

TP – Blockchain

1.d Réception d’1eth.

MetaMask Ether Faucet

faucet

address: 0x81b7e08f65bdf5648606c89998a9cc8164397647
balance: 81144371.40 ether

request 1 ether from faucet

user

address: 0x069977cdc3d618343e5b7a1e9ee3f8fd07190eda
balance: 0.00 ether
donate to faucet:

1 ether

10 ether

100 ether

transactions

1.e

Address 0x069977Cdc3D618343e5b7A1E9eE3f8fd07190eDa

Overview

Balance: 5 Ether

More Info

My Name Tag: Not Available

Transactions

Latest 5 from a total of 5 transactions

Txn Hash	Method	Block	Age	From	To	Value	Txn Fee
0x3d2487b615c850778e...	Transfer	12130801	14 hrs 29 mins ago	0x81b7e08f65bdf564860...	IN 0x069977cdc3d618343e...	1 Ether	0.000861541763
0xcb2b9011daa47a99fa...	Transfer	12130801	14 hrs 29 mins ago	0x81b7e08f65bdf564860...	IN 0x069977cdc3d618343e...	1 Ether	0.000861541742
0x38fa28a0018d4c788fc...	Transfer	12130801	14 hrs 29 mins ago	0x81b7e08f65bdf564860...	IN 0x069977cdc3d618343e...	1 Ether	0.000861541707
0xa017c71c7dd7d3637f...	Transfer	12130801	14 hrs 29 mins ago	0x81b7e08f65bdf564860...	IN 0x069977cdc3d618343e...	1 Ether	0.000861541707
0x9fbbddc449713362983...	Transfer	12130800	14 hrs 29 mins ago	0x81b7e08f65bdf564860...	IN 0x069977cdc3d618343e...	1 Ether	0.000861541693

Overview

State

[This is a Ropsten Testnet transaction only]

Transaction Hash:

0x9ffbddc449713362983cf15d07d44fee3832ebde6a4bc750f78db86bf60125a2

Status:

Success

Block:

12130800

1825 Block Confirmations

Timestamp:

14 hrs 29 mins ago (Mar-24-2022 10:16:07 PM +UTC)

From:

0x81b7e08f65bdf5648606c89998a9cc8164397647

To:

0x069977cdc3d618343e5b7a1e9ee3f8fd07190eda

Value:

1 Ether (\$0.00)

Transaction Fee:

0.000861541693488 Ether (\$0.00)

Gas Price:

0.000000041025794928 Ether (41.025794928 Gwei)

Click to see More

1.f

Block Height:

12130800

Timestamp:

14 hrs 31 mins ago (Mar-24-2022 10:16:07 PM +UTC)

Transactions:

21 transactions and 32 contract internal transactions in this block

Mined by:

0xc01658737f693370d92de84be2bb32949c9a6891 in 10 secs

Block Reward:

2.014918050591195527 Ether (2 + 0.030185392053641319 - 0.015267341462445792)

Uncles Reward:

0

Difficulty:

12,710,302,430

Total Difficulty:

40,870,751,134,529,829

Size:

12,336 bytes

Gas Used:

2,485,788 (24.83%) -50% Gas Target

Gas Limit:

10,010,261

Base Fee Per Gas:

0.000000006141851784 Ether (6,141851784 Gwei)

Burnt Fees:

0.015267341462445792 Ether

Extra Data:

geth-go1.17.5-linux (Hex:0xd883010a1084676574688676f312e31372e35856c696e7578)

1.g

↗

Envoyer

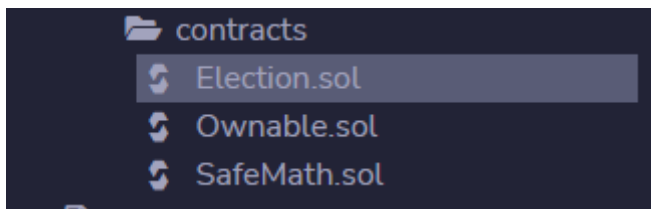
En attente - Vers: 0xc25...100f

Annuler

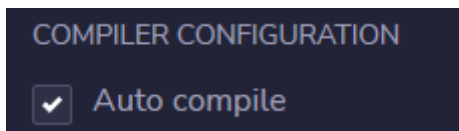
-1 ETH

-1 ETH

1.j Import des fichier solidity.

