页面 / zhaoguangwei的百页 / 区块链

快速部署JDChain

由 赵光伟 @创建, 最后修改于大约1分钟以前

目前部署JDChain需要修改三个配置文件,要花费一定的时间,为了快速部署JDChain,特此开发了这个小工具。

简要步骤

- 1)将安装的zip包解压到centos指定路径下,比如:/export/jdchain/peer0;/export/jdchain/peer1;/export/jdchain/peer2;/export/jdchain/peer3
- 2)(此步可以省略,使用配置文件中的默认公私钥)每个peer都生成公私钥。进入四个peer节点中的bin路径,分别执行如下命令:

peer0: sh keygen.sh -n a.com peer1: sh keygen.sh -n b.com peer2: sh keygen.sh -n c.com peer3: sh keygen.sh -n d.com

3) 安装ump管理工具,每个peer节点对应一个配置文件。参考样例下载地址:http://box.jd.com/sharedInfo/D81333A4DC57FAA5

其中0application.properties对应peer0的配置,其它类似。主要修改其中的安装路径。比如修改完0application.properties配置文件后,其它的配置文件可以复制。唯一的不同是每个配置文件的:peer.peerName=a.com 值要根据实际填写。

```
Oapplication.properites
                                                                                                                                                                                                                                                                        折叠源码
server.port=9000
logging.level.root = WARN
logging.level.org.springframework.web = DEBUG
logging.file=./logs/jdchain-deploy-peer0.log
#logging.path=/var/log
#setup the params; must set; it's also used in the dev mode;
peer.peerName=a.com
#generate the public/private keys by the peer.name;
\verb"peer.basePath=/Users/zhaoguangwei/Documents/jdchain/peer0"
#peer.basePath=/export/11-jdchain/peer0
peer.host=127.0.0.1
peer.initPort=8800
peer.consensusPort=36000
peer.visitPort=17800
peer.serverPort=9000
#when start up, invoke the gateway to push the params related;
#gateway.url=192.168.101.47:9000/gw
peer.mediatorUrl=localhost:9000/deploy
# if true, then this peer's private key will send to the gateway;
peer.gatewayBindPeer=true
schema.retrieval.url=http://192.168.151.39:8082
task.retrieval.url=http://192.168.151.39:10005
ump.dbUri=F:\\tmp\\jdchainDeploy\\peer0\\conf\\ump.db
ump.dbPasswd=
#register all Peer by single machine; dev model;
dev.peer0.peerId=0
dev.peer0.peerName=a.com
dev.peer0.basePath=/Users/zhaoguangwei/Documents/jdchain/peer0
dev.peer0.host=127.0.0.1
dev.peer0.initPort=8800
dev.peer0.consensusPort=36000
dev.peer0.visitPort=17800
dev.peer0.serverPort=9000
dev.peer0.mediatorUrl=localhost:9000/deploy
dev.peer0.gatewayBindPeer=true
dev.peer0.peerPubKey=3snPdw7i7PbUX47tXkHVuRd2mP8mXhEJbaBM441h9wa67TAeMfiqUX
\tt dev.peer0.peerPrivKey=177gjuzAyvF8W2KYST8tVPmvGBsPLhXsf55HpHxSbHF7Va995ekXvxjNimEYNt5wP6GxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpWxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWpGxTpWxTpWpGxTpWxTpWpGxTp
dev.peer0.peerPasswd=DYu3G8aGTMBW1WrTw76zxQJQU4DHLw9MLyy7peG4LKkY
#peer1
dev.peer1.peerId=1
dev.peer1.peerName=b.com
dev.peer1.basePath=/Users/zhaoguangwei/Documents/jdchain/peer1
dev.peer1.host=127.0.0.1
dev.peer1.initPort=8810
dev.peer1.consensusPort=36010
dev.peer1.visitPort=17810
dev.peer1.serverPort=9010
dev.peer1.mediatorUrl=localhost:9000/deploy
dev.peer1.gatewayBindPpeer=true
dev.peer1.peerPubKey=3snPdw7i7PdBTU3FEHZa59uWG4xSsDx4MGn2E2vAbWfNFUbpDRc2Am
```

```
\tt dev.peer1.peerPrivKey=177gjstr]DHmZabZTxybLMaH5n24DBPueigsQDx8jc2erw7cAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yJut6xgPbPV8mxAcAu1Xy2uX3yAu1Xy2uX3yAu1Xy2uX3yAu1Xy2uX3yAu1Xy2uX3yAu1Xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy2uX1xy
dev.peer1.peerPasswd=DYu3G8aGTMBW1WrTw76zxQJQU4DHLw9MLyy7peG4LKkY
#peer2
dev.peer2.peerId=2
dev.peer2.peerName=c.com
dev.peer2.basePath=/Users/zhaoguangwei/Documents/jdchain/peer2
dev.peer2.host=127.0.0.1
dev.peer2.initPort=8820
dev.peer2.consensusPort=36020
dev.peer2.visitPort=17820
dev.peer2.serverPort=9020
dev.peer2.mediatorUrl=localhost:9000/deploy
dev.peer2.gatewayBindPpeer=true
dev.peer2.peerPubKey=3snPdw7i7Pi6PYrxgrcXKCEV78VpJQAZSy6YAbZS8bwquVeURrah3w
dev.peer2.peerPrivKey=177gjxt5VtjjQ6S8Jge7tuGQ6WZbFtwUrrN2Ek3iMDu4xLrt9A71pbHXtWZSzgabmTZbAUG
dev.peer2.peerPasswd=DYu3G8aGTMBW1WrTw76zxQJQU4DHLw9MLyy7peG4LKkY
#peer3
dev.peer3.peerId=3
dev.peer3.peerName=d.com
dev.peer3.basePath=/Users/zhaoguangwei/Documents/jdchain/peer3
dev.peer3.host=127.0.0.1
dev.peer3.initPort=8830
dev.peer3.consensusPort=36030
dev.peer3.visitPort=17830
dev.peer3.serverPort=9030
dev.peer3.mediatorUrl=localhost:9000/deploy
dev.peer3.gatewayBindPpeer=true
dev.peer3.peerPubKey=3snPdw7i7PeGmrc7jyX2b8gr7vyjgV64zmkiVvjZ4FUyJSuPMw7D87
dev.peer3.peerPrivKey=177gjsXgUPgGwJQsEAbvKWRSiBgLv7PqV58XwywyXuVDfhYB6UMJrHCUEfaMGFexf8bZ3px
dev.peer3.peerPasswd=DYu3G8aGTMBW1WrTw76zxQJQU4DHLw9MLyy7peG4LKkY
```

