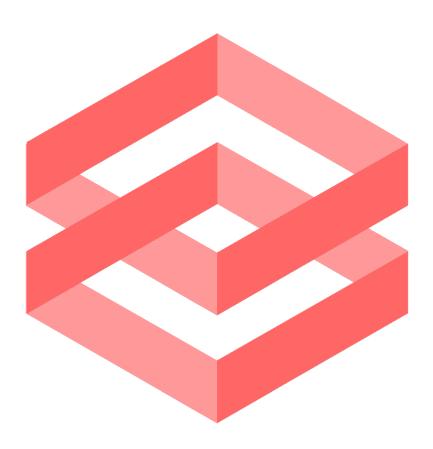
PARADEFI NETWORK PROTOCOL WHITEPAPER

Version 1.0
AUGUST 2020



"Make Defi Simple And Profitable"

By the Paradefi Foundation

Written by: Joseph Eichler, Kwok Yuen, and Erik Carlson

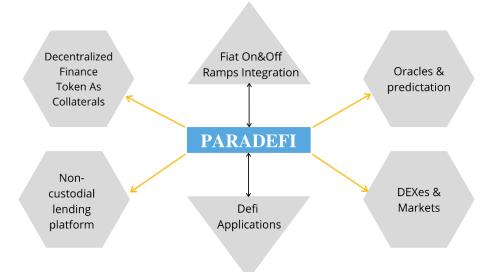
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Paradefi Overview

Paradefi is a decentralized lending and borrowing platform with a non-custodial protocol on Ethereum. The Paradefi foundation has developed a decentralized finance platform in which borrowers and lenders interact with each other in a pool-based strategy, liquid defi tokens will be listed on the platform, annual percentage yield will be based on supply and demand. Paradefi enables swaps between any cryptos on any Erc20-blockchain, and the decentralized platform also provides user-friendly fiat on-ramp and off-ramp gateways via Visa Card with most countries in the world accepted. Behind Paradefi is a ton of top backers to develop the project and offer high-yield savings compared to the current ones.

The Ecosystem of PARADEFI



Market Situation And Prediction

Until 27th August 2020, the defi market cap has roughly reached a total value of over 7 billion locked in the active defi platforms. However, in comparison with the market cap of 348 billion, nearly 92 trillion of physical money in the world, and the traditional banking system has gone worse over the last decades. There are also a significant number of banks and capital groups that have gone bankrupt, where the value of money inflates.

With the effect of the Covid19 pandemic, we have experienced huge economic losses that lead banks to offer zero or even negative interest rates. Moreover, banks now are unsafe and tricky with investors' money, many even do not guarantee the integrity of the savings deposit. With an announcement of the dissolution of the bank, lenders' money can be gone without any return. Since bankruptcy is legally accepted in a majority of countries, it makes investors feel risky and doubt before taking any investment actions. In contrast to that, the interest rate in Paradefi Network is decided algorithmically, in which any action happen instantly in the liquidity pool.



PARADEFI IS DESIGNED TO BE ABLE TO REMOVE BARRIERS TO ENTRY FOR ALL FINANCIAL SERVICES

	TRADITIONAL	Paradefi
ISSUED BY	GOVERNMENT	POS AND POW REWARD
TRANSFER MONEY	FIAT	CRYPTO ASSET
MARKET MONEY	BANKS	P O O L - B A S E D
EXCHANGE ASSET	E X C H A N G E , T E L L E R S , B R O K E R S	D E C E N T R A L I Z E D P R O T O C O L
INTEREST RATE	DECIDE BY THE STATE	BY SUPPLY AND DEMAND
INVESTING MONEY	STOCKS, BONDS, ACCESSIBLE THROUGH BANKS	T O K E N I Z E D F I N A N C I A L P R O D U C T S

On 15 March 2020, The Federal Reserve announced it would rates drop interest to zero and buy at least \$700 billion in government and mortgage-related bonds as part of a wide-ranging emergency action to protect the economy from the impact of the coronavirus outbreak, this marks the most dramatic steps since the 2008 financial crisis to bolster the U.S economy in the face of coronavirus pandemic. In addition to rate cuts, the Fed announced it is restarting the crisis-era program of bond purchases known as "quantitative easing" in which the central bank buys hundreds of billions of dollars in bonds to further push down rates and keep markets flowing freely. The Fed is also giving moregenerous loans to banks around the country so they can turn around and offer loans to small businesses and families in need of a lifeline.

