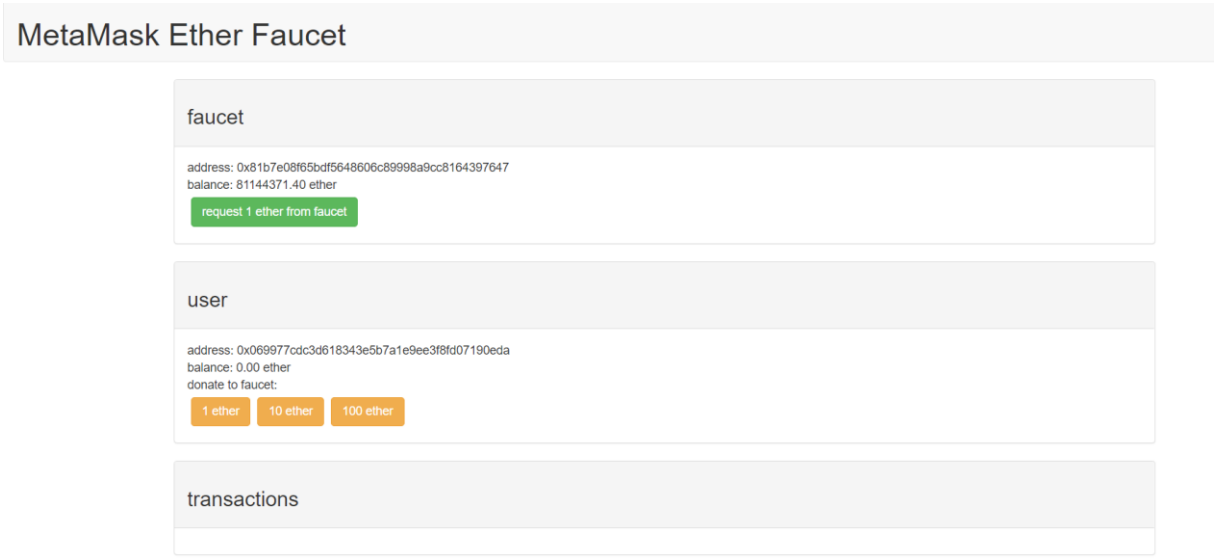
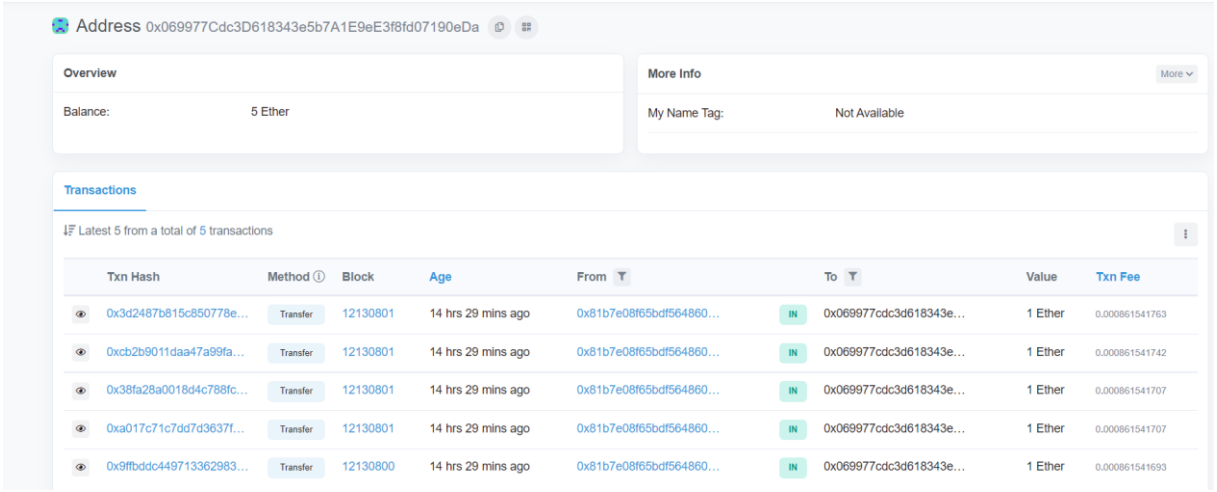
TP – Blockchain

1.d Réception d'1eth.



1.e



Overview State

[This is a Ropsten **Testnet** transaction only]

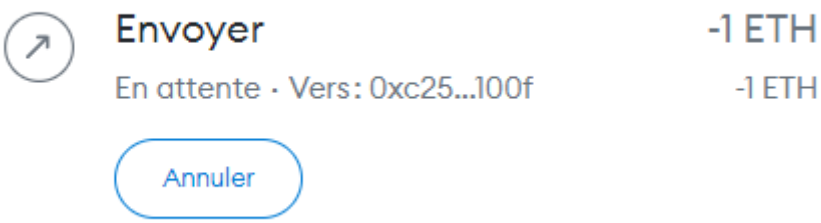
Transaction Hash:	0x9ffbddc449713362983cf15d07d44fee3832ebde6a4bc750f78db86bf60125a2
Status:	Success
Block:	12130800 1825 Block Confirmations
Timestamp:	14 hrs 29 mins ago (Mar-24-2022 10:16:07 PM +UTC)
From:	0x81b7e08f65bdf5648606c89998a9cc8164397647
To:	0x069977cdc3d618343e5b7a1e9ee3f8fd07190eda
Value:	1 Ether ($0.00)
Transaction Fee:	0.000861541693488 Ether ($0.00)
Gas Price:	0.000000041025794928 Ether (41.025794928 Gwei)

