

This is the instruction on how to start the ethereum private network and then deploying the smart contract on the network.
Copy both the folders inside phase-3 on to your desktop before starting.

1. Open the terminal and redirect to the KYC-Blockchain folder:
cd /{path}/KYC-Blockchain

2. you need to issue the following command and press enter: **geth --datadir ./datadir init ./genesis.json**

This command will create a private chain data for our blockchain.

3. You need to type the following command and press enter: **geth --datadir ./datadir --networkid 2019 --rpc --rpcport 30303 --allow-insecure-unlock console**

This command is going to create a new blockchain network and it will start a console

4. Create new accounts by entering this:

personal.newAccount('aakash')

aakash is the password

5. Unlock the newly created account by entering:

personal.unlockAccount(eth.coinbase, 'aakash', 0)

Here eth.coinbase is taken as the first account created by default and the password is 'aakash'. 0 in the end means we need to keep it unlock for indefinite time.

6. Now the network is running and the coinbase account is unlocked for migrating the smart contracts. Now start the mining process in this terminal by entering: **miner.start()**

IMPORTANT: Let the mining process be on for a while, so that the coinbase account has some ether to execute the migration via truffle

7. Open another terminal (lets call this terminal B) and redirect to the trufflekyc folder in phase-3: **cd /{path}/trufflekyc**

8. To compile the smart contract code in terminal B press:

truffle compile

With this command, you will see that truffle is going to compile all the smart contracts available inside your contracts directory and is going to create the byte-code that needs to be put on top of the blockchain.

9. Copy the KYC_Customer.sol file inside the newly created contracts folder. Also copy the 2_KYC_Customer_deployment.js file inside the newly created migrations folder. Both these files are inside the trufflekyc folder in phase-3.

9. Run the following command in Terminal B: **truffle migrate --network geth**

it is going to migrate the smart contracts on to the geth network

10. To access the truffle console run the following command:

truffle console --network geth

you will be taken inside the truffle console connected to the geth environment. Inside this console, you can write the JavaScript statements