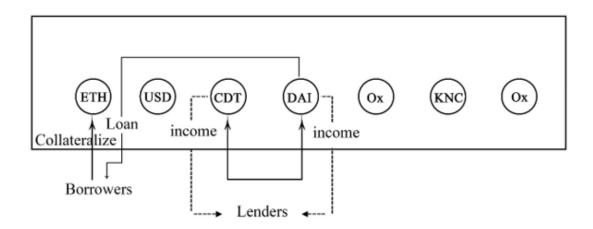
Economically, we have to admit that the impact of the coronavirus outbreak. However, this is clearly to prove the instability and weakness of the world physical monetary system where we would see a health crisis in contrast to the massive adoption of cryptocurrencies in general and decentralized finance in specific. The traditional banks are centralized and fully controlled by the governments, not the community of stakeholders. This gradually causes people to lose trust in this centralized fiat world and soon people will recognize the value of decentralized finance operations and the economic returns that people would deserve to have.

What Paradefi Ecosystem has

The Paradefi Ecosystem is an Ethereum-based and decentralized protocol that is built by the multibillion-dollar Infrastructure-as-as-Service (IaaS) industry named public cloud computing to enable transparency and enhance the decentralized characteristics.

The Paradefi App is a completely decentralized, transparent, and wealth-generating environment to grant the community to approach high annual-percentage-yield(APY) by simply using their high-yield savings account in the decentralized app platforms.

Borrowing And Lending Pool



The high-yield savings accounts are fully controlled by the wallet owners, the PRT protocol works transparently and automatically with a user-friendly platform in which each citizen will take seconds to understand the functional features, and also manage the on-chain assets and collateralizations. Every pool in the Defi platform is a reserve of a cryptocurrency, total liquidity is defined by the total value of Ethereum asset, every reserve is freely deposited by the lenders, and these assets can be borrowed instantly by other ciziten. However, different cryptocurrencies has different Loan Value, this is decided algorithmically by the specific asset liquidity. Not all crypto will be choosen as a collateral asset, during the development, the Paradefi team will partner with some other foundation to list liquid cryptos in the platform.

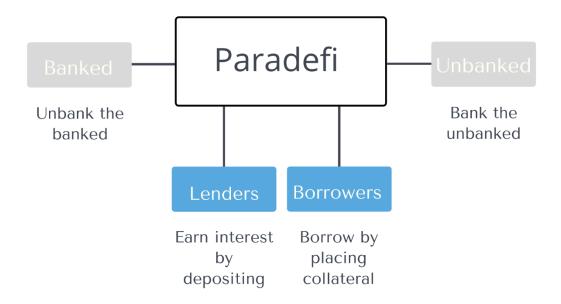
Paradefi App Platform is also the first decentralized platform that enables the function to buy cryptos by Visa Credit Card which saves investors time finding out a crypto merchant.

Why Always Paradefi

DeFi stands for "decentralized finance" and refers to the ecosystem comprised of financial applications that are being developed on top of blockchain systems. Paradefi is remarkable, it is much more than an abstract concept. It has become a movement that leverages blockchain technology to enable a pooled lending and borrowing platform and transfer of funds without intermediaries or centralized government systems. Paradefi virtually empowers people to access digital-financial services with autonomy.

