Ejercicio: Practicar el inicio, detener, suspender, reiniciar

Familiarícese con los distintos scripts que utilizará a lo largo de este curso. Asegúrese de que su entorno de desarrollo esté listo para actividades de desarrollo.

1. Inicie su entorno de desarrollo

```
$ ./startFabric.sh
Development only script for Hyperledger Fabric control
Running 'startFabric.sh'
FABRIC_VERSION is unset, assuming hlfv11
FABRIC_START_TIMEOUT is unset, assuming 15 (seconds)
C:\Users\Jesus\HLF-Windows-Fabric-Tool\fabric-scripts\hlfv11\composer\docker-compose.yml
Stopping peer0.org1.example.com ... done
Stopping couchdb                ... done
Stopping orderer.example.com    ... done
Stopping ca.org1.example.com    ... done
Removing peer0.org1.example.com ... done
Removing couchdb                ... done
Removing orderer.example.com    ... done
Removing ca.org1.example.com    ... done
Removing network composer_default
Creating network "composer_default" with the default driver
Creating ca.org1.example.com ... done
Creating couchdb             ... done
Creating orderer.example.com ... done
Creating peer0.org1.example.com ... done
sleeping for 15 seconds to wait for fabric to complete start up
2018-08-23 12:32:00.983 UTC [msp] GetLocalMSP -> DEBU 001 Returning existing local MSP
2018-08-23 12:32:00.984 UTC [msp] GetDefaultSigningIdentity -> DEBU 002 Obtaining default signing identity
2018-08-23 12:32:00.992 UTC [channelCmd] InitCmdFactory -> INFO 003 Endorser and orderer connections initialized
2018-08-23 12:32:00.996 UTC [msp] GetLocalMSP -> DEBU 004 Returning existing local MSP
2018-08-23 12:32:00.997 UTC [msp] GetDefaultSigningIdentity -> DEBU 005 Obtaining default signing identity
2018-08-23 12:32:00.999 UTC [msp] GetLocalMSP -> DEBU 006 Returning existing local MSP
2018-08-23 12:32:01.001 UTC [msp] GetDefaultSigningIdentity -> DEBU 007 Obtaining default signing identity
2018-08-23 12:32:01.001 UTC [msp/identity] Sign -> DEBU 008 Sign: plaintext: 0AA2060A074F7267314D53501296062D...6D706F736572436F6E736F727469706D
2018-08-23 12:32:01.002 UTC [msp/identity] Sign -> DEBU 009 Sign: digest: 2E9C4E9A85A4E4BA7F58E5D5CF6DC302BE7AB06DEEC90C53555353BF1774B827
2018-08-23 12:32:01.004 UTC [msp] GetLocalMSP -> DEBU 00a Returning existing local MSP
2018-08-23 12:32:01.005 UTC [msp] GetDefaultSigningIdentity -> DEBU 00b Obtaining default signing identity
2018-08-23 12:32:01.007 UTC [msp] GetLocalMSP -> DEBU 00c Returning existing local MSP
2018-08-23 12:32:01.008 UTC [msp] GetDefaultSigningIdentity -> DEBU 00d Obtaining default signing identity
2018-08-23 12:32:01.009 UTC [msp/identity] Sign -> DEBU 00e Sign: plaintext: 0ADF060A1B08021A0608C1D2FADB0522...D146A6F91D545B78003B8D9C57DCB516
2018-08-23 12:32:01.009 UTC [msp/identity] Sign -> DEBU 00f Sign: digest: 07F6766FE40652A96C3CBFF728E322E4519F31833B29FD3040D546DB84835CA4
2018-08-23 12:32:01.266 UTC [msp] GetLocalMSP -> DEBU 010 Returning existing local MSP
2018-08-23 12:32:01.267 UTC [msp] GetDefaultSigningIdentity -> DEBU 011 Obtaining default signing identity
2018-08-23 12:32:01.272 UTC [msp] GetLocalMSP -> DEBU 012 Returning existing local MSP
2018-08-23 12:32:01.276 UTC [msp] GetDefaultSigningIdentity -> DEBU 013 Obtaining default signing identity
2018-08-23 12:32:01.277 UTC [msp/identity] Sign -> DEBU 014 Sign: plaintext: 0ADF060A1B08021A0608C1D2FADB0522...AF6D939AF79012080A021A0012021A00
2018-08-23 12:32:01.278 UTC [msp/identity] Sign -> DEBU 015 Sign: digest: F3130A9BC01ADA579EBAA2843FBF09FD4D61663112FE8EE97A9246B34AD6B7D9
2018-08-23 12:32:01.355 UTC [channelCmd] readBlock -> DEBU 016 Got status: &{NOT_FOUND}
2018-08-23 12:32:01.357 UTC [msp] GetLocalMSP -> DEBU 017 Returning existing local MSP
2018-08-23 12:32:01.358 UTC [msp] GetDefaultSigningIdentity -> DEBU 018 Obtaining default signing identity
2018-08-23 12:32:01.366 UTC [channelCmd] InitCmdFactory -> INFO 019 Endorser and orderer connections initialized
2018-08-23 12:32:01.570 UTC [msp] GetLocalMSP -> DEBU 01a Returning existing local MSP
2018-08-23 12:32:01.571 UTC [msp] GetDefaultSigningIdentity -> DEBU 01b Obtaining default signing identity
2018-08-23 12:32:01.573 UTC [msp] GetLocalMSP -> DEBU 01c Returning existing local MSP
```