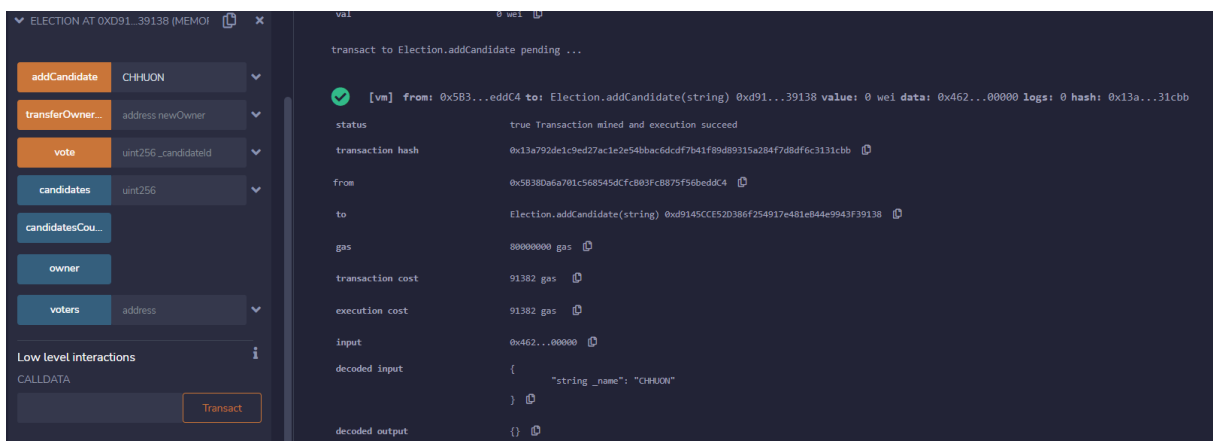


1.l Déploiement et compilation du contrat.



Les frais de transaction ne sont pas les mêmes, elles sont de 554494 gaz qui sont à convertir.

1.o



1.p

The screenshot shows a web interface with a sidebar on the left and a main content area on the right. The sidebar contains a list of functions: 'addCandidate' (selected), 'transferOwner...', 'vote', 'candidates', 'candidatesCou...', 'owner', and 'voters'. Below these is a section 'Low level interactions' with a sub-section 'CALLDATA'. The main content area displays the call data for the 'addCandidate' function. It shows a call from address 0x58380a6a701c568545dcfc803fc8875f56beddC4 to Election.candidates(uint256) with data 0x347...00001. The execution cost is 28814 gas. The input is 0x347...00001. The decoded input is a JSON object: {"uint256": "1"}. The decoded output is a JSON object: {"0": "uint256: id 1", "1": "string: name CHHUON", "2": "uint256: voteCount 0"}. The logs are empty.

1.q

The screenshot shows a web interface with a sidebar on the left and a main content area on the right. The sidebar contains a list of functions: 'addCandidate' (selected), 'transferOwner...', 'vote', 'candidates', 'candidatesCou...', 'owner', and 'voters'. Below these is a section 'Low level interactions' with a sub-section 'CALLDATA'. The main content area displays the call data for the 'addCandidate' function. It shows a call from address 0x58380a6a701c568545dcfc803fc8875f56beddC4 to Election.addCandidate(string) with data 0x462...00000. The execution cost is 74270 gas. The input is 0x462...00000. The decoded input is a JSON object: {"string_name": "CROCO"}. The decoded output is empty. The logs are empty.

1.r

The screenshot shows a web interface with a sidebar on the left and a main content area on the right. The sidebar contains a list of functions: 'addCandidate' (selected), 'transferOwner...', 'vote', 'candidates', 'candidatesCou...', 'owner', and 'voters'. Below these is a section 'Low level interactions' with a sub-section 'CALLDATA'. The main content area displays the call data for the 'addCandidate' function. It shows a call from address 0x58380a6a701c568545dcfc803fc8875f56beddC4 to Election.candidates(uint256) with data 0x347...00002. The execution cost is 28814 gas. The input is 0x347...00002. The decoded input is a JSON object: {"uint256": "2"}. The decoded output is a JSON object: {"0": "uint256: id 2", "1": "string: name CROCO", "2": "uint256: voteCount 0"}. The logs are empty.

