10/19/23. 8:46 AM Blueventure: Blockchain Lab

Blueventure: **Blockchain Lab**

Event dashboard > Write and deploy chaincode > Build chaincode

Track-and-Trace Blockchain Workshop for Hyperledger Fabric 2.2 (BETA)

X

- ▼ Create a Hyperledger Fabric Network
 - Create Network & Member
 - Accept invite and create Supplier member

Congratulations

- Setup Development Environment
- ▶ Set up a Fabric client
- ▼ Write and deploy chaincode

Chaincode development environment

Write chaincode

Create sharing policy

AWS account access

Open AWS console (us-east-1)

Get AWS CLI credentials

Exit event

Build chaincode

The blockchain network is hosted in a VPC that is managed by AWS. For security reasons, the peer nodes in this VPC don't have direct access to the Internet, which means that they are not able to install the dependencies declared in your package. json file. For this reason, in the Write Chaincode section of this module, we bundled our dependencies from node modules/ into a directory called lib/, which will be packaged along with the source code of our chaincode to be installed on the peer. To prevent the chaincode installation from failing when looking for external dependencies, we also made a minor change to our package. json file on Line 6 to tell the peer's chaincode Node.js execution environment how to run our code and find our bundled dependencies:

A This change has already been made to your package, json file, you do not need to modify the file. The following is for informational purposes only.

```
ð
     {
       "name": "chaincode",
       "version": "1.0.0",
       "scripts": {
         "test": "NODE PATH=lib mocha * test.js",
         "start": "NODE PATH=lib node products.js"
6
7
       },
8
        "dependencies": {
9
         "fabric-shim": "^2.0.0",
10
         "javascript-state-machine": "^3.1.0",
         "loglevel": "^1.6.8"
11
12
       },
13
       "devDependencies": {
14
         "@theledger/fabric-mock-stub": "^2.0.3",
15
         "chai": "^4.2.0",
         "chai-as-promised": "^7.1.1",
16
17
         "chai-datetime": "^1.6.0",
         "moment": "^2.25.3"
18
19
20 }
```

1 The Retailer should run the following commands in their Cloud9 terminal.

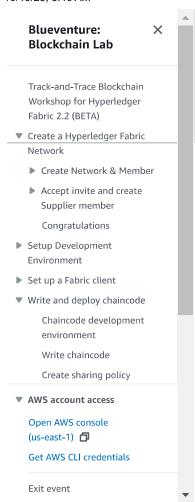
Next we need to build the chaincode into a package that will be identical for all peers to install. The following command packages the chaincode and uploads to package to the shared S3 bucket created earlier in this module.

```
ð
1 cp -r ~/environment/chaincode ~
    peer lifecycle chaincode package supplychaincc.tar.gz --path $HOME/chaincode --lang node --label supplychaincc_1.0
    sudo chmod 644 supplychaincc.tar.gz
```

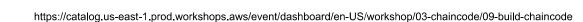




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