Moreover, the concept of Paradefi protocol is to reach back to the beginnings of cryptocurrency: Bitcoin and other cryptocurrencies have promoted their business models with the outstanding purpose of "banking the unbanked", Paradefi has missions to improve the liquidity of other decentralized finance tokens. The potential of blockchain technology and the spread of crypto-based financial services would form a new world named decentralized finance. People who have been without bank accounts up to now would be welcomed into a world of decentralized financial services. The unbanked would become digitally banked.

Liquid tokens will be carefully listed on the platform and will be chosen as collateral with different **Allowed Loan Value** (ratio).



The Paradefi dApp works as a pooled-lending digital bank, where lenders, borrowers, and the algorithm interest-generated system. The prerequisites for each borrow position is to place authorized collateral, Allowed-Loan-Value (ALV) is algorithmically decided by each collateral at a specific time. However, the Paradefi foundation considered to choose the low-risk crypto as collateral as well as to provide a higher interest rate when people opt to use Paradefi token as a collateralized asset in the system. For lenders, there are multiple currencies for this model, interest rate algorithmically corresponds to the demand of the market and available reserve in the system.

Paradefi Fiat-Ramp Integration (PFRI) is so much convenient even for a crypto newcomer, with your visa card, you can buy any crypto-asset without contacting a crypto merchant. PFRI remove the basic barrier for any people to own crypto, citizens then can easily manage their asset in the decentralized finance platform as well as to avoid themselves from scammers.

PRT Reserve Mechanism is very unique, fee, and profit generated for the decentralized system will be used to re-purchase PRT to the PRT reserve where the partial amount of interest generated will be paid in PRT. Another small amount will be burned to reduce token-price inflation and manipulation,

In reality, Paradefi is much more than these mentioned above, we were initially born to unbank the banked and help them to avoid the loss due to the centralized banking systems where investors lend money to receive a negative return and even do not know if the bank goes to belly up after the pandemic and economic crisis. Paradefi aims to get a world where all citizens can be able to get tokenized ownership of their property, this tokens can be paid for the loyal contributors, this is a decentralized financial service where you can lend people money against the property and earn some dividends algorithmically and periodically. With this decentralized finance, we can easily scale without building a system of physical infrastructure and an amount of staff and its managers in which is impossible with traditional-centralized banking systems.

Backers.

Paradefi token, PRT is broadly backed by the real-world assets and income-producing tokens, and greatly supported by the giant backers. By providing total transparency and a permissionless decentralized financial system, backers are moving their assets from centralized-financial systems to real digital assets that guarantee their underlying assets a healthy return on investment.

Our backers are venture capital firms, security audit Labs, community managers, and marketing firms who have the same vision to develop and scale up the project to benefit all citizens joined.

Token

Summary:

Actual amount will be raised is around 1,000,000 USD, since seed rounds can be canceled at any time.

Summary

Description	Details
Ticker	PRT
Token type	ERC-20
Total raise	\$1,000,000
Total token supply	360,000,000

Token Sale Detail:

Token Sale is very necessary for the development of the project. Paradefi uses a bonding curve for the token sale, the value for each curve is different. There are expectedly 4 rounds, 2 seeds round for angel investors, all will be manually given a form and then an eth wallet to contribute, private and public sale will be available for the community. Below 1/3 of total supply will be available for token sale, the public sale has the lowest percentage.

Token Vesting Detail:

In the table below, we show the token vesting detail, the Paradefi core team will be vested for the longest period of 5 years.

Token Vesting

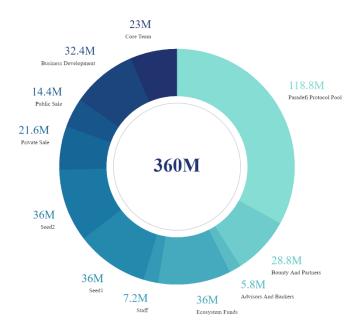
This table below shows how we managed to allocate our token vesting:

