Solidity Programming

Inheritance

Start the Geth console

1. Place the ipc folder in the home path the IPC

geth --datadir %ethereum\_home%/block1 --port 30303 --nodiscover --ipcpath %ethereum\_home%/geth.ipc console

1. Make sure geth is started:

geth --datadir %ethereum\_home%/block1 init %ethereum\_home%/genesis.json

1. Start the IPC service

geth --datadir %ethereum\_home%/block1 --nodiscover --rpc --rpcport "8545" --rpccorsdomain "\*" console 2>console.log

1. Make sure the account is unlocked:

Personal.unlockAccount(eth.accounts[0])

Create the filename.sol and select web3 provider:

pragma solidity ^0.4.0;

contract myFirstContract {

string private name;

uint private age;

function setName (string newName) public {

name = newName;

}

function getName() external view returns (string) {

return name;

}

function setAge (uint newAge) public {

age = newAge;

}

function getAge() external view returns (uint) {

return age;

}

}

ABI:

Var abi = [{"constant": true,"inputs": [],"name": "balance", "outputs": [ { "name": "", "type": "uint256" } ], "payable": false, "stateMutability": "view", "type": "function" }, { "constant": false, "inputs": [ { "name": "amount", "type": "uint256" } ], "name": "deposit", "outputs": [], "payable": false, "stateMutability": "nonpayable", "type": "function" }, { "constant": false, "inputs": [ { "name": "amount", "type": "uint256" } ], "name": "withdrawal", "outputs": [], "payable": false, "stateMutability": "nonpayable", "type": "function" }, { "inputs": [ { "name": "amount", "type": "uint256" } ], "payable": false, "stateMutability": "nonpayable", "type": "constructor" } ]

Var address = “0x576098c446ca1c8133d76c89de98dbecc63bebea”

Var myContract = eth.contract(abi).at(address)

myContract

myContract.balance()

eth.defaultAccount=eth.accounts[0] Otherwise WRITE operation's won't work

personal.unlockAccount(eth.accounts[0])

myContract.deposit(“50”)

myContract.withdrawal(“20”)