

# UnUniFi

~Decentralized cross-chain NFT marketplace/ platform with auto DeFi yield~

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## Abstract

UnUniFi Protocol is a decentralized finance(DeFi) platform that provides tools and features that allow users to create a collateralized deposit position, to synthesize a number of assets pegged to legal currency using NFTs and cryptocurrencies as collateral. As long as your NFTs are pledged as collateral, some rewards will come in on their own through the automatic DeFi of the issued stablecoins. The mission is “Give all NFTs the opportunity to DeFi”. The UnUniFi Protocol aims to expand the size of the NFT market by introducing a new investment approach to the existing crypto asset market, and the blockchain itself aims to be decentralized based on principles.

## 1. Introduction

### 1.1 Problems faced by NFT

Once regarded as a fad (for some, it still is), NFTs, digital assets that depict real-world objects, are becoming increasingly popular within and outside the crypto world.

But with large amounts of capital locked into illiquid NFTs, more people are looking for ways to unlock liquidity without selling their NFTs.

### 1.2 Problems faced by stablecoins designed to achieve the current stable price

A stablecoin is a cryptocurrency token which has its value at a 1:1 ratio; pegged to a stable asset.

Usually, they are pegged to an asset such as gold or a fiat currency like the US dollar. The fundamental concept of a stablecoin is to hold the stability of its pegged value while maintaining its reputation as a cryptocurrency. It holds the best aspects of the cryptocurrency market but leaves the volatility behind.

There are three main types of stablecoins designed to achieve stable prices on the blockchain: (i) fiat-backed stablecoins, (ii) crypto-backed stablecoins which are backed by cryptocurrencies such as ETH, and (iii) non-collateralized stablecoins. Many legal fiat-backed stablecoins are coming to market, but they have some problems. USDT, issued by the U.S. company Tether, is a typical example of a legal tender-backed stablecoin, but there is a risk that the issuing company may misuse the assets (such as dollars) that serve as collateral. In addition, fiat-backed stablecoins are susceptible to regulation by various countries. Non-collateralized stablecoins will only work if the demand for stablecoins increases in the long term. The most reasonably likely to scale at this point are crypto-backed stablecoins.

### 1.3 The rise of NFT + Decentralized Finance(DeFi)

DeFi is short for “Decentralized Finance”, a generalized umbrella term used to describe a variety of cryptocurrency and blockchain-based financial applications geared towards disrupting legacy financial institutions. DeFi is not reliant on central financial intermediaries such as brokerages,

exchanges, or banks to offer users access to traditional financial instruments, and instead utilizes smart contract-based applications that are built on top of existing blockchain-based platforms. With regard to DeFi, there is a growing movement to make finance smoother with ideas such as not only exchanging tokens, but also realizing existing financial products (such as corporate stocks) on the blockchain.

“NFTs are undoubtedly becoming a gateway into the DeFi space for mainstream audiences,” said Lauren Stephanian, a principal at Pantera Capital. “As new collectors become more active in the NFT market, they’ll seek new ways to leverage their assets through DeFi mechanisms like collateralized lending, fractionalized assets, staking and much more.”

## **2. Automatic NFT Lending Service on UnUniFi Protocol**

UnUniFi Protocol is a decentralized finance(DeFi) platform that provides tools and features that allow users to create a collateralized deposit position, to synthesize a number of assets pegged to legal currency using NFTs and cryptocurrencies as collateral. And as long as your NFTs are pledged as collateral, some rewards will come in on their own through the automatic DeFi of the issued stablecoins.

Users will no longer have to deal with the traditional problem of "holding NFTs with high market capitalization but no liquidity, so all you can do is just aim for capital gains after the price rises. The UnUniFi Protocol aims to expand the size of the NFT market by introducing a new investment approach to the existing crypto asset market, and the blockchain itself aims to be decentralized based on principles.

## **3. What is JPU, EEU, USU?**

JPU, EEU or USU is a digital asset drawn from the UnUniFi Protocol on Cosmos Network. The price of JPU, EEU or USU are nearly equal to that of JPY, EUR, or USD. A user can supply NFTs and cryptocurrencies to UnUniFi Protocol, borrow JPU, EEU or USU, and with leveraging those stablecoins, UnUniFi automatically operates DeFi and benefits its users. Once the JPU, EEU or USU is repaid to the UnUniFi Protocol, the user regains full access to their supplied NFTs and cryptocurrencies.

## **4. What is Cosmos Network?**

Cosmos is a network of independent parallel blockchains that are each powered by classical BFT consensus algorithms like Tendermint 1.

