

Flash Loans with Aave

# **Aave *Flash loans***

by Rush

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**Rush** *FlashLoan Contract Receivers*

# Balances *Aave Debt Tokens*

aTokens in Account		
index	Token Name	balance
0	aAAVE	100001699426625260613534337
1	aDAI	111219929209770165011457155
2	aLINK	100002001749280001306246401
3	aSUSD	100074990828591646086624669
4	aUSDC	1999871869166160
5	aUSDT	289199965621721
6	aWETH	8631714495773894879
7	aWBTC	100006395807959

Stable Tokens in Account		
index	Token Name	balance
0	stableDebtAAVE	0
1	stableDebtDAI	0
2	stableDebtLINK	0
3	stableDebtSUSD	0
4	stableDebtUSDC	0
5	stableDebtUSDT	0
6	stableDebtWBTC	0
7	stableDebtWETH	0

Variable Tokens in Account		
index	Token Name	balance
0	variableDebtAAVE	0
1	variableDebtDAI	0
2	variableDebtLINK	0
3	variableDebtSUSD	0
4	variableDebtUSDC	0
5	variableDebtUSDT	0
6	variableDebtWBTC	0
7	variableDebtWETH	0

# Deploy *Rush FlashLoan*

```

7 variableDebtWETH 0
• 🐶 brownie run scripts/deploy_flashloan.py
Brownie v1.19.1 - Python development framework for Ethereum

RushProject is the active project.

Running 'scripts/deploy_flashloan.py::main'...
=====
Deploying Rush flashloan receiver contract ...
=====
Transaction sent: 0x4ee0deb053c54534f1918de8311a5b9bccae7e461518e5c619d67f7322a1e3e3
Gas price: 1e-09 gwei Gas limit: 626919 Nonce: 374
RushFlashLoan.constructor confirmed Block: 1312415 Gas used: 569927 (90.91%)
RushFlashLoan deployed at: 0x7B4A0375f7c1F6eEC44342c46B7Dd7E61050e001

View contract on Optimism Goerli 🔗 🔗 🔗 🔗 https://goerli-optimism.etherscan.io/address/0x7B4A0375f7c1F6eEC44342c46B7Dd7E61050e001
Transaction was Mined

Tx Hash: 0x4ee0deb053c54534f1918de8311a5b9bccae7e461518e5c619d67f7322a1e3e3
From: 0xFE948CB2122FDD87bA43dCe8aFa254B1242c199
New RushFlashLoan address: 0x7B4A0375f7c1F6eEC44342c46B7Dd7E61050e001
Block: 1312415
Gas Used: 569927 / 626919 (90.9%)

=====
Deploying Simple Rush flashloan receiver contract ...
=====
Transaction sent: 0x97d86c5aad05738931d9c7e55a9cb5ceecebc9423cf4f7136e8c38201ef80914
Gas price: 1e-09 gwei Gas limit: 437684 Nonce: 375
RushSimpleFlashLoan.constructor confirmed Block: 1312417 Gas used: 397895 (90.91%)
RushSimpleFlashLoan deployed at: 0x7cd617BDA98e86144269ED7E325fb20c784f6102

View contract on Optimism Goerli 🔗 🔗 🔗 🔗 https://goerli-optimism.etherscan.io/address/0x7cd617BDA98e86144269ED7E325fb20c784f6102
Transaction was Mined

Tx Hash: 0x97d86c5aad05738931d9c7e55a9cb5ceecebc9423cf4f7136e8c38201ef80914
From: 0xFE948CB2122FDD87bA43dCe8aFa254B1242c199
New RushSimpleFlashLoan address: 0x7cd617BDA98e86144269ED7E325fb20c784f6102
Block: 1312417
Gas Used: 397895 / 437684 (90.9%)

```

# AAVE

$$\begin{array}{ccccccc} & & & & ) \\ ) & & ) & ( / ( ( \\ ( & ( & ( / ( ) \backslash ( )) \backslash \\ \backslash & , & \backslash & \backslash & \backslash & \backslash & \backslash \end{array}$$

 10 million flashloan

# Run *Simple FlashLoan*

0x3aefe92d640007d052a87562e7c165ea9ae3ec856a4223d9e94fc06329bcc6f4

✓ Success

1312500

Confirmed by Sequencer

🕒

33 secs ago (Sep-21-2022 07:18:16 PM +UTC)

0xfe948cb2122fdd87baf43dce8afa254b1242c199

🔍

Contract

0x4b529a5d8268d74b687ac3dbb00e1b85bf4bf0d4

✓

▶

From

0xa0c014681...

