that only 15% of cyber crimes are actually reported, the scale of actual loss incurred will be much greater.

As we live in a digital information society, massive amounts of data are generated every day and without our knowing, our personal data in various forms are handed over to service providers. The true intention of these service providers are hidden in the fine print that most users do not even read. Our geolocation, our membership status and our email are all scanned and acquired to offer better tailored content and advertisements.

Some may see this as normal corporate activity, but one cannot help but be concerned how much of our personal data are being used for corporate profit and to what degree our personal information is exposed.

1- 2. A new attempt

Fridium does not attempt to know who you are or what you are interested in. With Fridium messenger, you can conduct secret chats with friends. Even if you were to discuss confidential business strategies with your business partner, no one, not even those on the Fridium team, knows what is being discussed. You don't need cash or plastic credit cards to make small payments on automatic machines such as when you go in for automobile repair with a robot or get remotely diagnosed. A simple QR code read on the Fridium messenger is enough. The low fees make it all the more attractive.

Guarantee of safe yet free messenger activities! As we enter an era of IoT, the FDC Payment Services that can efficiently process small payments on over 25 billion devices will make your life more convenient. This is just the starting point for the Fridium team though. Fridium will continue to strive until full freedom is achieved on the internet for you.

2. Blockchain ANON

Most messenger apps such as Whatsapp, WeChat, Line and iMessage use an End-to-End encryption method (a process where the starting point of the network uses encryption and the destination point uses decryption) and a centralized system equipped with security services. But once the security services are broken down, all information becomes vulnerable to hackers or inside managers.

The user data generated on Fridium messenger (Anon) has a very powerful algorithm of the latest encryption method applied to the Fridium Block-Chain Ecosystem to offer primary encryption and save it directly onto the blockchain. The messages of the user are doubly protected with a randomly generated personal key. A third party that wishes to view the content of activities on messenger must first decrypt the algorithm of the Fridium Block-Chain Ecosystem and all personal keys on the message blocks at the same time. To completely decrypt the Fridium Block-Chain Ecosystem, a super computer would have to be applied for hundreds of years.

2- 1. Key characteristics of ANON

■ Blockchain messenger

- All information (data) are completely encrypted and directly saved onto blockchain.
- All messages are completely encrypted from the sender's device and decrypted on the receiver's end. A third party (including the developer) cannot access the messages.
- It is not controlled by the developer team or third party.
- Messages are not saved on the device but directly loaded from blockchain.
- No one, including the development team, can block or restrict the account in use.
- The program code for blockchain or messenger is open. (An independent audit of the code is possible.)
- Text, file (including large sizes), voice messages, voice calls and video calls

■ Users can choose to remain anonymous or let their name be known.

- Data to identify the user are not needed. (Complete anonymity is supported.)
- The user's address book, location or IP address are not accessed.
- A real name-based system is supported for fair and accurate information providers.
- A minimum amount of data is requested to be entered for account management (maintenance of continuity).

■ Compatible with all devices

- No need for separate installation.
- Can be accessed using the latest web browser on all operating systems or mobile devices.
- A separate app is provided for users who are not familiar with using a web browser. (IOS or Android)

■ An independent messenger system for groups (corporations)

- System manuals and API are provided
- Easy-Setup is supported through interface manipulation
- Supports efficient customer management by operating an AI Chat-Bot.
- Unique skin designs and features can be applied.

2- 2. Structure of the system

Anon is a decentralized algorithm of PreCoS(Pre- Consent of Stake).

Through PreCoS(Pre- Consent of Stake), all events generated newly in each second are promptly and accurately processed according to a pre- consent method. In addition, to overcome the shortcomings of most blockchain messengers that only support transmission of texts, a multi- block data base system is established to support large size files and videos.

All blockchains of Anon are connected by the client through the HTTPS protocol (encryption at each end) and a specific API is used to transmit the data in a JSON method. This is done by the entire node.

■ There are three types of nodes.

- Consent Node : Event process orders and data storage through pre- consent.
- Premier Master Node : Event processing and saving of data
- API Node : Lightweight API node for simple event processing.

■ The entire node uses the following criteria. HTTPS Protocol through P2P Schema is used for mutual access.

- OS Linux server (Ubuntu or CentOS)
- A program server using Node.JS
- A data base server that saves blockchain.

■ The client uses the following technologies.

- Web App: A web application program for the latest browser.
- HTML5, CSS, Angular.JS- Program language and framework for the web
- Use of all nodes through the API protocol.

Web App: Web App refers to a system where the same content can be viewed on either desktops or mobile devices, regardless of the type of device.

2- 2. Development plan for ANON

■ Messenger

- Support encrypted text, emoticons and images.
- Chat content can be searched.
- Notification for new messages
- Built- in address book (search, add, delete, block, invite friends and set up a nickname). Profile set- up
- Group chats
- Bookmark chat partners or groups
- Support voice or video calls.
- Send secret messages (e.g. Messages that require a code set by the sender, messages that can only be viewed after authentication)
- Send large files (video files or large data files)
- Lock specific chat history

(Although the chat records encrypted and stored on blockchain are not deleted, an order can be placed so that the content of all chats with the partner can no longer be viewed by the sender or

- receiver after a certain amount of time has passed.)
- Option for voice entry or voice message to text feature. (Voice messages sent by the other party can be heard as voice, or can be read in text format.)