The first blockchain in this network will be the Cosmos Hub. The Cosmos Hub connects to many other blockchains (or zones) via a novel inter-blockchain communication protocol. The Cosmos Hub tracks numerous token types and keeps record of the total number of tokens in each connected zone. Tokens can be transferred from one zone to another securely and quickly without the need for a liquid exchange between zones, because all inter-zone coin transfers go through the Cosmos Hub. This architecture solves many problems that the blockchain space faces today, such as application interoperability, scalability, and seamless upgradability. For example, zones derived from Bitcoin, Go-Ethereum, CryptoNote, ZCash, or any blockchain system can be plugged into the Cosmos Hub. These zones allow Cosmos to scale infinitely to meet global transaction demand. Zones are also a great fit for a distributed exchange, which will be supported as well.

Cosmos is not just a single distributed ledger, and the Cosmos Hub isn't a walled garden or the center of its universe. Cosmos Communities are designing a protocol for an open network of distributed ledgers that can serve as a new foundation for future financial systems, based on principles of cryptography, sound economics, consensus theory, transparency, and accountability.

## **5. How to stable JPU, EEU, USU**

※The following is an only description of JPU, but EEU and USU is also issued on the same protocol, so the mechanism is the same.

There is nothing in the JPU digital asset design that in and of itself guarantees trading in a market around 1 JPY, or in a stable range. The price and volatility of a market is a function of the ratio of supply and demand for an asset in that market; the JPU asset design can influence the price in the market by adjusting the ratio of supply and demand for that asset, but only indirectly.

JPU stability in markets is not a strictly necessary condition for a moderate level of success in terms of market engagement. Indeed, there are assets on the market today with supposed stability mechanisms whose price action is anything but stable, yet still drive high levels of engagement. Endeavoring for a specific JPU price and volatility level are not themselves a goal, they are a means. Using the OKR framework for project goal setting, an objective of the JPU asset may be to be the most used “stable asset” in the crypto industry. To achieve that level of usage and growth, minimizing JPU price volatility and deviation from ¥1 are arguably the most important key results to measure. It’s a subtle but useful point, that while JPU stability around ¥1 is likely an important part of its success, it is not strictly necessary. The price and stability of JPU or EEU does not affect your ability to repay the principal you borrow on the UnUniFi Protocol. This is because your principal is denominated in JPU and not in any other asset. For example, if you borrow ¥100 from the supplied BTC and no borrowing APY is set, you will be able to repay ¥100 and have full access to the supplied BTC, even if JPU is trading at ¥0.50 or ¥1.50. The price of JPU will be affected if there is a surplus of JPU to be raised from the valued borrowed APY, if you sell the borrowed JPU (effectively shorting it), or if you buy JPU with other assets (and are now effectively long the asset). Usage makes JPU price stability an important key result for JPU growth. Users who borrowed JPU will be more likely to sell it for what they need, with less risk, for a longer period of time if they are confident that when they buy it back to repay it, the unit price will be about the same as when they sold it. They will be more likely to sell JPU for a longer period of time. Similarly, sourcing JPU as inventory for some profit-generating strategy (purchasing liquidate assets at auction, DeFi yield staking, etc) becomes more appealing as the user’s belief in the long term stability of JPU price increases.

#### JPU Lending Auction Arbitrage:

JPU lending’s system assumes JPU is worth ¥1.00 insofar as its ability to purchase liquidated assets at auction at a rate of 1 JPU equals ¥1.00 of liquidated assets. Example, if ¥100.00 of BTC is up for auction, determined by Chainlink Price Oracle reference feeds, then you can purchase the entire ¥100.00 BTC lot for 100 JPU, whether you purchased that JPU at market for ¥0.50 or ¥1.50. This feature presents a price arbitrage opportunity for any JPU valued at less than ¥1.00.

There are a number of factors which contribute to asset flows in a market. For the JPU digital asset here are a few categories:

#### Endogenous Variables:

**Borrow APY:** Borrow APY is the annualized rate at which a user must pay on their borrowed JPU and can be adjusted per asset. We might expect that as Borrow APY for a given asset increases, all else being equal, marginal propensity to borrow JPU from that asset will decrease, thereby increasing demand to source JPU.

**JPU Savings Rate:** JPU savings rate is the annualized rate at which JPU holders are compensated for sourcing and holding JPU. We might expect that as JPU Savings Rate increases, all else being equal, marginal propensity to source JPU should increase.

**GUU Incentives:** GUU incentives are the amount of GUU assets compensated to users who borrow JPU with a given asset. We might expect that as GUU Incentives increase for a given asset, all else being equal, the marginal propensity to borrow JPU will increase, thereby increasing supply onto a given market.

Exogenous Variables:

**JPU Downstream Demand:** JPU downstream demand is any demand source which compensates JPU holders for taking a specific action. We might expect that as JPU downstream demand increases, all else being equal, the marginal propensity to source JPU should increase.

**JPU Speculative Demand:** JPU speculative demand is the set of decisions made by JPU market participants to place bets on specific JPU prices, potentially at a specific time. For a given JPU price and time, we might expect that as JPU speculative demand increases, all else being equal, the volatility about that price decreases.

