

TIC-BLK4

Etape 2

“Deploy and interact with your smart contrat in your Private Network”

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Ecriture et compilation du smart contract:

The screenshot shows the Remix IDE interface. On the left, the 'SOLIDITY COMPILER' panel is active, displaying the compiler version '0.5.12+commit.7709ece' and the language 'Solidity'. The 'Contract' dropdown shows 'financialContract (financi'. Below this, there are buttons for 'Publish on Swarm', 'Publish on Ipfs', and 'Compilation Details'. The main editor displays the Solidity code for 'financialContract.sol':

```
1 pragma solidity >=0.4.22 <0.6.0;
2
3 contract financialContract {
4     uint balance= 15;
5
6     function setValue(uint value) public {
7         balance = value;
8     }
9
10    function getValue() public view returns(uint){
11        return (balance);
12    }
13
14    function deposit(uint newDeposit) public {
15        balance = balance + newDeposit;
16    }
17 }
```

At the bottom, the 'Execution' panel shows a transaction log with a single entry: '[call] from:0xCA35b7d915458EF540aDe066dfe2f448Ffa733c to:financialContract.getValue() data:0x209...65255'. The execution cost is 391 gas.

Déploiement et utilisation du smart contract:

The screenshot shows the Remix IDE interface with the 'DEPLOY & RUN TRANSACTIONS' panel active on the left. The 'Environment' is set to 'JavaScript VM'. The 'Account' is '0xCA3...a733c (99.9995 ETH)'. The 'Gas limit' is '3000000'. The 'Value' is '0 wei'. The 'Contract' dropdown shows 'financialContract - browser/financia'. The 'Deploy' button is highlighted. Below this, there are buttons for 'At Address' and 'Load contract from Address'. The 'Transactions recorded' section shows one transaction. The 'Deployed Contracts' section shows the 'financialContract' at address '0x692...7783A (memory)'. Below this, there are buttons for 'deposit', 'setValue', and 'getValue'. The 'deposit' button is highlighted, and the 'Value' field is set to '10'. The 'setValue' button is highlighted, and the 'Value' field is set to '45'. The 'getValue' button is highlighted, and the 'Value' field is set to '0: uint256: 55'. The main editor displays the same Solidity code as in the previous screenshot. At the bottom, the 'Execution' panel shows a transaction log with a single entry: '[call] from:0xCA35b7d915458EF540aDe066dfe2f448Ffa733c to:financialContract.getValue() data:0x209...65255'. The execution cost is 391 gas.

DEPLOY & RUN TRANSACTIONS

EnvironmentJavaScript VM

Account0xd08...92148 (98.999%)

Gas limit3000000

Value0ether

FinancialContract - browser/financi

Deploy

or

At AddressLoad contract from Address

Transactions recorded: 0

Deployed Contracts

FinancialContract at 0x5fc...6A45a [mem]

deposit1200

receiveDeposit

setValue12

getBalance

0: uint256: 1000000000000000000

getValue

0: uint256: 1212

financialContract.sol

1pragma solidity >=0.4.22 <0.6.0;

2contract FinancialContract {

3uint balance = 1500;

4

5

6constructor() payable public {

7

8}

9

10

11function receiveDeposit() payable public {

12}

13

14function setValue(uint value) public {

15balance = value;

16}

17

18function getValue() public view returns(uint){

19return (balance);

20}

21

22function deposit(uint newDeposit) public {

23balance = balance + newDeposit;

24}

25

26function getBalance() public view returns(uint){

27return (address(this).balance);

28}

29}

FinancialContract

Search with transaction hash or address

0listen on network

Debug

[call] from:0xd0870fa1b7c4700f2b07f44238821c26f7392148 to:FinancialContract.getValue() data:0x209...65255

Lancement de ganache:

