

Activity: Decentralized Finance.

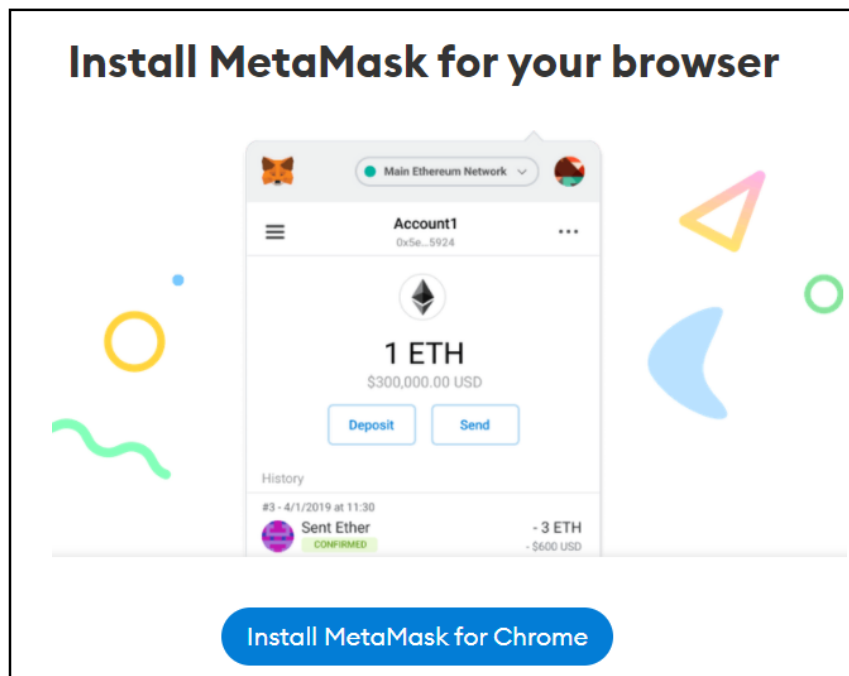
Introduction

This activity demonstrates how to obtain Ethereum and use it for borrowing on the decentralized blockchain using smart contracts. It is a financial system that is run without third-party holding your funds as it entirely run with distributed computer programs (smart contracts).

You need to first install Metamask then get some Koven test net Ether, i.e. not real Ether.


Metamask

Download metamask: <https://metamask.io/download>



Add as Extension. Create a Wallet (option on the right).



 <p>No, I already have a seed phrase Import your existing wallet using a 12 word seed phrase</p> <p>Import wallet</p>	 <p>Yes, let's get set up! This will create a new wallet and seed phrase</p> <p>Create a Wallet</p>
--	---

 METAMASK

< Back


建立密碼

新密碼 (至少8個字元)

確認密碼

☐ I have read and agree to the [使用條款](#)

建立

 METAMASK

< Back

Create Password

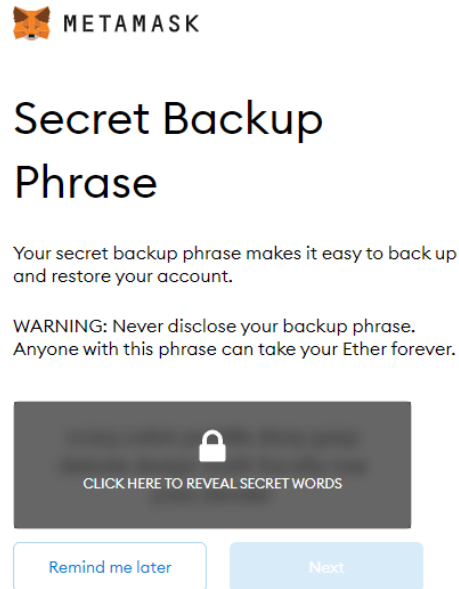
New password (min 8 chars)

Confirm password

☐ I have read and agree to the [Terms of Use](#)

Create

Enter New Password (remember it, write it down!!)