执行命令如下:

java -jar ump-1.0.1.RELEASE.jar --spring.config.location=file:./0application.properties java -jar ump-1.0.1.RELEASE.jar --spring.config.location=file:./1application.properties java -jar ump-1.0.1.RELEASE.jar --spring.config.location=file:./2application.properties java -jar ump-1.0.1.RELEASE.jar --spring.config.location=file:./3application.properties 4)4个ump应用启动之后,

通过执行:http://localhost:9000/deploy/getAllConf4dev来加载配置,然后执行:http://localhost:9000/deploy/md/planLedger来完成节点的初始化配置。如果执行成功,提示如下:

 $["a.com\ make\ conf\ successfully.","d.com\ make\ conf\ successfully.","b.com\ make\ conf\ successfully."]$

- 5) 查看每个peer的配置文件是否已经修改成功,位置如下:peerxxx/config/init中的三个文件:bftsmart.config ledger.init local.conf。
- 6) 启动每个peer的ledger-init.sh脚本,位置:peerxxx/bin/ledger-init.sh
- 7) 启动每个peer的startup.sh脚本,位置:peerxxx/bin/startup.sh。**注意**:<mark>如果在单机上启动4个peer节点,则需要保证脚本中的端口不同,不然会出现冲突。还有在单机启动4个节点,内存占用较高,可以将startup.sh脚本中的内存参数改为512M和1g。</mark>
- 8)修改网关的配置文件,启动网关(具体参见部署文件,位置:http://ledger.jd.com/downloaddocs.html)。

将网关zip安装包解压至gw下,配置文件在:gw/config/gateway.conf。

填写网关和共识节点的信息,以及使用的公私钥信息。

```
折叠源码
gateway.conf
#网关的HTTP服务地址;
http.host=192.168.151.45
#网关的HTTP服务端口;
http.port=18081
#网关的HTTP服务上下文路径,可选;
#http.context-path=
#共识节点的服务地址;
neer.host=192.168.151.39
#共识节点的服务端口;
peer.port=17800
#共识节点的服务是否启用安全证书;
peer.secure=false
#共识节点的服务提供解析器
\verb|peer.providers=com.jd.blockchain.consensus.mq.MsgQueueConsensusProviders=com.jd.blockchain.consensus.mq.MsgQueueConsensusProviders=com.jd.blockchain.consensus.mq.MsgQueueConsensusProviders=com.jd.blockchain.consensus.mq.MsgQueueConsensusProviders=com.jd.blockchain.consensus.mq.MsgQueueConsensusProviders=com.jd.blockchain.consensus.mq.MsgQueueConsensusProviders=com.jd.blockchain.consensus.mq.MsgQueueConsensusProviders=com.jd.blockchain.consensus.mq.MsgQueueConsensusProviders=com.jd.blockchain.consensus.mq.MsgQueueConsensusProviders=com.jd.blockchain.consensus.mq.MsgQueueConsensus.mq.MsgQueueConsensus.mq.MsgQueueConsensus.mq.MsgQueueConsensus.mq.MsgQueueConsensus.mq.MsgQueueConsensus.mq.MsgQueueConsensus.mq.MsgQueueConsensus.mq.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQueueConsensus.mg.MsgQ
data.retrieval.url=http://192.168.151.39:10001
#默认公钥的内容(Base58编码数据);
keys.default.pubkey=endPsK36koyFr1D245Sa9j83vt6pZUdFBJoJRB3xAsWM6cwhRbna
#默认私钥的路径; 在 pk-path 和 pk 之间必须设置其一;
keys.default.privkey-path=
#默认私钥的内容(加密的Base58编码数据);在 pk-path 和 pk 之间必须设置其一;
 keys.default.privkey=
```

#默认私钥的解码密码;

keys.default.privkey-password=

无标签