

Blueventure:
Blockchain LabTrack-and-Trace Blockchain
Workshop for Hyperledger
Fabric 2.2 (BETA)▼ Create a Hyperledger Fabric
Network

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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:

 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.

```
1  {
2    "name": "chaincode",
3    "version": "1.0.0",
4    "scripts": {
5      "test": "NODE_PATH=lib mocha *_test.js",
6      "start": "NODE_PATH=lib node products.js"
7    },
8    "dependencies": {
9      "fabric-shim": "^2.0.0",
10     "javascript-state-machine": "^3.1.0",
11     "loglevel": "^1.6.8"
12   },
13   "devDependencies": {
14     "@theledger/fabric-mock-stub": "^2.0.3",
15     "chai": "^4.2.0",
16     "chai-as-promised": "^7.1.1",
17     "chai-datetime": "^1.6.0",
18     "moment": "^2.25.3"
19   }
20 }
```

 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.

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

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Exit event

```
5  aws s3api put-object --bucket $BUCKET_NAME --key supplychaincc.tar.gz --body $HOME/supplychaincc.tar.gz --acl bucket-owner-full-control
6  sudo rm supplychaincc.tar.gz
7  cd
```

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