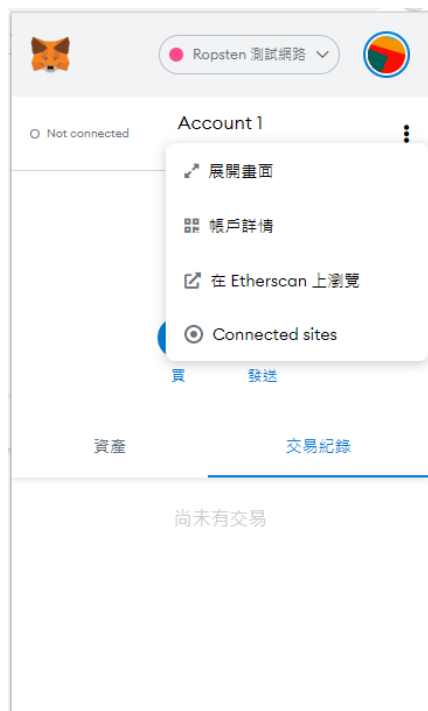
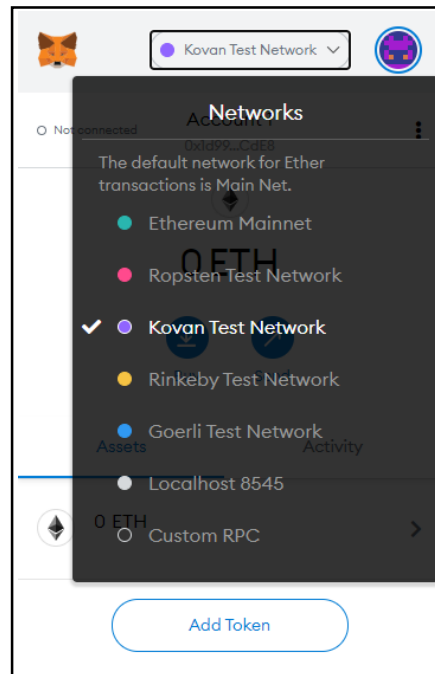


Link to TestNet. **Ropsten**, Kovan, Rinkeby, Goerli are all testnets. Select **Kovan**.

Go to <https://faucet.kovan.network/> to get testnet **ETH**. Google for other Kovan faucets

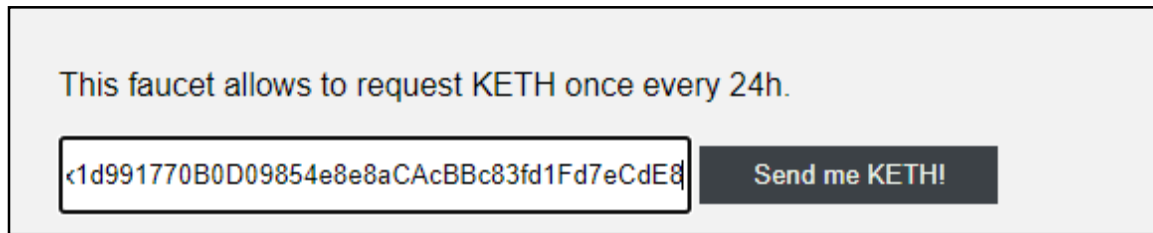
You have to key in your **Metamask** account number. Copy it at Metamask.

Click only 1 time.

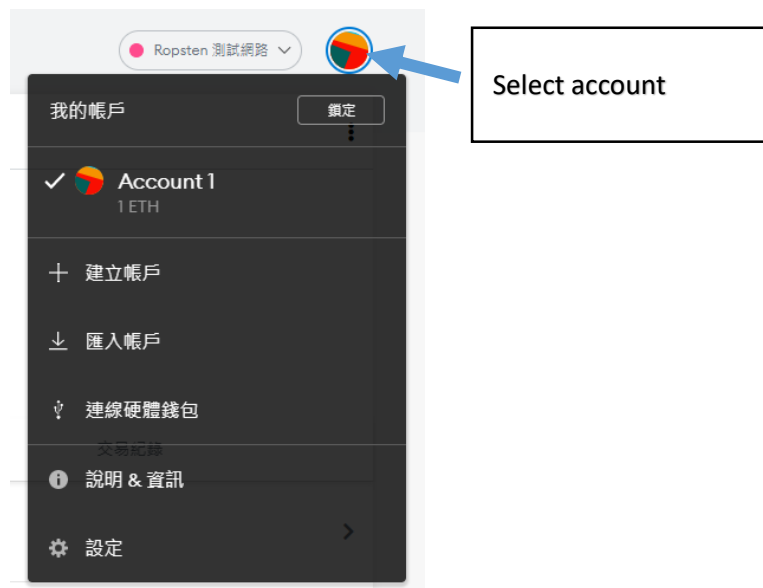


Click on the menu (3 dots) to get the account number. Copy that number. Fill in the Kovan Faucet page and click “Send me test Ether” button

Click only 1 time!!