To

0x7cd617bda...

For

10,000,000

🕒

USDC (USDC)

▶

From

0x000000000...

To

0x7cd617bda...

For

5,000

🕒

USDC (USDC)

▶

From

0x7cd617bda...

To

0xa0c014681...

For

10,005,000

🕒

USDC (USDC)

0 Ether

(\$0.00)

0.000000000000027 Ether (\$0.000000)

1 wei (0.000000001 Gwei)

 60 million flashloan

# RUN *FlashLoan Batch*

0xb096db8fbf39c390f343603d9dc51bd7ed41f51a47124cb6b1bdb3007f7f7a76

Success

1312583 Confirmed by Sequencer

29 secs ago (Sep-21-2022 07:21:23 PM +UTC)

0xfe948cb2122fdd87baf43dce8afa254b1242c199

Contract 0x4b529a5d8268d74b687ac3dbb00e1b85bf4bf0d4

From 0x27cf8bc5b8... To 0x7b4a0375f... For 60,000,000 DAI (DAI)

From 0xa0c014681... To 0x7b4a0375f... For 50,000,000 USDC (USDC)

From 0x8e2a45549... To 0x7b4a0375f... For 50,000,000 USDT (USDT)

From 0xe34899bf6... To 0x7b4a0375f... For 30,000,000 SUSD (SUSD)

From 0x19a81e3c2... To 0x7b4a0375f... For 10 WETH (WETH)

From 0x00051d87b... To 0x7b4a0375f... For 20,000 WBTC (WBTC)

From 0xa48d52bf4f... To 0x7b4a0375f... For 1,000,000 AAVE (AAVE)

From 0x44f522c187... To 0x7b4a0375f... For 1,000 LINK (LINK)

From 0x000000000000... To 0x7b4a0375f... For 30,000 DAI (DAI)

Scroll for more

0 Ether (\$0.00)

0.000000000000125 Ether (\$0.000000)



# BALANCES *After FlashLoan*

23

24

25

26

```

for n in range (0, len(tokens)):
    token_name = tokens[n]
    balance = get_atoken(tokens[n]).balanceOf(acct)

```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

JUPYTER: VARIABLES

4

USDC

18100323156994753

5

USDT

89810954978000000

6

WETH

0

7

WBTC

0

=====

aTokens in Account

=====

index	Token Name	balance
0	aAAVE	1000021992245757320778025
1	aDAI	111249902358116532383492245
2	aLINK	100002002249070001959369606
3	aSUSD	100089983328792663819876205
4	aUSDC	1999901855432612
5	aUSDT	289224953913415
6	aWETH	8634092950060591431
7	aWBTC	100007394399405

=====

Stable Tokens in Account

=====

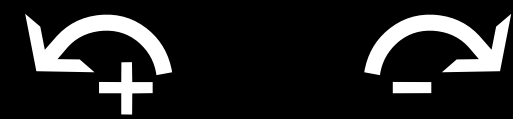
index	Token Name	balance
0	stableDebtAAVE	0
1	stableDebtDAI	0
2	stableDebtLINK	0
3	stableDebtSUSD	0
4	stableDebtUSDC	0
5	stableDebtUSDT	0
6	stableDebtWBTC	0
7	stableDebtWETH	0

=====

Variable Tokens in Account

=====

index	Token Name	balance
0	variableDebtAAVE	0
1	variableDebtDAI	0
2	variableDebtLINK	0
3	variableDebtSUSD	0
4	variableDebtUSDC	0
5	variableDebtUSDT	0
6	variableDebtWBTC	0
7	variableDebtWETH	0



**OP**

**Rush** *FlashLoan*  
*Receivers*

