

DeFi – AAVE

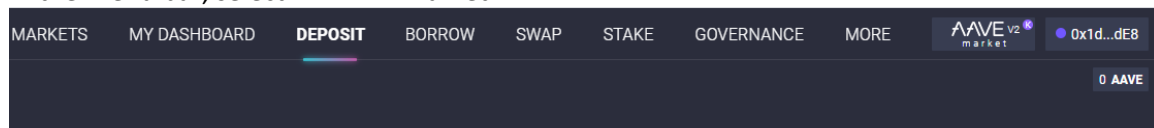
Before you start get some Kovan Eth first. AAVE testnet runs on Kovan. If you have already use the Kovan faucet, you can't get any more for 24 hours.

While waiting watch the Video at: <https://www.youtube.com/watch?v=48nxw6fVTRE&t=37s>
Read the Documents of AAVE at: <https://docs.aave.com/faq/>


DEPOSIT

Goto <https://testnet.aave.com/>

Connect to the site with Metamask, and select the appropriate account with ETH.
In the Menu bar, select AAVE V2 Market



Click on MYDASHBOARD:


No deposits yet 
There will be a list of all the assets you have deposited.
For now, it's empty since you have not deposited.

[Deposit now](#)

Click Deposit now, select ETH. You must have enough amount to pay for gas or transaction will fail.

How much would you like to deposit?
Please enter an amount you would like to deposit. The maximum amount you can deposit is shown below.

Available to deposit **2.069454 ETH**

 1| [MAX](#)

[Continue](#)

Deposit overview

These are your transaction details. Make sure to check if this is correct before submitting.

Amount	1 ETH \$ 2,216.05054
<div><div>1 Deposit</div><div>2 Finished</div></div> <div><div>1/2 Deposit Please submit to deposit</div><div>Deposit</div></div>	

Click on the Metamask to Confirm.

Click on MY DASHBOARD to see the amount and APY. APR represents the annual rate charged for earning or borrowing money.

Your deposits	Current balance	APY	Collateral ⓘ	
ETH	1.000 \$ 2,216.05174	94.73 % Past 300 Avg. 97.12 %	Yes <input checked="" type="checkbox"/>	<button>Withdraw</button> <button>Swap</button>

The interest rate for depositors fluctuates based on the supply and borrowing demand. For example, if you deposit DAI and lots of people want to borrow DAI and there is a limited supply, then the interest rate you will earn on your DAI deposit will increase to incentivize more deposits.

This also works the other way around, so if there is lots of DAI in the supply and not a lot of borrowing demand, the interest rates for DAI depositors will be lower. You can find the historical for deposit rates on the website.

Borrow

Once you've deposited an asset that can be used as collateral, you are able to borrow from the Aave Protocol.


Select "borrow" on the menu bar, and now you can see all the assets that are available for you to borrow as well as the stable and variable APY rates.

The maximum amount you can borrow depends on the value you have deposited and the available liquidity. For example, you can't borrow an asset if there is not enough liquidity or if your health factor doesn't allow you to. See the borrowing risk factors at: <https://docs.aave.com/risk/asset-risk/risk-parameters>

How much would you like to borrow?

Please enter an amount you would like to borrow. The maximum amount you can borrow is shown below.

Available to borrow **1,755.477116 DAI**

 500 MAX


Safer New health factor 3.62 Riskier



Continue

You can choose either stable or variable APR for your loan. Click continue, and confirm with Metamask.

Borrow overview

These are your transaction details. Make sure to check if this is correct before submitting.

Amount	 500 DAI \$ 504.94928
Interest (APR)	42.75 %
Interest rate type	Variable
New health factor	3.62

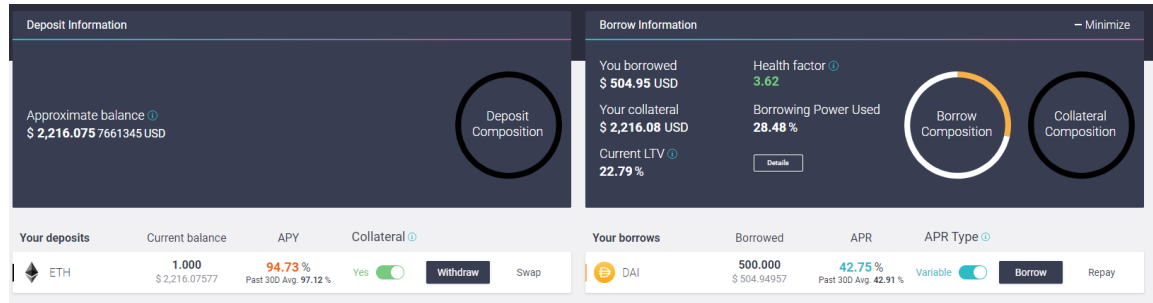
1 Borrow	2 Pending
Transaction(s) Pending	
Borrow	Pending  Explorer 