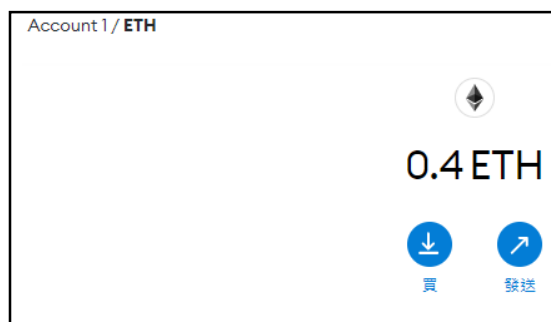


Wait awhile, check back Metamask. You will see that you have received 1 ETH.



Sending and Receiving ETH

Select the ETH account with some balance. Click on "Send"



Key in the address of the recipient (could be your own separate account, or through QR code). Then key in the amount (not all, leave some for Gas fees). Wait for confirmation to see the transferred amount.

Get comfortable with using Metamask, we will be using it quite a bit.

發送以太幣

取消

✓ 0x15aC...4d85

✕

資產:

ETH

餘額: : 0.399966 ETH

數量:

最大値

0.2 ETH

尚未有匯率比較值

↑↓

交易費:

Gas 價格 (GWEI)

Gas 上限

1

21000

取消

下一頁

PART 1: Oasis Dashboard

Open a tab at: <https://oasis.app/?network=kovan> to use the TESTNET.



Click on Open Oasis to see the Dashboard. You will be asked to Sign with Metamask.


Welcome

It looks like you're new to Oasis.app or are using a new device to connect. For added security, please sign a message with your wallet to continue.

Waiting for signature...

Oasis

0x1d...eCdE8



Thanks for joining. Here's how you can get started with Dai.

1

Select a provider in your country or region.

2

Complete the purchase and wait for the Dai to arrive in your account.

120.01

Dai purchased this week

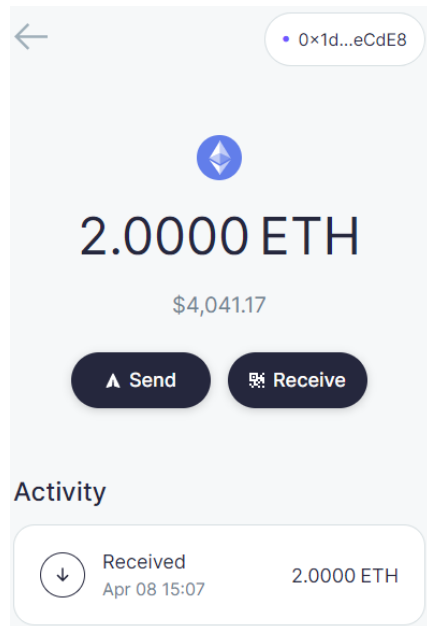
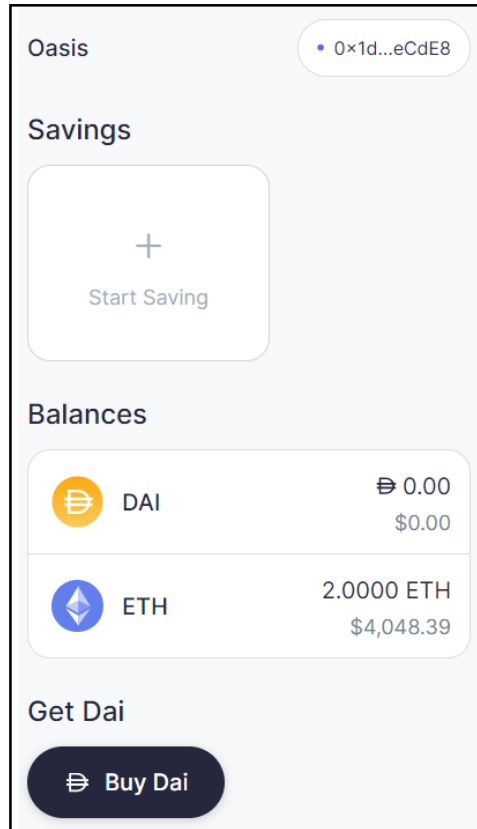
3

Start spending, receiving, or saving Dai.