Click to see More

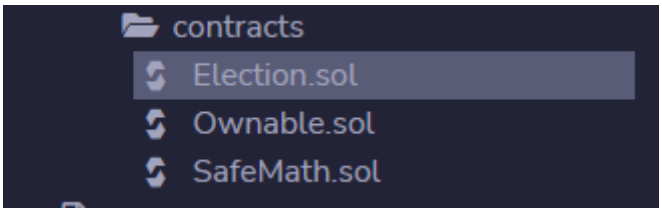
1.f

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 - 0.01526734146244579 2)
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:0xd883010a1084676574688867 6f312e31372e35856c696e7578)

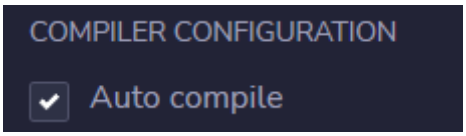
1.g



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


addCandidate
string _name
transferOwner...
address newOwner
vote
uint256 _candidateId
candidates
1
0: uint256: id 1
1: string: name CHHUON
2: uint256: voteCount 0
candidatesCou...
owner
voters
address
Low level interactions
CALLDATA
call [call] from: 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4 to: Election.candidates(uint256) data: 0x347...00001
from 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4
to Election.candidates(uint256) 0xd9145CCE52D386f254917e481eB44e9943F39138
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 0" }
logs []

1.q


ELECTION AT 0XD91...39138 (MEMOI
addCandidate
CROCO
transferOwner...
address newOwner
vote
uint256 _candidateId
candidates
uint256
0: uint256: id 1
1: string: name CHHUON
2: uint256: voteCount 0
candidatesCou...
owner
voters
address
Low level interactions
CALLDATA
[vm] from: 0x5B3...eddC4 to: Election.addCandidate(string) 0xd91...39138 value: 0 wei data: 0x462...00000 logs: 0 hash: 0x526...0e2fb
status true Transaction mined and execution succeed
transaction hash 0x5262b75d51ac06034562c43bb28c4e7ac840af3ec390e481876b6da72bd0e2fb
from 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4
to Election.addCandidate(string) 0xd9145CCE52D386f254917e481eB44e9943F39138
gas 80000000 gas
transaction cost 74270 gas
execution cost 74270 gas
input 0x462...00000
decoded input { "string _name": "CROCO" }
decoded output {}
logs []
val 0 wei

1.r


addCandidate
CROCO
transferOwner...
address newOwner
vote
uint256 _candidateId
candidates
2
0: uint256: id 2
1: string: name CROCO
2: uint256: voteCount 0
candidatesCou...
owner
voters
address
call [call] from: 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4 to: Election.candidates(uint256) data: 0x347...00002
from 0x5B38Da6a701c568545dCfcB03FcB875f56beddC4
to Election.candidates(uint256) 0xd9145CCE52D386f254917e481eB44e9943F39138
execution cost 28814 gas (Cost only applies when called by a contract)
input 0x347...00002
decoded input { "uint256 ": "2" }
decoded output { "0": "uint256: id 2", "1": "string: name CROCO", "2": "uint256: voteCount 0" }

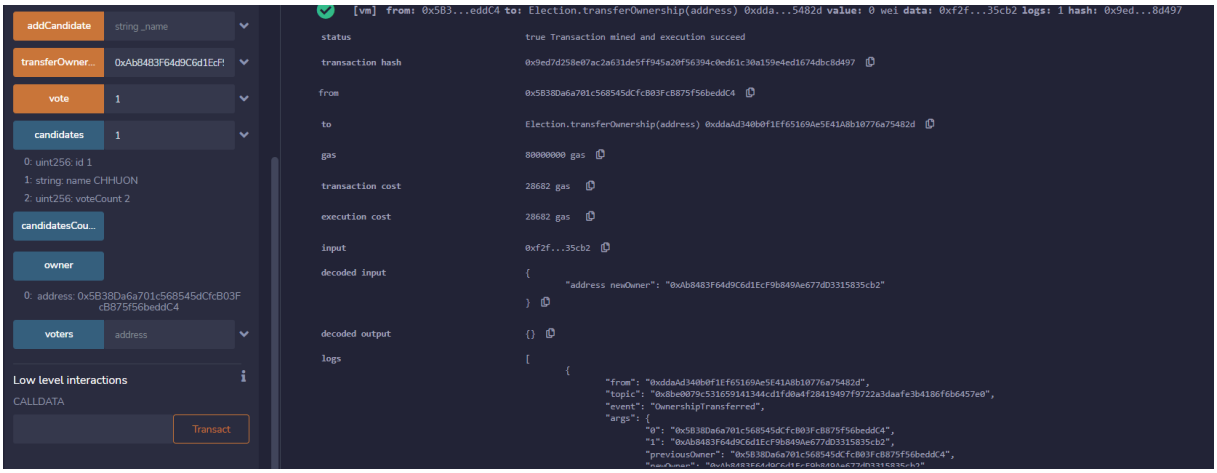
1.s

1.t

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

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

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



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 :

Avec un autre wallet l'action addCandidate est refusé :