Explaining stable and variable rates:

Variable rates are more volatile than stable rates. Stable rates act as a fixed rate (a rate that will not change) in the short term, but they can be rebalanced in the long-term in response to changes in the market. When borrowing, you can choose whichever rate benefits you the most. Aave Protocol also lets you switch between stable and variable rates! For example, if you originally borrow at a variable rate but then the rate zooms up, you can switch to the lower stable rate option, and vice versa.

You repay your loan in the same asset you borrowed. For example, if you borrow 1 ETH you will pay back 1 ETH + interest accrued. You can also use your collateral to repay in the new version 2 of Aave Protocol. If you want to pay back the loan based on USD price you can borrow any of the available stable coins as USDC, DAI, USDT, etc.

On the Dash Board you can see:



The health factor is the numeric representation of the safety of your deposited assets against the borrowed assets and its underlying value. The higher the value is, the safer the state of your funds are against a liquidation scenario. If the health factor reaches 1, the liquidation of your deposits will be triggered. The health factor depends on the liquidation threshold of your collateral against the value of your borrowed funds

There is no fixed time period to pay back the loan. As long as your position is safe, you can borrow for an undefined period. However, as time passes, the accrued interest will grow making your health factor decrease, which might result in your deposited assets becoming more likely to be liquidated.

Repay

How do you want to repay?

With your current collateral

From your wallet balance

Swap & Repay with collateral

In Aave V2 you have the ability to swap your deposited assets, even the ones being used as collateral, to another asset. Aave V2 also allows you to repay your debt/loans with your deposited collateral.

In order to swap your assets you just need to go to the Swap section and follow these steps:

- Select the asset you want to swap and the amount in the left side (From).
- Select the asset you want to swap to in the right side (To)
- Make sure to check the swap rate and check the slippage. You can edit it based on your preferences. Depending on the slippage, the expected rate might differ and the transaction might even fail if you set it too low. After this click on Continue.
- In the next step you will need to send the approval and submit the transaction. The approval transaction will only be required the 1st time you do this step, unless you revoke the approval.

- Make sure to have enough ETH for the transaction cost. After sending both transactions your swap will be complete.

We will swap the ETH deposited to DAI to repay the borrowing.

Swap

This swap functionality only **contains the assets you deposited** in the Aave Protocol. For more information on the swap feature, please read the [FAQ](#).

From

ETH

1

Available 1.00

MAX

2148.50785570086895462

DAI

To

APY 94.73 %

= \$ 2,216.05

= \$ 2,169.77 (-2.09%)

APY 34.76 %

APY change	94.73 % >> 34.76 %
New health factor	3.62 >> 3.43
Max. slippage	2 %
Fees	0.39 %

Continue

Swap overview

These are your transaction details. Make sure to check if this is correct before submitting.

From asset	1 ETH \$ 2,216.05054
To asset	2,148.50786 DAI \$ 2,169.77497
Current health factor ⓘ	3.62
New health factor	3.36
Maximum slippage	2 %
Fees	0.39 %

1 Approve

2 Swap



3 Finished





1/3 Approve
Please approve before swap

Approve

Swap overview

These are your transaction details. Make sure to check if this is correct before submitting.





From asset	 1 ETH \$ 2,216.05054
To asset	 2,148.50786 DAI \$ 2,169.77497
Current health factor ⓘ	3.62
New health factor	3.36
Maximum slippage	2 %
Fees	0.39 %

1 Approve	2 Swap	3 Pending
Transaction(s) Pending		
Approve	Confirmed 	Explorer 
Swap	Pending 	Explorer 

Deposit Information

Approximate balance ⓘ
\$ 2,216.128 2591320 USD

Deposit Composition

Your deposits	Current balance	APY	Collateral ⓘ	
 DAI	661.406 \$ 664.81545	34.76 % Past 30D Avg. 34.71 %	Yes 	Withdraw Swap
 ETH	0.700 \$ 1,551.31281	94.78 % Past 30D Avg. 97.12 %	Yes 	Withdraw Swap