ACCOUNTS

BLOCKS

TRANSACTIONS

CONTRACTS

EVENTS

LOGS

SEARCH FOR BLOCK NUMBERS OR TX HASHES

CURRENT BLOCK0

GAS PRICE2000000000

GAS LIMIT6721975

HARDFORKPETERSBURG

NETWORK ID5777

RPC SERVERHTTP://0.0.0.0:8545

MINING STATUSAUTOMINING

WORKSPACETEST_SIMOES_T

SWITCH

MNEMONIC

hidden hybrid brand embrace edge measure gold taste later scorpion attract mesh

HD PATH

m/44'/60'/0'/0/account_index

ADDRESS	0x812C52a49653CE1Eb84E35a6Cf90f8e5Fea73CC2	BALANCE	100.00	ETH	TX COUNT	0	INDEX	0	
ADDRESS	0x89C8926060A9D859f147fFaD8a3df72B9ceb2110	BALANCE	100.00	ETH	TX COUNT	0	INDEX	1	
ADDRESS	0x4B70F3CE39D87BDeca17AE1dBc765E6c3EC8738c	BALANCE	100.00	ETH	TX COUNT	0	INDEX	2	
ADDRESS	0x8A4da758BB8e480d96dE70d91bb8090fDeaB75bB	BALANCE	100.00	ETH	TX COUNT	0	INDEX	3	
ADDRESS	0xF041109A9cFd766da213833cee90b82C89B060a1	BALANCE	100.00	ETH	TX COUNT	0	INDEX	4	
ADDRESS	0x57E4C1dC2e898B78fc899ce6dC52f0894322EE5D	BALANCE	100.00	ETH	TX COUNT	0	INDEX	5	
ADDRESS	0x3236Dc2571d0c66A667C8e9F007E0a4EBE8208E5	BALANCE	100.00	ETH	TX COUNT	0	INDEX	6	
ADDRESS	0x36641CfC56107B7F9525AEfe16625cd21E39E56c	BALANCE	100.00	ETH	TX COUNT	0	INDEX	7	
ADDRESS	0x05C0215eeaC62F68eDB33b3a948aa34c8FAdE229	BALANCE	100.00	ETH	TX COUNT	0	INDEX	8	
ADDRESS	0x835B822bac6822c23a815872C99B97aCB3b023a6	BALANCE	100.00	ETH	TX COUNT	0	INDEX	9	

Import du serveur RPC de Ganache à MyEtherWallet:

Set Up Your Custom Node

[Instructions can be found here](#)

Node Name

Private ETH Node

URL

http://127.0.0.1

Port

7545

☐ HTTP Basic access authentication

☒ ETH

☐ ETC

☐ Ropsten

☐ Kovan

☐ Rinkeby

☐ Custom

Cancel

Save & Use Custom Node

Déploiement du smart contract sur MyEtherWallet:

MyEtherWallet

3.4.0 English Gas Price: 41 Gwei Network Private ETH Node:eth (custom)

The network is really full right now. Check Eth Gas Station for gas price to use.

Home Wallet Send Ether & Tokens Swap Send Offline Contracts ENS DomainSale Check TX Status View Wallet Info Help

Interact with Contract or Deploy Contract

Byte Code

```
60200191505060405180910390f35b3480156100d757600000fd5b50610104600480360360208110156100ee57600080fd5b8101908080359060200190929190505061020  
5565b005b34801561011257600000fd5b506101376004803603602081101561012957600000fd5b810190808035906020019092919050506102a9565b005b34801561014d  
57600000fd5b506101566182b3565b004051808273ffffffffffffffffffffffffffffffffff1673fffffffffffffffffffffffffffffffff1681526020019  
1595060405190910390f35b3480156101a457600080fd5b506101d1600480360360208110156101bb57600080fd5b81019080803590602001909291905050506102dd565b00  
5b6101db6102eb565b005b0003073fffffffffffffffffffffffffffffffffffffffffff1631905090565b0000054905090565b3373ffffffffffffffffffffffffffffffffffff  
ffffffff16600160009054906101000a900473fffffffffffffffffffffffffffffffffffffffffff1673ffffffffffffffffffffffffffffffffffffffffff161461025f57600080  
fd5b3373fffffffffffffffffffffffffffffffffffffffffff166108fc829081150290604051600060405180030381858088f193505050501580156102a5573d6000803e3d600  
0fd5b5050565b060008190555050565b0600600160009054906101000a900473ffffffffffffffffffffffffffffffffffffffffff16905090565b060005401600081905550
```

Gas Limit

311308

Sign Transaction

MyEtherWallet.com does not hold your keys for you. We cannot access accounts, recover keys, reset passwords, nor reverse transactions. Protect your keys & always check that you are on correct URL. You are responsible for your security.

[illegible]

Interaction avec le smart contract sur MyEtherWallet:

MyEtherWallet.com does not hold your keys for you. We cannot access accounts, recover keys, reset passwords, nor reverse transactions. Protect your keys & always check that you are on correct URL. [You are responsible for your security.](#)

Interact with Contract or [Deploy Contract](#)

Contract Address

0xb6E2170c8eCf7a4Dc0FA4358d9D44898eC562df6



Select Existing Contract

Select a contract...