2. Use el comando Docker para verificar si los 4 contenedores para el entorno de Fabric están activos (Sugerencia: ps)

```
$ docker ps
CONTAINER ID    IMAGE                              COMMAND                CREATED            STATUS             PORTS                                             NAMES
0711989384de    hyperledger/fabric-peer:x86_64-1.1.0    "peer node start"      About a minute ago  Up About a minute  0.0.0.0:7051->7051/tcp, 0.0.0.0:7053->7053/tcp    peer0.org1.exam
ple.com
7a33fe1ec1e7    hyperledger/fabric-orderer:x86_64-1.1.0    "orderer"              About a minute ago  Up About a minute  0.0.0.0:7050->7050/tcp                            orderer.example
.com
b360d6db71e1    hyperledger/fabric-ca:x86_64-1.1.0    "sh -c 'fabric-ca-se…"  About a minute ago  Up About a minute  0.0.0.0:7054->7054/tcp                            ca.org1.example
.com
2a8c32f6a433    hyperledger/fabric-couchdb:x86_64-0.4.6    "tini -- /docker-ent…"  About a minute ago  Up About a minute  4369/tcp, 9100/tcp, 0.0.0.0:5984->5984/tcp        couchdb
```

3. Ahora suspenda el entorno, es decir, use fabricUtil

```
$ ./fabricUtil.sh stop
Development only script for Hyperledger Fabric control
The ARCH variable is not set. Defaulting to a blank string.
Stopping peer0.org1.example.com ... done
Stopping orderer.example.com    ... done
Stopping ca.org1.example.com    ... done
Stopping couchdb                ... done

Fabric DEV environment stopped - DO NOT Clean the containers :)
```

4. Ejecuta el comando docker ps. No deberías ver los contenedores.

```
$ docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS              PORTS               NAMES
```

5. Ejecute el comando del docker (docker ps -a). Debería ver los contenedores suspendidos.

```
$ docker ps -a
CONTAINER ID        IMAGE                           NAMES                                                                                                           COMMAND                 CREATED             STATUS
0711989384de        hyperledger/fabric-peer:x86_64-1.1.0                                                                                                            "peer node start"       7 minutes ago       Exited (0) 4
minutes ago                             peer0.org1.example.com
7a33fe1ec1e7        hyperledger/fabric-orderer:x86_64-1.1.0                                                                                                         "orderer"               7 minutes ago       Exited (2) 4
minutes ago                             orderer.example.com
b360d6db71e1        hyperledger/fabric-ca:x86_64-1.1.0                                                                                                              "sh -c 'fabric-ca-se…"  7 minutes ago       Exited (137)
4 minutes ago                           ca.org1.example.com
2a8c32f6a433        hyperledger/fabric-couchdb:x86_64-0.4.6                                                                                                         "tini -- /docker-ent…"  7 minutes ago       Exited (143)
4 minutes ago                           couchdb
fa90f1414a27        dev-peer0.org1.example.com-airlinev8-bna-0.0.1-fad73ec725109c51313b98838260c4f673bce3bf50cc6a67446abfb8af12eabf                                 "/bin/sh -c 'cd /usr…"  38 hours ago        Exited (0) 36
hours ago                               dev-peer0.org1.example.com-airlinev8-bna-0.0.1
984738a56d1f        hyperledger/fabric-ccenv:x86_64-1.1.0                                                                                                           "/bin/sh -c 'cp -R /…"  2 days ago          Exited (0) 38
hours ago                               keen_kalam
```