Token Allocation	%	Vesting	Bonded?
Seed 1	10%	Locked for 1 months	Yes
Seed 2	10%	0%	Yes
Private	6%	0%	No
Public	4%	0%	No
Staff	2%	Locked for 2 years, release 5% each month	No
Advisors And Backers	3%	Locked for 10month, release 19% each month	Yes
Core Team	5%	Locked for 5 years, release 20% each year	Yes
PRT Reserve Pool	33%	0% for the lending pool, token rewards	
Bounty And Partners	8%	Locked for 4 months since IDO finished	No
Business Development	4%	Release 8% each month	Yes
Ecosystem Funds	10%	Locked for 2.5 years, release 20% each 5 months	
Reserved Pool	5%	Locked for 2.5 years, release 20% each 5 month	ns Yes

Allocation of Tokens:

Only 360,000,000 PRT issued in the ecosystem, PRT will be allocated as the following, initial circulating supply will only be around 94,000,000 PRT, it may be decreased due to the seed round cancelation:

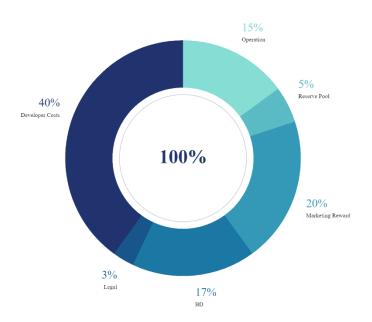
Paradefi Token Allocation



Allocation Of Funds:

All the unsold token will be burnt, the fund raised from the IDO will be used as the following:

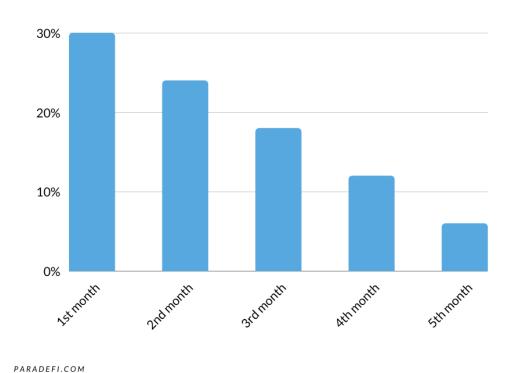




Why penalty fee?

This fee applied for only the seed1 round since the tokens in this round is locked for 5 months. The penalty fee is is a mechanism that incurs a charge which is burned in the form of the Paradefi token. For the seed1 round investors wanted to liquidate on exchanges, they will be charged a transfer fee of up to 30%, it will be reduced 6% each month. All the fee charged will be either burned or transferred to the Paradefi reserve pool

PARADEFI PENALTY FEE TABLE



The penalty fee is temporarily a **vibrant lock-up tool**. If a seed1 holder conducted to transfer tokens, they will be automatically charged proportionally at the time they do. All **fees generated result in tokens being burned or transferred to the PRT reserve pool for the lending function**.

Utility:

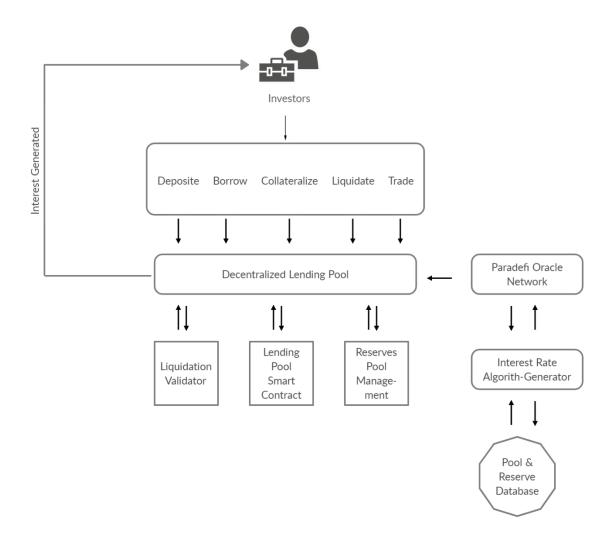
The Paradefi (PRT) token is utilized in different ways:

- 1. Pay as interest currency: Whatever collateral citizens use, they will be paid in PRT, there will be a reserve pool for the lending.
- 2. **Lending:** Investors are encouraged encouraged to lend PRT since it will be given a better interest rate as well as to pay a better income in PRT.
- 3. **Governance:** For holders who wanted to contribute to the project, their tokens must be burned to have right to vote.
- 4. The PRT reserve pool: 33% of the total supply will be dedicated to decentralized lending and borrowing features. Income generated will be partially paid in PRT, this is based on the smart-contract algorithm, around 10-30% of the income will be paid in PRT.
- 5. **Trading:** PRT will be gradually listed on exchanges, the listing time will be announced later to make sure that the anouncement will not effect the market and investors.

Paradefi Token is a utilized token in the system, it is prioritized to use as the most valued collateral asset where a borrower can deposite and borrow up to 90% of its total value, it has low liquidation rate and higher interest rate.

Holding PRT is a smart way to get good ROI compared to that of ETH with low LV and Liquidation.

Architecture



The architecture for the PRT Ecosystem is very unique, it is a combination of the traditional banking system but in the decentralized lending system with an algorithm integration. The smart-contract creates a place where lenders and borrowers interact and benefit each other, and PRT Life-Circle Mechanism (PLCM) to valuate and recycle the PRT.

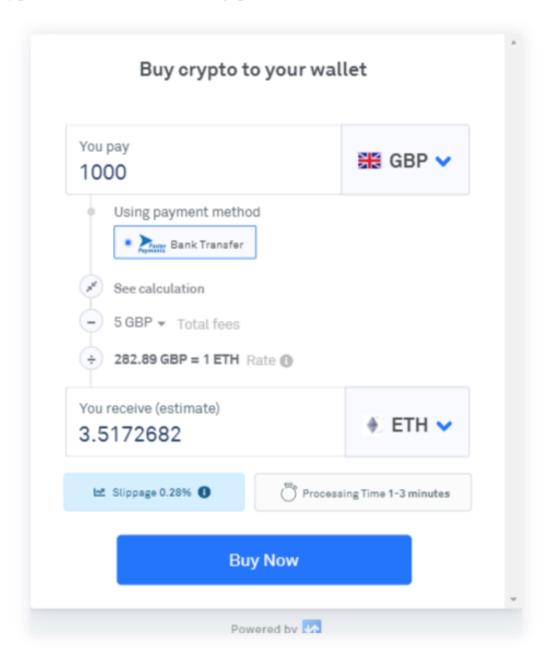
The smart-contract resolves all the burdens that the PRT Ecosystem and its governance may face. Paradefi protocol operates

on a network of decentralized with different nodes that interoperate with the Ethereum blockchain. The nodes of the protocols will be a kind of validator with decentralized infrastructures in contract to a various amount of physical infrastructures with traditional centralized banking systems.

User data will be transferred through the blockchain algorithm system that is strictly monitored by the validators of the protocols and its algorithms smart-contract. Lending assets in the platform are liquid decentralized finance tokens, in which who comes with better liquidity, will have a better allowed loan value.

Fiat On-Ramp

Fiat On-Ramp is a service that allows user to pay in over 40 different currencies to buy their cryptocurrencies (USDC, DAI, BTC, ETH, ADA, LTC, BCH, XLM, XRP, USDT, KCS and BNB). This is basically about to save people time from finding legit crypto sellers and avoiding potential scammers.



The Paradefi works directly with some FiatVSCrypto Payment Gateway such as Transak, Instant or Moonpay.