ABI / JSON Interface

```
[
  {
    "inputs": [],
    "payable": true,
    "stateMutability": "payable",
    "type": "constructor"
  }
]
```

Access

Read / Write Contract

0xb6E2170c8eCf7a4Dc0FA4358d9D44898eC562df6

Select a function

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Interact with Contract or [Deploy Contract](#)

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```

Access

Read / Write Contract

0xb6E2170c8eCf7a4Dc0FA4358d9D44898eC562df6

getOwner

deposit
getBalance
getOwner
getValue
receiveDeposit
setValue
withdraw

0x1eb84e35a6cf90f8e5fea73cc2



MyEtherWallet.com does not hold your keys for you. We cannot access accounts, recover keys, reset passwords, nor reverse transactions. Protect your keys & always

New WalletSend Ether & TokensSwapSend OfflineContractsENSDomainSaleCheck TX StatusView Wallet InfoHelp

Interact with Contract or Deploy Contract

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```

Access

Read / Write Contract

0xb6E2170c8eCf7a4Dc0FA4358d9D44898eC562df6

withdraw

funds uint256

120

WRITE

ACCOUNTS		BLOCKS	TRANSACTIONS	CONTRACTS	EVENTS	LOGS	SEARCH FOR BLOCK NUMBERS OR TX HASHES				
CURRENT BLOCK 16	GAS PRICE 20000000000	GAS LIMIT 6721975	HARDWARE PETERSBURG	NETWORK ID 5777	RPC SERVER HTTP://0.0.0.0:7545	MINING STATUS AUTOMINING	WORKSPACE TEST_SIMOES_T			<div>SWITCH</div> <div>⚙</div>	
TX HASH											
0x59b064d3813bbf69d3955b2d4d1144648587beb950e1a681d5f92bea855f8980											
FROM ADDRESS 0x812C52a49653CE1Eb84E35a6CF90f8e5Fea73CC2		TO CONTRACT ADDRESS 0xb6E2170c8eCF7a4Dc0FA4358d9D44898eC562df6				GAS USED 30000		VALUE 0			
TX HASH											
0x2af2b0ef82b4fee67271d5a1cc49c92c4e32cf8262d60f54218e0666026106e7											
FROM ADDRESS 0x812C52a49653CE1Eb84E35a6CF90f8e5Fea73CC2		TO CONTRACT ADDRESS 0xb6E2170c8eCF7a4Dc0FA4358d9D44898eC562df6				GAS USED 21632		VALUE 1000000000000000000			
TX HASH											
0xd4e915fb1c59d45f6be25d5e48372c1238b9ed97f1c7cb3597457f7407911767											
FROM ADDRESS 0x812C52a49653CE1Eb84E35a6CF90f8e5Fea73CC2		TO CONTRACT ADDRESS 0xb6E2170c8eCF7a4Dc0FA4358d9D44898eC562df6				GAS USED 21587		VALUE 1000000000000000000			
TX HASH											
0xf8bf893da0f26416663f609e4bf29815e80b48a9262a1b5e57cda346ca04c85a											
FROM ADDRESS 0x812C52a49653CE1Eb84E35a6CF90f8e5Fea73CC2		TO CONTRACT ADDRESS 0xb6E2170c8eCF7a4Dc0FA4358d9D44898eC562df6				GAS USED 26706		VALUE 0			
TX HASH											
0x1ae9c1f75f0e46ce98e19ed3c32cb85a341b4deacd39a1853df0cc4f052d805											
FROM ADDRESS 0x812C52a49653CE1Eb84E35a6CF90f8e5Fea73CC2		TO CONTRACT ADDRESS 0xb6E2170c8eCF7a4Dc0FA4358d9D44898eC562df6				GAS USED 26706		VALUE 0			
TX HASH											
0x378fb3d4ff1c51d802630f6a1ce14e4d2f73809e3e3856455438a48ea3ba0a0											
FROM ADDRESS 0x812C52a49653CE1Eb84E35a6CF90f8e5Fea73CC2		TO CONTRACT ADDRESS 0xb6E2170c8eCF7a4Dc0FA4358d9D44898eC562df6				GAS USED 21587		VALUE 1000000000000000000			
TX HASH											
0xa03c361a176b7e03a2ce21dab4980821fcac5818ca690d											