007 开发环境下测试弹珠资产管理系统的chaincode

部署链码

将 弹珠资产管理系统的链码拷贝到`fabric-samples/chaincode`

进入链码开发目录

```
cd fabric-samples/chaincode-docker-devmode
```

打开3个终端

终端1

```
$ docker-compose -f docker-compose-simple.yaml up
```

终端2

```
$ docker exec -it chaincode bash

$ cd chaincode006

$ go build

$ CORE_PEER_ADDRESS=peer:7051 CORE_CHAINCODE_ID_NAME=mycc:0 ./chaincode006
```

终端3

```
$ docker exec -it cli bash

$ peer chaincode install -p chaincodedev/chaincode/chaincode006 -n mycc -v 0

$ peer chaincode instantiate -n mycc -v 0 -c '{"Args":[]}' -C myc

$ peer chaincode invoke -n mycc -c '{"Args":["initMarble","marble1","blue","
```

```
35","tom"]}' -C myc

$ peer chaincode invoke -n mycc -c '{"Args":["initMarble","marble2","red","50","tom"]}' -C myc

$ peer chaincode invoke -n mycc -c '{"Args":["initMarble","marble3","blue","70","tom"]}' -C myc

$ peer chaincode query -n mycc -c '{"Args":["readMarble","marble1"]}' -C myc

$ peer chaincode invoke -n mycc -c '{"Args":["transferMarble","marble2","jerry"]}' -C myc

$ peer chaincode query -n mycc -c '{"Args":["readMarble","marble2"]}' -C myc

$ peer chaincode invoke -n mycc -c '{"Args":["deleteMarble","marble1"]}' -C myc

$ peer chaincode query -n mycc -c '{"Args":["getMarblesByRange","marble1","marble3"]}' -C myc

$ peer chaincode query -n mycc -c '{"Args":["getHistoryForMarble","marble1"]}' -C myc

$ peer chaincode query -n mycc -c '{"Args":["queryMarblesByOwner","tom"]}' -C myc
```

富查询报错

富查询需要配置 CouchDB

chaincode for develop 配置 CouchDB

修改 `chaincode-docker-devmode/docker-compose-simple.yaml` 配置

```
# peer 加入如下配置

    environment:
    # 添加以下内容

      - CORE_LEDGER_STATE_STATEDATABASE=CouchDB
      - CORE_LEDGER_STATE_COUCHDBCONFIG_COUCHDBADDRESS=couchdb:5984
      - CORE_LEDGER_STATE_COUCHDBCONFIG_USERNAME=
      - CORE_LEDGER_STATE_COUCHDBCONFIG_PASSWORD=
```

```
    depends_on:
      - orderer
      - couchdb
```

```
  couchdb:
    container_name: couchdb
    image: hyperledger/fabric-couchdb
    # Populate the COUCHDB_USER and COUCHDB_PASSWORD to set an admin user an
d password
    # for CouchDB.  This will prevent CouchDB from operating in an "Admin Pa
rty" mode.
    environment:
      - COUCHDB_USER=
      - COUCHDB_PASSWORD=
    ports:
      - 5984:5984
```

docker-compose-simple.yaml × | docker-compose.yml × | docker-compose-couch.yaml

```
    ports:
      - 7050:7050
  peer:
    container_name: peer
    image: hyperledger/fabric-peer
    environment:
      - CORE_PEER_ID=peer
      - CORE_PEER_ADDRESS=peer:7051
      - CORE_PEER_GOSSIP_EXTERNALENDPOINT=peer:7051
      - CORE_PEER_LOCALMSPID=DEFAULT
      - CORE_VM_ENDPOINT=unix:///host/var/run/docker.sock
      - CORE_LOGGING_LEVEL=DEBUG
      - CORE_PEER_MSPCONFIGPATH=/etc/hyperledger/msp
      - CORE_LEDGER_STATE_STATEDATABASE=CouchDB
      - CORE_LEDGER_STATE_COUCHDBCONFIG_COUCHDBADDRESS=couchdb:5984
      - CORE_LEDGER_STATE_COUCHDBCONFIG_USERNAME=
      - CORE_LEDGER_STATE_COUCHDBCONFIG_PASSWORD=
    volumes:
        - /var/run/:/host/var/run/
        - ./msp:/etc/hyperledger/msp
    working_dir: /opt/gopath/src/github.com/hyperledger/fabric/peer
    command: peer node start --peer-chaincodedev=true -o orderer:7050
    ports:
      - 7051:7051
      - 7053:7053
    depends_on:
      - orderer
      - couchdb

  couchdb:
    container_name: couchdb
    image: hyperledger/fabric-couchdb
    # Populate the COUCHDB_USER and COUCHDB_PASSWORD to set an admin user and p
    # for CouchDB.  This will prevent CouchDB from operating in an "Admin Party
    environment:
      - COUCHDB_USER=
      - COUCHDB_PASSWORD=
    ports:
      - 5984:5984
```