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Assignment No. 3: Write and deploy a chaincode

Execute the following commands

cd ../../test-network

export PATH=${PWD}/../bin:$PATH

export FABRIC\_CFG\_PATH=$PWD/../config/

Javascript Chaincode

peer lifecycle chaincode package basic.tar.gz --path ../asset-transfer-basic/chaincode-javascript/ --lang node --label basic\_1.0

**Install Chaincode**

**Setup Organization 1**

export CORE\_PEER\_TLS\_ENABLED=true

export CORE\_PEER\_LOCALMSPID="Org1MSP"

export CORE\_PEER\_TLS\_ROOTCERT\_FILE=${PWD}/organizations/peerOrganizations/org1.example.com/peers/peer0.org1.example.com/tls/ca.crt

export CORE\_PEER\_MSPCONFIGPATH=${PWD}/organizations/peerOrganizations/org1.example.com/users/Admin@org1.example.com/msp

export CORE\_PEER\_ADDRESS=localhost:7051

**Setup Organization 2**

export CORE\_PEER\_LOCALMSPID="Org2MSP"

export CORE\_PEER\_TLS\_ROOTCERT\_FILE=${PWD}/organizations/peerOrganizations/org2.example.com/peers/peer0.org2.example.com/tls/ca.crt

export CORE\_PEER\_MSPCONFIGPATH=${PWD}/organizations/peerOrganizations/org2.example.com/users/Admin@org2.example.com/msp

export CORE\_PEER\_ADDRESS=localhost:9051

peer lifecycle chaincode install basic.tar.gz

**Approve Chaincode**

Get the package id

peer lifecycle chaincode queryinstalled

export CC\_PACKAGE\_ID=<Package\_ID>

peer lifecycle chaincode approveformyorg -o localhost:7050 --ordererTLSHostnameOverride orderer.example.com --channelID mychannel --name basic --version 1.0 --package-id $CC\_PACKAGE\_ID --sequence 1 --tls –cafile "${PWD}/organizations/ordererOrganizations/example.com/orderers/orderer.example.com/msp/tlscacerts/tlsca.example.com-cert.pem"

export CORE\_PEER\_LOCALMSPID="Org1MSP"

export CORE\_PEER\_MSPCONFIGPATH=${PWD}/organizations/peerOrganizations/org1.example.com/users/Admin@org1.example.com/msp

export CORE\_PEER\_TLS\_ROOTCERT\_FILE=${PWD}/organizations/peerOrganizations/org1.example.com/peers/peer0.org1.example.com/tls/ca.crt

export CORE\_PEER\_ADDRESS=localhost:7051

peer lifecycle chaincode approveformyorg -o localhost:7050 --ordererTLSHostnameOverride orderer.example.com --channelID mychannel --name basic --version 1.0 --package-id $CC\_PACKAGE\_ID --sequence 1 --tls --cafile "${PWD}/organizations/ordererOrganizations/example.com/orderers/orderer.example.com/msp/tlscacerts/tlsca.example.com-cert.pem"

**Committing Chaincode**

Check commit readiness

peer lifecycle chaincode checkcommitreadiness --channelID mychannel --name basic --version 1.0 --sequence 1 --tls --cafile "${PWD}/organizations/ordererOrganizations/example.com/orderers/orderer.example.com/msp/tlscacerts/tlsca.example.com-cert.pem" --output json

**Invoke Chaincode**

peer chaincode invoke -o localhost:7050 --ordererTLSHostnameOverride orderer.example.com --tls --cafile "${PWD}/organizations/ordererOrganizations/example.com/orderers/orderer.example.com/msp/tlscacerts/tlsca.example.com-cert.pem" -C mychannel -n basic --peerAddresses localhost:7051 --tlsRootCertFiles "${PWD}/organizations/peerOrganizations/org1.example.com/peers/peer0.org1.example.com/tls/ca.crt" --peerAddresses localhost:9051 --tlsRootCertFiles "${PWD}/organizations/peerOrganizations/org2.example.com/peers/peer0.org2.example.com/tls/ca.crt" -c '{"function":"InitLedger","Args":[]}'

peer chaincode query -C mychannel -n basic -c '{"Args":["GetAllAssets"]}'