Buy Dai

Continue to Dashboard

Metamask
connected account



PART 1A: Oasis Borrow

Open <https://oasis.app/borrow/?network=kovan>

Then click connect with Wallet, select Metamask/

Open your first Vault to start generating Dai.

Get Started

You will see collateral types. Pick one of ETH.

Select a collateral type

Each collateral type has its own risk parameters.

	COLLATERAL TYPE	STABILITY FEE ?	LIQ RATIO ?	LIQ FEE ?	YOUR BALANCE	DAI AVAILABLE
<input type="radio"/>	ETH-A	0.00 %	150.00 %	13.00 %	2.00 ETH	536.06M
<input type="radio"/>	ETH-B	6.00 %	130.00 %	13.00 %	2.00 ETH	5.00M
<input type="radio"/>	ETH-C	3.50 %	175.00 %	13.00 %	2.00 ETH	100.00M

It will ask for Vault Setup. Metamask will ask for you to sign. Wait for confirmation to get the vault setup.

Vault Setup and Management

Setup Vault

Configure your Vault for easy management. This only has to be done once.

Setup

Set Allowance

This permission allows Oasis to interact with your ETH. This has to be done once for each new collateral type.



Back

Continue

Click CONTINUE

Deposit ETH and Generate Dai

Different collateral types have different risk parameters and collateralization ratios.

How much ETH would you like to lock in your Vault?

The amount of ETH you lock up determines how much Dai you can generate.

1.5

ETH

YOUR BALANCE 2.00 ETH

How much Dai would you like to generate?

Generate an amount that is safely above the liquidation ratio.

300



DAI

MAX AVAIL TO GENERATE 678.96 DAI

Your Collateralization Ratio

294.22% (Min 130.00%)

Your Liquidation Price

\$260.00 USD/ETH

Current ETH Price

\$588.44 USD

Stability Fee

6.00%

Max Dai available to Generate

5000000.00 Dai

Back

Continue

Confirm Vault Details

Depositing	1.50 ETH
Generating	300.00 DAI
Your Collateralization Ratio	294.22%
Liquidation Ratio	130.00%
Your Liquidation Price	\$260.00
Liquidation Fee	13.00%
Stability Fee	6.00%

☐ I have read and accept the [Terms of Service](#)

☐ I understand the Stability Fee is not fixed and is likely to change over time

[Back](#) [Open Vault](#)

Click Open Vault, Metamask will send the ETH to the Vault.

ETH-B Vault #3492

Liquidation price

260.00 USD
Current price information 588.44 USD
Liquidation penalty 13.00%

Collateralization ratio

294.21 %
Minimum ratio 130.00%
Stability fee 6.00%

ETH locked

ETH locked	1.50 882.66 USD	Deposit
Able to withdraw	0.8372 492.66 USD	Withdraw

Outstanding Dai debt

Outstanding Dai debt	300.00 DAI	Pay back
Available to generate	378.97 DAI	Generate

Vault history

ACTIVITY	DATE	TX HASH
Generated 300.00 new Dai from Vault	Apr 8, 2021, 3:27:08 PM	0x6bb2...b08f18f ↗
Deposited 1.50 ETH into Vault	Apr 8, 2021, 3:27:08 PM	0x6bb2...b08f18f ↗
Opened a new Vault with id #3492	Apr 8, 2021, 3:27:08 PM	0x6bb2...b08f18f ↗

You have successful sent ETH to the Vault and borrowed some DAI.

A collateral ratio of 150% means that to mint \$100, you need to deposit a minimum of \$150 worth of ETH. The collateralization ratio in the vault is 294.21%. This that the value of ETH in the vault is 294.21% of the Dai that we got. You can check that $300 \times 2.9421 = 882.63$

Stability Fee is the annualized debt that incurs on an outstanding loan position. It is equivalent to the 'interest rate' which you are required to pay along with the principal debt of the vault. All borrowed Dai (plus the Stability Fee) must be paid back to close the position.

Liquidation occurs when the value of the collateral provided is less than the borrowed funds. The liquidation event happens when the collateralization ratio drops below its minimum ratio (130%).

Click on SEND on the Wallet Balances window (on the right) to send DAI to yourself.