6. Ahora reinicie el entorno, es decir, use fabricUtil. Usando docker, compruebe si los contenedores están arriba.

```
$ ./fabricUtil.sh start
Development only script for Hyperledger Fabric control
Starting all containers
0711989384de
7a33fe1ec1e7
b360d6db71e1
2a8c32f6a433
Error response from daemon: network 06553c94ea622e487b87cfed5ba42aba59bf9d8331b1b6ca9ce2b282149efcb3 not found
984738a56d1f
Error: failed to start containers: fa90f1414a27

BNA container may still show up as dangling/exited - First command will start BNA
Fabric DEV environment started !!!
```

```
$ docker ps
CONTAINER ID        IMAGE                           COMMAND                 CREATED             STATUS              PORTS                                               NAMES
0711989384de        hyperledger/fabric-peer:x86_64-1.1.0        "peer node start"       19 minutes ago      Up 10 minutes       0.0.0.0:7051->7051/tcp, 0.0.0.0:7053->7053/tcp      peer0.org1.examp
le.com
7a33fe1ec1e7        hyperledger/fabric-orderer:x86_64-1.1.0     "orderer"               19 minutes ago      Up 10 minutes       0.0.0.0:7050->7050/tcp                              orderer.example.
com
b360d6db71e1        hyperledger/fabric-ca:x86_64-1.1.0          "sh -c 'fabric-ca-se…"  19 minutes ago      Up 10 minutes       0.0.0.0:7054->7054/tcp                              ca.org1.example.
com
2a8c32f6a433        hyperledger/fabric-couchdb:x86_64-0.4.6     "tini -- /docker-ent…"  19 minutes ago      Up 10 minutes       4369/tcp, 9100/tcp, 0.0.0.0:5984->5984/tcp          couchdb
```

7. Use stopFabric y luego verifique el estado de los contenedores usando el comando docker ps & ps -a. ¿Ves los contenedores suspendidos?

```
$ ./stopFabric.sh
Development only script for Hyperledger Fabric control
Running 'stopFabric.sh'
FABRIC_VERSION is unset, assuming hlfv11
FABRIC_START_TIMEOUT is unset, assuming 15 (seconds)
Stopping peer0.org1.example.com ... done
Stopping orderer.example.com    ... done
Stopping ca.org1.example.com    ... done
Stopping couchdb                ... done
```

```
$ docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS              PORTS               NAMES
```

```
$ docker ps -a
CONTAINER ID        IMAGE                           NAMES                                                                                                           COMMAND                 CREATED             STATUS
0711989384de        hyperledger/fabric-peer:x86_64-1.1.0                                                                                                            "peer node start"       21 minutes ago      Exited (0) Ab
out a minute ago                        peer0.org1.example.com
7a33fe1ec1e7        hyperledger/fabric-orderer:x86_64-1.1.0                                                                                                         "orderer"               21 minutes ago      Exited (2) Ab
out a minute ago                        orderer.example.com
b360d6db71e1        hyperledger/fabric-ca:x86_64-1.1.0                                                                                                              "sh -c 'fabric-ca-se…"  21 minutes ago      Exited (137)
About a minute ago                      ca.org1.example.com
2a8c32f6a433        hyperledger/fabric-couchdb:x86_64-0.4.6                                                                                                         "tini -- /docker-ent…"  21 minutes ago      Exited (143)
About a minute ago                      couchdb
fa90f1414a27        dev-peer0.org1.example.com-airlinev8-bna-0.0.1-fad73ec725109c51313b98838260c4f673bce3bf50cc6a67446abfb8af12eabf                                 "/bin/sh -c 'cd /usr…"  38 hours ago        Exited (128)
37 hours ago                            dev-peer0.org1.example.com-airlinev8-bna-0.0.1
984738a56d1f        hyperledger/fabric-ccenv:x86_64-1.1.0                                                                                                           "/bin/sh -c 'cp -R /…"  2 days ago          Exited (0) 12
minutes ago                             keen_kalam
```