## 6. How does it work for the NFTs collateral liquidation

In the issuance of synthetic assets using CDP, settlement auctions occur when the value of the collateral assets declines. In other words, the collateral is put up for auction and bid on by bidders. Based on the above mechanisms (the same as MakerDAO), the following mechanisms will be introduced to realize of “NFTs collateral”.

Instead of getting prices in pricefeed, auction pre-bid prices, bid prices, and cancellations of those bids become price change information.

1. When users create CDP with NFTs as collateral, they decide how much they want to bid during the auction at the time of liquidation and enter it in the UI.
2. Bidding is done all the time.
3. When the base currency (ex. BTC) of the limit price (ex. how many BTC do you want to buy that NFT for, using BTC) crashes, liquidation occurs.
4. Either the second highest bidder or the seller in the auction buys NFTs in the base currency to complete the clearing.  
※ If the seller does not want to lose the NFT with a time limit, he/she can buy it back at a higher price than the auction's existing maximum price.

## 7. Use case

As long as users pledge NFTs to UnUniFi, the rewards will come in on their own through the automatic operation of the issued stable coins. And it is also possible to issue synthetic assets using cryptocurrencies as collateral.

## 8. What is GUU ?

GUU (Governance token of UnUniFi) is a utility token for governance or commission used in the UnUniFi Protocol.

## 9. GUU token distribution

We absolutely do not do initial coin offerings or token sales. Every token will be distributed in return for your actions like being a validator.

Usage	Percentage of usage / supply
Ecosystem Development	30%
Assignment for validators	30%
Assignment for UnUniFi team	20%

Marketing	9%
Advisor	1%
Assignment for business partners	10%

#### 10. Tokens specifications

Name	Symbol	Denom in blockchain
GUU	GUU	uguu
JPU	JPU	ujpu
EUU	EUU	ueuu
USU	USU	uusu

#### 11. GUU specifications

Initial supply	1,000,000,000,000uguu =1,000,000GUU
Inflation rate range	7%~20%

#### 12. Governance specifications

Minimum deposit for voting	1,000,000uguu =1GUU
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#### 13. Staking specifications

Max validators	100
Bonding denom	uguu

#### 14. About us

The UnUniFi Protocol is owned by Botany LLP(Yu Kimura, Takeru Shimojima, Kenji Yanagisawa). The developer team of the UnUniFi Protocol is CauchyE, Inc. which is a leading technologist company of Cosmos blockchain technologies in Japan.

#### 15. Legal Disclaimer

Please be aware of and accept the following risks before using JPU, EUU or USU. Botany LLP. and CauchyE, Inc. shall not be liable for any loss or damage arising out of or in connection with any of the following risks.

##### 15.1 Risk of Losing JPU or EUU due to Loss of Private Key

The private key itself or a combination of private key shall be necessary for the disposal of the User's JPU, EUU or USU, and the management of the private key shall be managed under the User's own

authority and responsibility. The loss of the private keys associated with the wallet in which the user's JPU is stored is the same as the loss of the JPU, EEU or USU itself. Phishing attacks against you or the JPU, EEU or USU on your device may result in loss of JPU, EEU or USU due to malware attacks, DoS attacks, consensus-based attacks, or any other form of attack.

### **15.2 Risks Related to the UnUniFi Protocol**

Since JPU, EEU or USU is based on the UnUniFi Protocol any malfunction, failure or failure of the UnUniFi Protocol may have a material adverse effect on JPU, EEU or USU and may render JPU, EEU or USU temporarily unusable.

### **15.3 Risk of mining attacks**

JPU, EEU or USU, like other distributed cryptographic tokens based on public chain protocols, may be subject to mining attacks during the verification of token transactions on the blockchain. These attacks may pose a risk to the recording of transactions related to JPU, EEU or USU.

### **15.4 Changes in Laws and Regulations and Taxation Risk**

There may be future changes in laws, government ordinances, statutes, regulations, orders, notices, guidelines, or other regulations or taxation systems related to JPU, EEU or USU. You are responsible for making your own decisions regarding the taxation of the JPU, EEU or USU.

### **15.5 Risks Due to Input Errors and Other Factors by User**

There is a risk of unintended transaction results due to input errors or any other actions by the User, failure, malfunction or operational status of the User's or a third party's communication or system equipment, natural disasters, cyber attacks or any other causes.

### **15.6 Relationship between Users**

Any transactions, communications, disputes, etc., arising between users and other users or third parties in relation to the Company's website shall be the responsibility of the users.

### **Contributions**

We have already made some little contributions to the Cosmos ecosystems.

<https://github.com/cosmos-client/cosmos-client-ts>

### **Contact**

To contact us on the UnUniFi topic, please create an issue ticket in GitHub.

<https://github.com/UnUniFi/chain>