• MetaMask0x1d991...ecde8

Wallet Balances

ASSET	BALANCE	USD	
DAI	300.00	\$300.00	SEND
ETH	0.3706	\$218.06	SEND

Send DAI

How much DAI would you like to send?

300

Set max

YOUR BALANCE 300.000 DAI

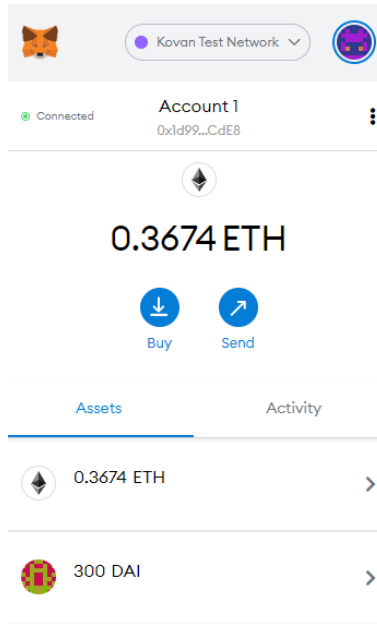
Destination Address

0AcBBc83fd1Fd7eCdE8

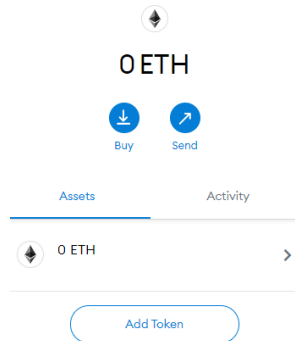
Paste

Send

Cancel

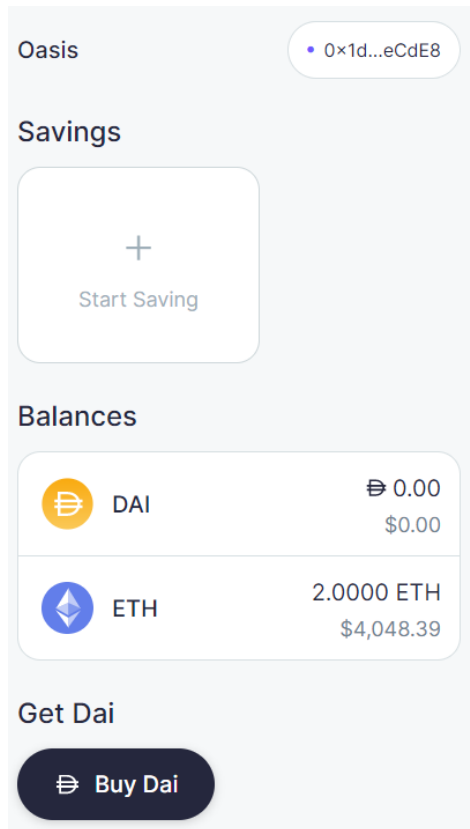


You will see it in your wallet, if not you have to add the token name to it. Click on the Add Token at the bottom of Metamask

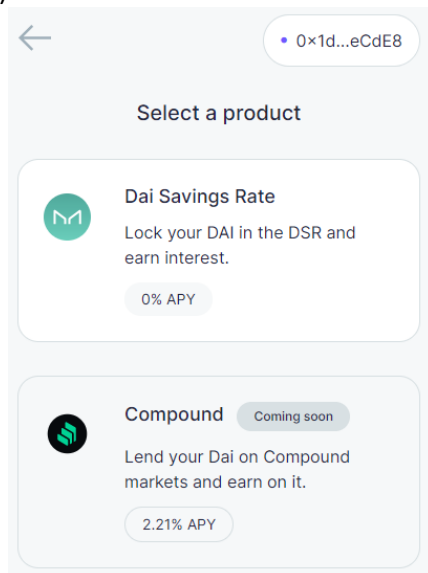


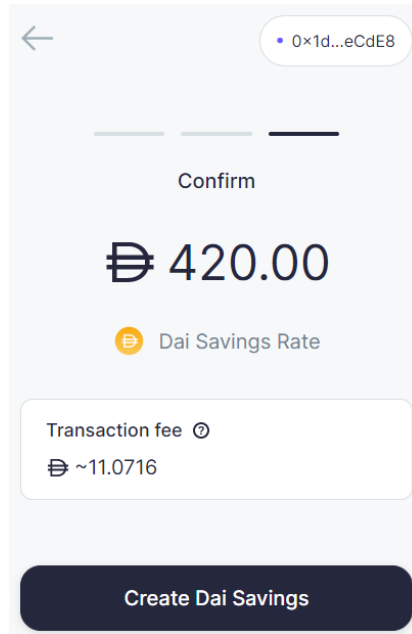
PART 1B: Oasis Save

Go back to oasis app dashboard. Click on Start Saving. Use the DAI that you have.