1.s

1: string: name CROCO
2: uint256: voteCount 0

candidatesCou...

owner

0: address: 0x5B380a6a701c568545dCfcB03FcB875f56beddC4

voters address

Low level interactions

CALLDATA

Transact

CALL [call] from: 0x5B380a6a701c568545dCfcB03FcB875f56beddC4 to: Election.owner() data: 0x8da...5cb5b

from: 0x5B380a6a701c568545dCfcB03FcB875f56beddC4

to: Election.owner() 0xd9145CCCE52D386f254917e481e844e9943f39138

execution cost: 23430 gas (Cost only applies when called by a contract)

input: 0x8da...5cb5b

decoded input: {}

decoded output: {
 "0": "address: 0x5B380a6a701c568545dCfcB03FcB875f56beddC4"
}

logs: []

1.t

addCandidate string_name

transferOwner... address newOwner

vote 1

candidates uint256

0: uint256: id 2
1: string: name CROCO
2: uint256: voteCount 0

candidatesCou...

owner

0: address: 0x5B380a6a701c568545dCfcB03FcB875f56beddC4

voters address

Low level interactions

CALLDATA

Transact

[vm] from: 0x5B3...eddC4 to: Election.vote(uint256) 0xd91...39138 value: 0 wei data: 0x012...00001 logs: 1 hash: 0xf15...897b5

status: true Transaction mined and execution succeed

transaction hash: 0xf15ee719e9880e1fc78febba84a778eb611d66fa98eb0626dc520583897b5

from: 0x5B380a6a701c568545dCfcB03FcB875f56beddC4

to: Election.vote(uint256) 0xd9145CCCE52D386f254917e481e844e9943f39138

gas: 80000000 gas

transaction cost: 69467 gas

execution cost: 69467 gas

input: 0x012...00001

decoded input: {
 "uint256_candidateId": "1"
}

decoded output: {}

logs: [
 {
 "from": "0xd9145CCCE52D386f254917e481e844e9943f39138",
 "topic": "0xffff3c900d938d21d0990d786e819f29b8d05c1ef587b462b939609625b684b16",
 "event": "votedEvent",
 "args": {
 "0": "1",
 "_candidateId": "1"
 }
 }
]

1.u Le vote a bien été pris en compte et qu'il est de 1 pour le candidat CHHUON.

candidates 1

0: uint256: id 1
1: string: name CHHUON
2: uint256: voteCount 1

candidatesCou...

0: uint256: 2

owner

0: address: 0x5B380a6a701c568545dCfcB03FcB875f56beddC4

voters address

Low level interactions

CALLDATA

Transact

CALL [call] from: 0x5B380a6a701c568545dCfcB03FcB875f56beddC4 to: Election.candidates(uint256) data: 0x347...00001

from: 0x5B380a6a701c568545dCfcB03FcB875f56beddC4

to: Election.candidates(uint256) 0xd9145CCCE52D386f254917e481e844e9943f39138

execution cost: 28814 gas (Cost only applies when called by a contract)

input: 0x347...00001

decoded input: {
 "uint256 ": "1"
}

decoded output: {
 "0": "uint256: id 1",
 "1": "string: name CHHUON",
 "2": "uint256: voteCount 1"
}

logs: []

1.v On peut voir que le vote a été pris en compte et qu'il est de 2 pour le candidat CHHUON.

The screenshot shows a transaction for the 'vote' function. The left sidebar displays the function 'vote' with input '1' and a list of candidates. The main area shows the transaction details, including the VM execution log and decoded output.

addCandidate string_name
transferOwner... address newOwner
vote 1
candidates 1

0: uint256: id 1
 1: string: name CHHUON
 2: uint256: voteCount 2

candidatesCou...
owner
 0: address: 0x5B38Da6a701c568545dCfcB03Fc8B75F56beddC4
voters address

Low level interactions
 CALLDATA
 Transact

VM [vm] from: 0x5B3...eddC4 to: Election.(constructor) value: 0 wei data: 0x608...c0033 logs: 0 hash: 0x433...7fb9c
 call to Election.candidates

CALL [call] from: 0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2 to: Election.candidates(uint256) data: 0x347...00001

from 0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2
 to Election.candidates(uint256) 0xddaAd340b0f1Ef65169Ae5E41A8b10776a75482d
 execution cost 28814 gas (Cost only applies when called by a contract)
 input 0x347...00001
 decoded input { "uint256 ": "1" }
 decoded output { "0": "uint256: id 1", "1": "string: name CHHUON", "2": "uint256: voteCount 1" }
 logs []
 transact to Election.vote pending ...

1.w On transfère la propriété su contrat en utilisant la fonction « transferOwnership » et en entrant l'identifiant du wallet du nouveau propriétaire.