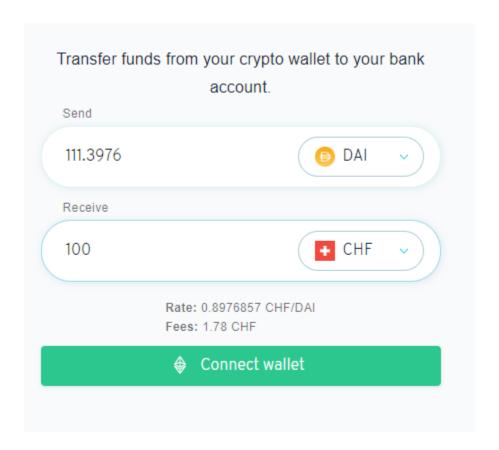
```
HTML
   <html>
     <meta charset="utf-8" />
     <script src="https://global.transak.com/sdk/v1.1/widget.js"</pre>
   async></script>
     <script>
       function launchTransak() {
         let transak = new TransakSDK.default({
           apiKey: '4fcd6904-706b-4aff-bd9d-77422813bbb7', // Your
           environment: 'STAGING', // STAGING/PRODUCTION
           defaultCryptoCurrency: 'ETH',
           themeColor: '000000', // App theme color in hex
           hostURL: window.location.origin,
           widgetHeight: '550px',
           widgetWidth: '100%'
         });
          transak.init();
         transak
            .on(transak.ALL_EVENTS, (data) => {
           });
         transak.on(transak.EVENTS.TRANSAK_ORDER_SUCCESSFUL,
   (orderData) => {
         });
       window.onload = function() {
          launchTransak()
```

Integration Source For Transak Payment Gateway

Fiat Off-Ramp

Fiat Off-Ramp is always a burden for many crypto projects as well as defi ones. The Paradefi Team has been working hard to resolve this issue, gradually we have found ways to help the user to cash out easily.

At the moment, users can cash out their asset into AUD, EUR, and CHF via Mooni and Banxas.



A user-friendly interface to cash out in CHF and EUR

Risk Mitigation

Due to the impact of the health pandemic and economic crisis, we have observed a world of zero or negative interest rates in comparison to a yearly yield of 5-9% of decentralized finance. However, there are a significant number of potential risks that the Paradefi system may face in the near future. Each member is supposed to be responsible and taking some needed solutions to mitigate the risks.

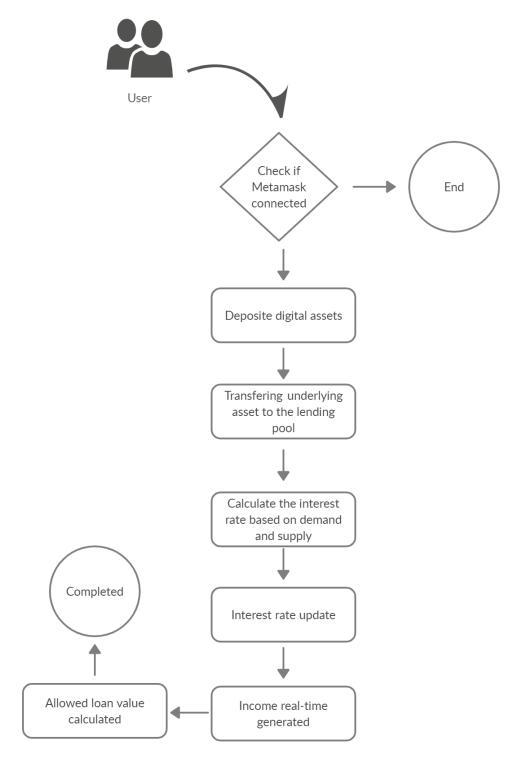
The Paradefi algorithms protocol serves as the tool to manage the protocol lending and liquidity-based pools. The protocol interacts with the credit and digital asset data through the computing cloud-based network to mitigate the risks and generate lending terms based on the written scripts.

The consensus contract on the Ethereum blockchain defines each figure of the functions and validators in the decentralized systems. Once consensus reached a certain value, the validators will work on that to initiate the loan and calculate the interest rate algorithmically.