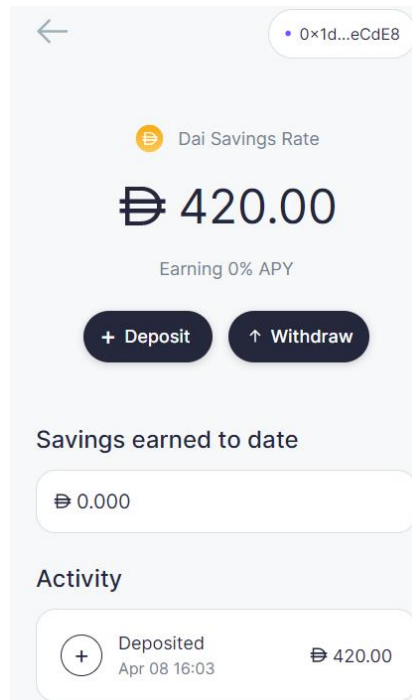


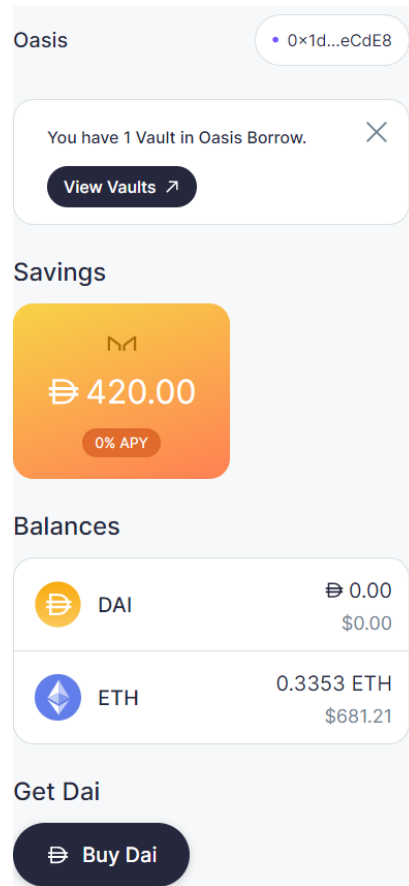
Select Dai Savings Rate. Note that in the testnet it has 0% APY. Interest rates are denoted in Annual Percentage Yield (APY).





Click “Create Dai Savings”. Key in an amount that takes into consideration of the transaction fee. Confirm with Metamask.





You have successfully create a savings account (with 0%APY) using the DAI that you have generated from the ETH you sent to the Vault.

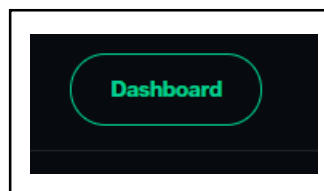
PART 2: Compound CASH

For this demo, you need Ropsten Testnet and ETH. Get the ETH from <https://faucet.ropsten.be/> faucet. Make you connect Metamask to the Ropsten Testnet.

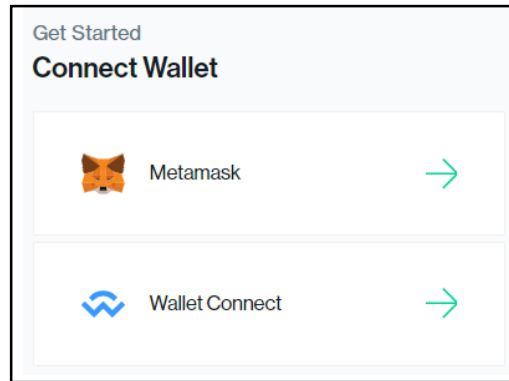
On the browser open another tab, go to <https://app.compound.cash/>

Refer to the User Documentation if you need further explanation :
https://docs.google.com/document/d/12EY6Gqt4tlp9TP0icBpsOuZZFh_bVln6Fn9YNa5XpkU/edit