The screenshot shows a transaction for the 'transferOwnership' function. The left sidebar displays the function 'transferOwnership' with input '0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2'. The main area shows the transaction details, including the VM execution log and decoded output.

addCandidate string_name
transferOwner... 0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2
vote 1
candidates 1

0: uint256: id 1
 1: string: name CHHUON
 2: uint256: voteCount 2

candidatesCou...
owner
 0: address: 0x5B38Da6a701c568545dCfcB03Fc8B75F56beddC4
voters address

Low level interactions
 CALLDATA
 Transact

VM [vm] from: 0x5B3...eddC4 to: Election.transferOwnership(address) 0xdda...5482d value: 0 wei data: 0xf2f...35cb2 logs: 1 hash: 0x9ed...8d497

status true Transaction mined and execution succeed
 transaction hash 0x9ed7d258e07ac2a631de5f945a20f56394ced61c30a159e4ed1674dbc84497
 from 0x5B38Da6a701c568545dCfcB03Fc8B75F56beddC4
 to Election.transferOwnership(address) 0xddaAd340b0f1Ef65169Ae5E41A8b10776a75482d
 gas 80000000 gas
 transaction cost 28682 gas
 execution cost 28682 gas
 input 0xf2f...35cb2
 decoded input { "address newOwner": "0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2" }
 decoded output {}
 logs [{ "from": "0xddaAd340b0f1Ef65169Ae5E41A8b10776a75482d", "topic": "0xdbc0e079c531659141344cd1f00a720419497f9722a3daafe3b4186fb6457e0", "event": "OwnershipTransferred", "args": { "0": "0x5B38Da6a701c568545dCfcB03Fc8B75F56beddC4", "1": "0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2", "prevOwner": "0x5B38Da6a701c568545dCfcB03Fc8B75F56beddC4", "newOwner": "0xAb8483F64d9C6d1EcF9b849Ae677dD3315835cb2" } }]

1.x

On peut limiter la visibilité avec la mention « onlyOwner ».

1.y

```
function addCandidate (string memory _name) public onlyOwner {
```

Avec le wallet du propriétaire l'action addCandidate est bien effectué :

The screenshot shows a web interface with a sidebar on the left and a main content area on the right. The sidebar contains several buttons: 'addCandidate' (selected), 'transferOwner...', 'vote', 'candidates', 'candidatesCou...', 'owner', and 'voters'. Below these is a 'Low level interactions' section with a 'CALLDATA' input field and a 'Transact' button. The main content area displays transaction details for a successful transaction. The status is 'true Transaction mined and execution succeed'. The transaction hash is '0xbabe2aa3a7c17b1c9b35d30938c709c3c9db2e0c8e616fd11f5fbb0c835ec9e'. The 'from' address is '0x58380a6a701c56854dcfc803fc8879f56bedd4'. The 'to' address is 'Election.addCandidate(string) 0xEf9f1ACE83dfb88f5590a621f4aEA72C6EB10eBF'. The gas used is 80000000. The transaction cost is 93501 gas. The execution cost is 93501 gas. The input is '0x462...00000'. The decoded input is '{ "string_name": "aa" }'. The decoded output is '{}'. A green checkmark icon is visible next to the transaction details.

Field	Value
status	true Transaction mined and execution succeed
transaction hash	0xbabe2aa3a7c17b1c9b35d30938c709c3c9db2e0c8e616fd11f5fbb0c835ec9e
from	0x58380a6a701c56854dcfc803fc8879f56bedd4
to	Election.addCandidate(string) 0xEf9f1ACE83dfb88f5590a621f4aEA72C6EB10eBF
gas	80000000 gas
transaction cost	93501 gas
execution cost	93501 gas
input	0x462...00000
decoded input	{ "string_name": "aa" }
decoded output	{}

Avec un autre wallet l'action addCandidate est refusé :

The screenshot shows the same web interface as the previous one, but the transaction is failed. The status is 'false Transaction mined but execution failed'. The transaction hash is '0x2c313a2cca14dc57188c766dd66aa32c5e8cf18c8da8da8f9deda472bebe0'. The 'from' address is '0xab8483f64d9C6d1EcF9b849a677d03315835cb2'. The 'to' address is 'Election.addCandidate(string) 0xEf9f1ACE83dfb88f5590a621f4aEA72C6EB10eBF'. The gas used is 80000000. The transaction cost is 24327 gas. The execution cost is 24327 gas. The input is '0x462...00000'. The decoded input is '{ "string_name": "aa" }'. The decoded output is '{}'. A red X icon is visible next to the transaction details.

Field	Value
status	false Transaction mined but execution failed
transaction hash	0x2c313a2cca14dc57188c766dd66aa32c5e8cf18c8da8da8f9deda472bebe0
from	0xab8483f64d9C6d1EcF9b849a677d03315835cb2
to	Election.addCandidate(string) 0xEf9f1ACE83dfb88f5590a621f4aEA72C6EB10eBF
gas	80000000 gas
transaction cost	24327 gas
execution cost	24327 gas
input	0x462...00000
decoded input	{ "string_name": "aa" }
decoded output	{}