Annual Percentage Yield Mechanism

Unlike a centralized exchange or a peer-to-peer platform, every loan needs to wait to match another user. The Paradefi is different, it creates an aggregator of the supply of each users. When a lender deposits an asset, it will be assigned to the pool, the interest rate will be based on the supply and demand at a time. It leads to offer more liquidity than other tradition lending system, depositors can withdraw at any time without waiting for any specific procedure or paper work.

Lending

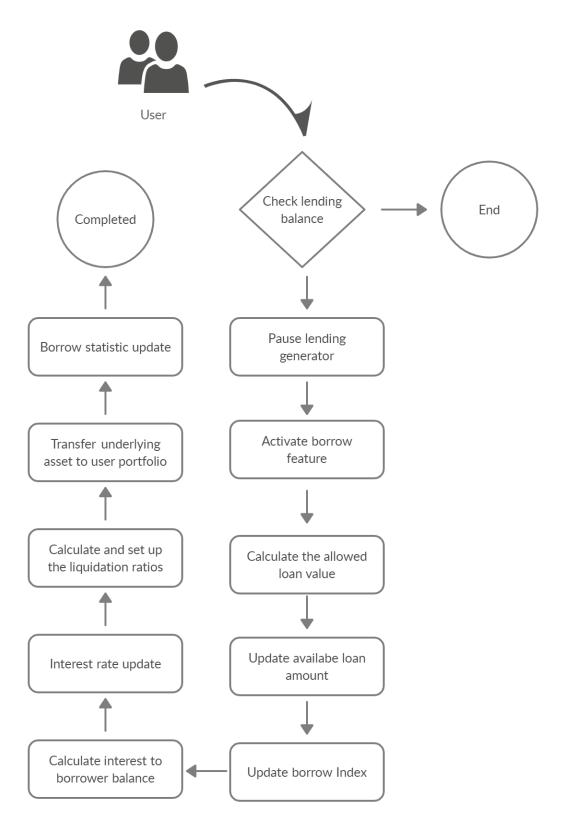


Lend funds

Lending in the Paradefi system is to increase quantity of the underlying assets, people can freely connect their preferred defi tokens to the system, by choosing high liquid tokens, they will earn a better income, APY is completely based on supply and demand of that token in the pool. Any individual can use a Paradefi money market as a way of income return on their investment. In case, people own any collateralized token, they can supply it to the Paradefi protocol and then earn interest in real-time statistic update with a completely monitoring system.

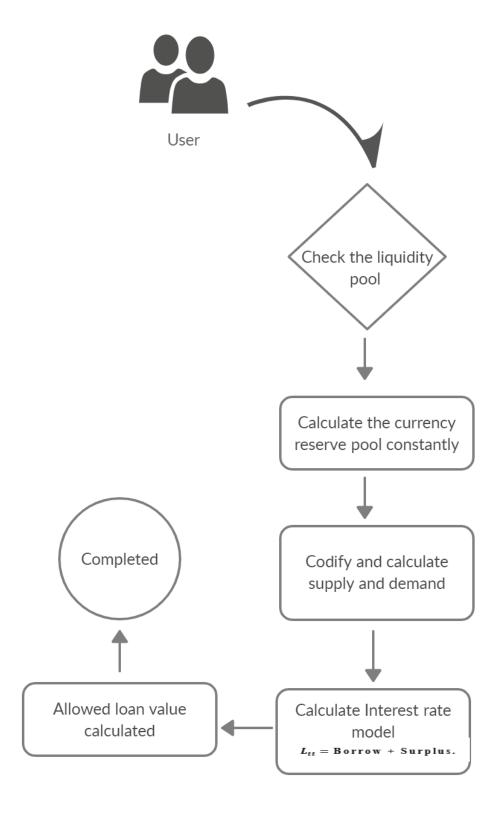
Borrowing

Paradefi also allows people to easily borrow from the protocol by a click, using allowed tokens as collateral in the Erc20 ecosystem. Decentralization authorizes borrowing from Paradefi simply just need to pick a desired token without any term, period, dates, and negotiation. Everything is automatic and frictionless at a user's fingertips, based on the floating interest rate, fee will be counted in real time update.