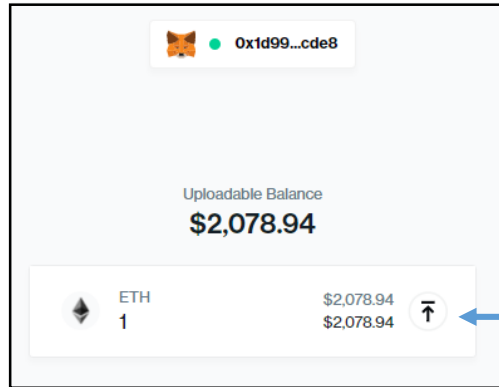
Click Dashboard, then Metamask (if necessary).



You need to click on the metamask extension. Then click to connect to compound finance.



On the dashboard you can see you have 1 ETH.



Select **upload** Ether. Do not select all your Ether as you need to cover transaction fees.

Upload Ether

.6

MAX

\$1,247.72

Compound Chain ETH

Your Balance

0 → 0.6

Est. Cash/Day

0 → 0.0003

Risk Position

Risk Limit

0.00 → 998.18

Risk Limit Used

0 → 0

0%

Upload

Metamask will ask for confirmation.

Sign the transfer via Metamask (see next page).

MetaMask Notification

Ropsten 測試網路

Account...

→

0xD905...86...

https://app.compound.cash

合約互動

0.6

DETAILS

DATA

GAS FEE

0.000042

尚未有匯率比較值

Gas 價格 (GWEI)

Gas 上限

1

42020

AMOUNT + GAS FEE

TOTAL







0.600042

尚未有匯率比較值

拒絕

確認

In the collateral assets you have 0.6 ETH. You will be able to earn interest.

Collateral Assets					
Asset		Value	Limit Multiplier	APY	
	CASH 0	\$1.00 \$0.00	1.0x 0.00	3.05%	 
	ETH 0.6	\$2,076.02 \$1,245.61	0.8x 996.49	0.01%	 

When users and applications upload an asset to Gateway, they begin earning a variable interest rate instantly. Interest accrues every Gateway block (currently ~5 seconds), and users can withdraw their principal plus interest anytime.

A core difference between Compound Ethereum and Gateway is that interest is always paid in CASH, Gateway's native unit of account, as opposed to the underlying assets.

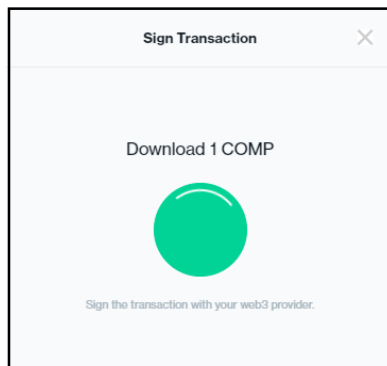
If you see your uploaded assets on the Gateway balance side, then you've done it! You're now earning CASH as interest.

Borrowing

Once you've uploaded an asset, you'll see that your Risk Limit has increased, this means you can now download other assets against your uploaded assets as collateral. In concept, this works fairly similar to "borrowing limit" in Compound Ethereum: the more assets you upload, the larger your Risk Limit becomes.

When you Upload an asset, it counts as collateral, increasing your Risk Limit. You can use your Risk Limit to Download assets you don't own for use; you can think of this like borrowing against your collateral.

Say you want to borrow 1 COMP, click on the download arrow and confirm sign with Metamask.



Collateral Value
\$1,642.56

Risk Limit
1,314.05

Collateral Assets

Asset	Value	Limit Multiplier	APY
ETH 0.798	\$2,058.35 \$1,642.56	0.8x 1,314.05	0.01% <div> </div>

Credit Balance
\$470.23

Risk Limit Used
587.78

44%

Credit Assets

Asset	Value	Risk Multiplier	APY
BAT 0	\$1.27 \$0.00	1.6x 0.00	22.12% <div> </div>
CASH - 0.0001	\$1.00 \$0.00	1.0x 0.00	3.05% <div> </div>
COMP - 1	\$470.23 \$470.23	1.2x 587.78	5.13% <div> </div>

0x1d99...CdE8

Uploadable Balance
\$3.93

ETH
0.0019

\$2,058.35
\$3.93

Incomplete Transactions
\$470.23

COMP
1

FINISH