Graphical user interface, text

Description automatically generated

**Lesson 1 Demo 4**

**Package the Chaincode**

|  |
| --- |
| **Objective:** To package the Agrofarm chaincode  **Tools required:** Ubuntu  **Prerequisites:** Lesson 1 Demo 3 and Hyperledger Fabric Test network |

Steps to be followed:

1. Setting up the Hyperledger Fabric Test network
2. Packaging the Agrofarm chaincode

**Step 1: Setting up the Hyperledger Fabric Test network**

1. Navigate to the **test-network** folder by using the following command:

***cd fabric-samples/test-network***

1. Stop the previously running test network by running the following command:

***sudo ./network.sh down***

1. Remove the unused docker images by running the following command:

***sudo docker system prune***

1. Start the test network by executing the following command:

***sudo ./network.sh up -ca -s couchdb***

1. To create a communication channel for the peers in the test network, use the following command:

***sudo ./network.sh createChannel -c mychannel***

**Step 2: Packaging the Agrofarm chaincode**

1. Navigate to the **fabric-samples/test-network** folder and create **lifecycle\_setup.sh** life using the following command:

**nano lifecycle\_setup\_org1.sh**

1. Add the following code in the **lifecycle\_setup\_org1.sh** file:

***#!/bin/sh***

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

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

***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***

***export ORDERER\_CA=${PWD}/organizations/ordererOrganizations/example.com/orderers/orderer.example.com/msp/tlscacerts/tlsca.example.com-cert.pem***

|  |
| --- |
| **Note**: Press **Ctrl + X** to save the file. |

1. To set up all required environment variables, go to the **fabric-samples/test-network** and run the **lifecycle\_setup\_org1.sh** file using the command:

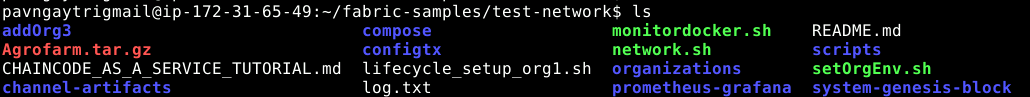
***source ./lifecycle\_setup\_org1.sh***

1. Run the following command to package the Agrofarmchaincode:

***peer lifecycle chaincode package Agrofarm.tar.gz --path ../../eclipse-workspace/Agrofarm/lib/build/install/lib --lang java --label Agrofarm \_1***

1. Run the following command to list the newly created ***Agrofarm*.tar.gz** package:

***ls***

******

The Agrofarm chaincode is packaged.