■ FDC(Fridium coin) wallet

- FDC storage and transactions.
- Search transaction history and details.
- Re- verification of all transaction parties before sending an event.
- Safe transactions through OTP authentication.

■ Programs using messenger

- Safe Data Box: An algorithm is used to divide one piece of data into multiple parts to have them saved separately on numerous nodes. This allows for safe storage of personal or confidential data. Data can be restored with the user's passcode and OTP key entry.
- Blog & Free Commercial(a blog that supports E- commerce) : A blog system that supports transaction systems and thus goes beyond serving as an informative blog. Using an "open transaction" mark, products can be registered and traded. Creative works by the poster will be offered an IRR protection system by default.
- File- Share & Decentralized Streaming(p2p sharing of files and decentralized streaming): Sharing of computer programs, multimedia (audio or video) and various documents can be shared. Numerous networks can view the shared data in real time, thanks to the Meta- Hash algorithm.
- In addition, artificial intelligence CAHT- BOT services for corporate users, blockchain game services that do not require a main server and a smart home synchronization services that allows the registration of a multiple security code to manage homes are in the works.

3. FDC Payment System

3- 1. Advantages of distributed ledger technology; The average transmission speed of cryptocurrency The distributed ledger technology used in Bitcoin and blockchain resolves various issues that occur in traditional payment methods (double payment, unauthorized usage), ushering in a change in the IT and financial services paradigm.

The advantages of blockchain distributed ledger technology are as follows.

- Distributed computing structure: Using distributed computer power, an efficient system is operated (30% cost saving compared to centralized management)
- Prevention of counterfeiting: Data are interlinked in a chain structure with the data before and after. This makes it impossible to doctor the data.
- Transparent tracking: All events can be tracked from the beginning throughout the pathway.
- Easy to make small payments: An essential payment system in an era of IoT where over 25 billion devices are interconnected.
- Scalability: Various services can be built upon the system, once established.

FDC Payment System was designed to process new transaction events each second using a pre- consent method. By 2019, it aims to process 20,000 cases of transaction data per second.

All dApps operated by the Fridium Ecosystem use FDC for providing services and transactions.

Node operators issue new coins in accordance with the rules of Fridium Reward. This is the basis upon which a stable ecosystem is created. Users are offered stable services and generate traffic through their use of messenger and blogs. Through such user activity, they can gain coins.

3- 2. About FDC(Fridium Coin)

- Coin Name : Fridium Coin (FDC)
- Total Supply : 150,000,000
- Algorithm : Keccak512 + PreCoS(Pre- Consent of Stake)
- Average transmission speed: 1 second
- Program Source : Open Source(GNU GPLv3)

Details of the coin

- ICO (40%) 60,000,000
- Reward (40%) 60,000,000
- Team (10%) 15,000,000 (2 Years Hold)
- Advisor (5%) 7,500,000 (1 Year Hold)
- Marketing (5%) 7,500,000

Once Fridium Coin 150 Million FDC are issued, it will no longer be issued. FDC transactions can start at a minimum value of 0.00000001, and the transaction fees are applied in accordance with the number of transactions.

(Details on the transaction system, including transaction fees will be clearly marked in the next version whitepaper.)

ICO will sell a total of 60,000,000 FDC. The unsold portion of FDC will be used for rewards. Through the Reward System, new coins are issued. Once the quantity of the rewards initially set is exhausted, the FDC acquired from content providers and FDC transaction fees will be applied towards those used for the reward.

(Details on the Reward System will be presented in the next version white paper.)

The amount held by the Fridium team will be blocked from being traded for two years. After the two years, they will be used for the team's reward, and discovery of and support for dApp development teams. By making it known the wallet addresses for the coins held by the team, transparency is guaranteed.

The amount held by the Advisor is blocked from being traded for one year. After this period, it can be traded. Advisor category will consist of donors who help with presenting the legal foundation of Fridium and promotion of its brand. Coins allocated for marketing will be paid out as compensation for talent donation during the period of bounty activities, and development and marketing of Fridium. The address of the wallet will be publicized to guarantee transparency.

3- 3. Fund raising to continue with the project (pre- ICO and ICO campaign)

Participation in the ICO is possible through trading of ETH or BTC. (Participation via wire transfers for only private sales is possible.)

Participation in investment can be done via <https://ico.fridium.org>.

ICO will take place in a total of four stages: Private Sale, Pre- Sale, ICO 1st Round, and ICO final Round.

The timeline for fund raising in all stages, excluding private sales will be made public on the website. If you subscribe to the newsletter, you can be among the first to be updated via email on notices regarding the fund raising.