Borrow funds

Loan Value



Collateral used by holding asset in the Paradefi protocol to borrow from the protocol. Each money market has a Loan Value (Loan Factor), it varies from 0 to 1. Illiquid, low-cap assets have low Loan Factor, by contrast, liquid and, high-cap assets have better Loan Factor.

Every loan should not exceed a user's borrowing capacity, there will be a Safety Factor that borrowers need to pay attention before an execution to liquidate the collateral amount.

Interest Rate Model

Borrowers and lenders are not asked to negotiate over terms, periods, and rates, the Paradefi Interest Rate mechanism manages an equilibrium in which each money market will be based on supply and demand. Like other economic theory, when the demand is high, supply is low, interest rate will increase, by contrast, when demand is low and very high supply, interest rate may go down at a time.

$$L_{tt} = ext{Borrow} + ext{Surplus}.$$
 $B_{tb} = Total\ borrows$

The Utilization Ratio:
$$U_r = \frac{B_{tb}}{L_{tt}}$$

The demand directly effects to the interest rate, it is codified through governance and described as a function of utilization. Borrowing interest rates may be calculated as below:

$$Interest\ rate = Inflation + U_r * Range + (TCM)$$

TCM: 10% commission on referral interest

Inflation = 2%

Range = 15-25%

Paradefi money markets are defined by an changable interest rate, applied to all borrowers in the protocol, which adjust over time as the relationship between supply and demand changes.

The history of each interest rate, for each money market, is captured by an Interest Rate Index, which

is calculated each time an interest rate changes, resulting from a user minting, redeeming,

borrowing, repaying or liquidating the asset.

Roadmap

Q1/2020: Whitepaper Written

Angel Investors/Backers Funded

Concept Design

MVP Design

Q2/2020: Fiat On-ramp And Off-ramp Solution

Lending Algorithm

Trial Running

Q3/2020: Homepage Development

Private Slideshow With Backers

Curve Platform Completion

Validator Test

Q4/2020: Completion of Initial Decentralized Offering

Block Explorer

Integration of Paradefi Lending Protocol

Development of Security And Auditing

Exchange Listing

Governance On Ropsten Testnest

Q1/2021: Official Operation

Paradefi Oracle With Chainlink

IOS And Android Dapp Release

Governance Mainnet

Q2-3/2021: Data Queries

Further Development

Smartcontract 3.0

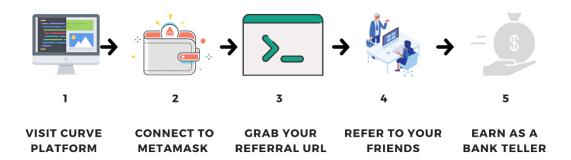
Launch Various Defi Products based on PRT

Referral Program

To build a good community and appreciate the contribution of each citizen, the Paradefi Foundation decided to dedicate a dynamic-incentive referral program.

Paradefi's referral program consists of a 10% and 20% fee-share, this is especially about to work for both bonding curve sales as well as the decentralized lending programs. This takes only 1 level, Paradefi Team does not aim to be a metamorphosis MLM program, but the 1-level referral program is needed for an energetic community.

Paradefi Commission



WWW.PARADEFI

- During the token sale, you will
 - For each buy of your referrals, you will be able to earn 10% of their buy, all will be paid in PRT, referral tokens will be locked for the same period like seed1 round.
- After the IDO is finished, when operating the decentralized lending platform, each transaction will be charged a significant origination fee.
 - These fees generated from this will be used to rebuy and burn the PRT, it helps to reduce the inflation of the token price as well as to increase the value of the PRT.

To participate in the referral program, what you just need to do is to visit the curve platform to grab your unique referral link. And send it to your loved friends, then you will be earning generous commissions soon to your erc20 wallet.

Commissions will be calculated as below:

TCM = Interest rate*10%

"Every citizen is a digital bank teller"

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Financial risk in DeFi

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