Borrow Information

You borrowed
\$ 502.58 USD

Your collateral
\$ 2,216.13 USD

Current LTV ⓘ
22.68 %



Health factor ⓘ
3.60

Borrowing Power Used
28.89 %

Details





Borrow Composition



Collateral Composition

Your borrows	Borrowed	APR	APR Type ⓘ	
 DAI	500.006 \$ 502.58280	42.75 % Past 30D Avg. 42.91 %	Variable 	Borrow Repay

Repay

Repay with DAI that you have borrowed with the swap that was just made to DAI with ETH. Select repay from Wallet.

Your deposits	Current balance	APY	Collateral ⓘ	
 DAI	661.408 \$ 664.81704	34.76 % Past 30D Avg. 34.71 %	Yes 	Withdraw Swap
 ETH	0.700 \$ 1,551.32298	94.78 % Past 30D Avg. 97.12 %	Yes 	Withdraw Swap

Your borrows	Borrowed	APR	APR Type ⓘ	
 DAI	0.007 \$ 0.00681	42.75 % Past 30D Avg. 42.91 %	Variable 	Borrow Repay

Repay overview

These are your transaction details. Make sure to check if this is correct before submitting.

Amount to repay	500 DAI
	\$ 502.5771
Remaining to repay	0.006 7...0730 DAI
You don't have enough funds to repay the full amount ⓘ	\$ 0.0068
Current Health Factor ⓘ	3.60
Next Health Factor	268,062.26

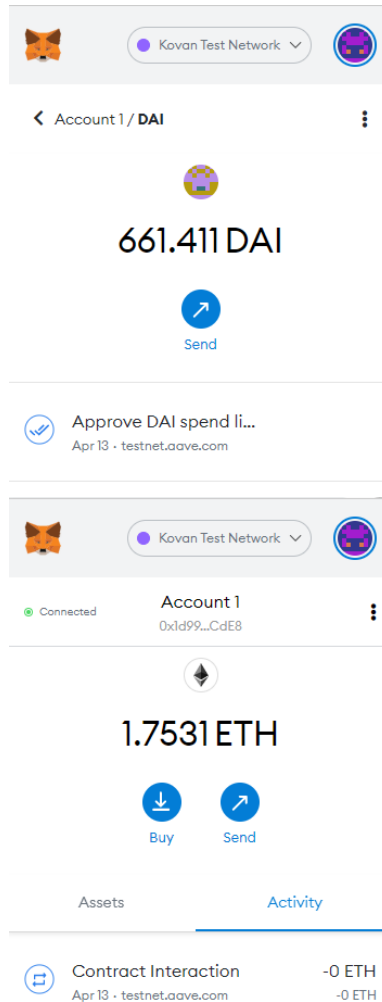
1 Approve	2 Repay	3 Pending
Transaction(s) Pending		
Approve	Confirmed ●	Explorer ↗
Repay	Pending 🔄	Explorer ↗

After repayment the Borrow section is cleared (takes a while).

Deposit Information			Borrow Information			— Minimize
Approximate balance ⓘ \$ 2,216.147 5035639 USD			You borrowed —			Health factor ⓘ —
Deposit Composition			Your collateral \$ 2,216.15 USD			Borrowing Power Used —
Current LTV ⓘ —			Collateral Composition			
Your deposits		Current balance	APY	Collateral ⓘ		
DAI	661.410	\$ 664.81899	34.76 % Past 30D Avg. 34.71 %	Yes	Withdraw	Swap
ETH	0.700	\$ 1,551.32852	94.78 % Past 30D Avg. 97.12 %	Yes	Withdraw	Swap
						Nothing borrowed yet

Withdraw

Finally, you can withdraw all back to your Metamask wallet. DAI 661.41 and 0.7 ETH has been sent back to Metamask. The Dash Board is clear now.



Other - Flash Loans

Flash loans are a feature designed for developers, due to the technical knowledge required to execute one. Flash Loans allow you to borrow any available amount of assets without putting up any collateral, as long as the liquidity is returned to the protocol within one block transaction. To do a Flash Loan, you will need to build a contract that requests a Flash Loan. The contract will then need to execute the instructed steps and pay back the loan + interest and fees all within the same transaction.