- Early Backer(Private Sale)
 - Period: August 25, 2018 ~ Until sale is completed
 - Quantity : 7,000,000 FDC
 - Discount rate : 70%
 - Investment amount : Approximately 2,000,000 USD
 - Based on a Soft Cap, the minimum capital needed for stable development.
 - Inquiries about the Private Sale can be made through <https://ico.fridium.org>. When the sale is completed, a notice will be made on the website.
- Pre- Sale
 - Period: To be posted on the website <https://ico.fridium.org>
 - Quantity : 21,000,000 FDC
 - Discount rate : 50%
 - Investment amount: Approximately 12,000,000 USD
 - Minimum investment: 0.35 BTC / 10 ETH
- ICO First Round

- Period : To be posted on the website <https://ico.fridium.org>
- Quantity : 20,000,000 FDC
- Discount rate: 30%
- Investment amount: Approximately 15,000,000 USD
- Minimum investment: 0.07 BTC / 2 ETH

■ ICO Final Round

- Period : To be posted on the website <https://ico.fridium.org>
- Quantity : 12,000,000 FDC
- Discount rate : 20%
- Investment amount: Approximately 10,000,000 USD
- Minimum investment: 0.035 BTC / 1 ETH

About the fund raising: The Bounty policy

- All members of the website are provided with a unique URL
- For new members who take part through URL promotional campaigns on social media, 5% of the investment made will be counted towards Bounty Bonus points.
- Points can be viewed in real time on the dash board after logging into the website.

Donation Bounty policy

- Translation of the website and white paper
- Social media activities
- Reporting of bugs and suggestions.
- Translation of blog posts and PR activities

3- 4. Project budgeting and budget execution

All funds raised through the ICO will be used for the development, maintenance, operation and marketing of the Fridium Ecosystem for the ultimate success of the Fridium project.

Soft Cap : 2,000,000 USD (approximately 300 BTC)

Hard Cap : 35,000,000 USD (approximately 4500 BTC)

Soft Cap will be used to establish the essential infrastructure needed to develop the first dApp of the Fridium Ecosystem, Anon(Messenger). If funds raised exceed the target of the Soft Cap, the excess will be used to improve the overall ecosystem and speed up the development of dApp.

Fund allocation plan

- Development(40%) : Renting of office space, utilities, salary, technological equipment, software licenses.
- Infrastructure(30%) : Server and security equipment, securing of the bandwidth, security consulting.
- Marketing and partnership (30%) : Advertisements, online and offline promotion to increase the participants in the ecosystem and promote partnerships

4. Development plan (Roadmap)

Q4 2018

- Established Fridium Japan head office
 - Market research, project planning, block chain DB design and programming
 - Homepage and technical white paper (1st copy) issue
 - FDC (Fridium Coin) Private Sale
 - Start construction of Fridium ecosystem TestNet

Q1 2019

- Completion of Fridium EcoSystem TestNet

- FDC payment system beta release, wallet service, payment system explorer implementation
- ANON Messenger Beta Test

Q2 2019

- Integration of FDC payment system with ANON Messenger
- FDC (Fridium Coin) Public Sale
- Upgrade ANON Messenger function

Q3 2019

- Full version release of ANON Messenger
- Establishment of additional service construction plan

5. Notices

Participation in the Fridium ICO is not just grabbing an investment opportunity but purchasing coins for the trading of products and services on dApp provided in the Fridium ecosystem. As such, information on neither this whitepaper nor the Fridium ("website") - <http://Fridium.io> shall be interpreted as investment advice. We recommend that ICO participants, before acting on what is written in the white paper or website, to seek legal and financial consultation.

ICO participants shall recognize the risks associated with the purchase of FDC, agree to the purchase, reception, sale and holding of FDC and either explicitly or implicitly, receive them at 'current price' without any guarantee. It is entirely the responsibility of the ICO participants to verify whether they can purchase FDC and sell them to another buyer in their area, in accordance with the law which has jurisdiction of the participant's area. Participants must also prove that they are adults by law and guarantee that they shall observe the law that governs the area in which they live. Citizens or residents of the U.S., china or Korea or their agents where participation in ICO is prohibited are prohibited from taking part in the ICO of Fridium. In addition, the buyer, receiver, seller or holder of FDC bears the full responsibility of determining or assessing the tax impact associated with the purchase or sale of FDC or participation of Fridium ICO in their jurisdiction. This white paper does not regulate the purchase or sale of FDC that meet the criteria listed on the website.

Fridium does not mention or guarantee in any form the accuracy, reliability or completeness of any information in this white paper or on its website.

Fridium and its founder, members, employees, advisors and partners shall be immune from bearing the responsibility for any direct or indirect, incidental or subsequent losses or damage, including the loss of profits or the loss of data, resulting from the use or abuse of information in this white paper or on the website. Some of the forecasts or future plans mentioned in this white paper or on the website carries uncertainty and risks and therefore may differ in reality. No information listed in this white paper or the website did not undergo a review or receive approval from a regulatory body. Such measures have not been taken in accordance with the jurisdiction's law or regulations, nor are there any plans to do so. Some countries do not have a clear regulation on cryptocurrency. Legislative or regulatory bodies of such countries may apply existing regulations to FDC, in which case it might work against FDC.

Fridium

- Website
<https://fridium.org>
- ICO website
<https://ico.fridium.org>