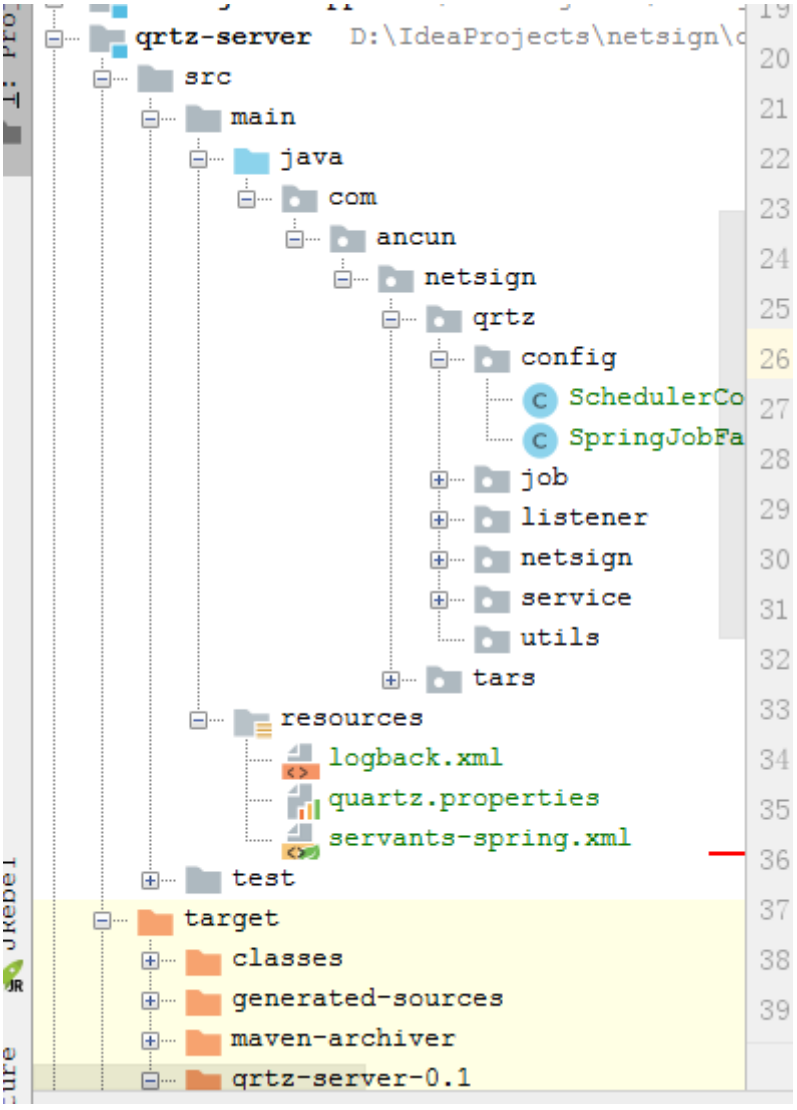
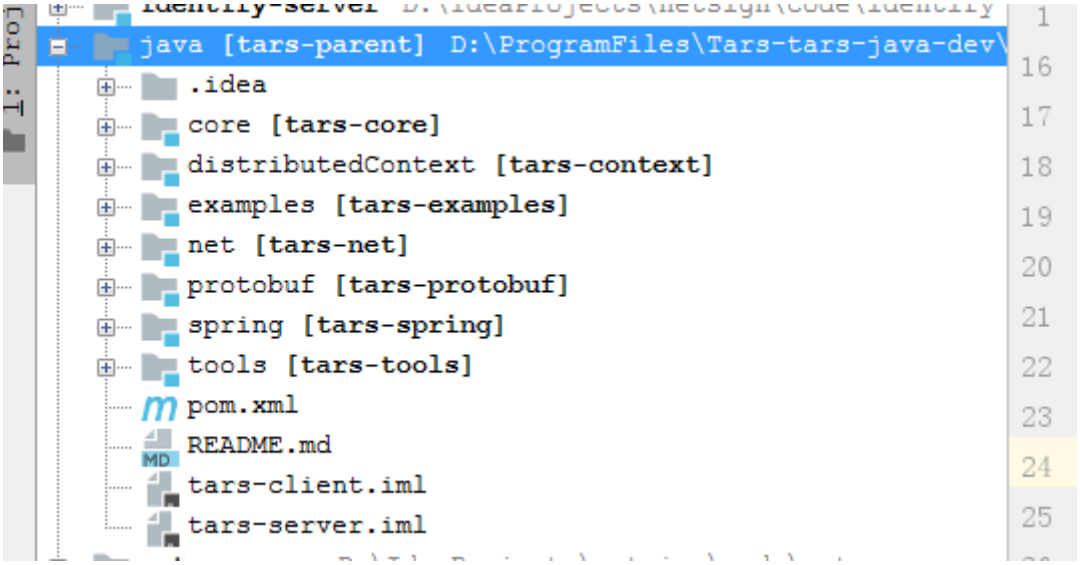
tars 服务端的本地调试

一、准备工作

首先需要一个tars服务项目，比如我的：

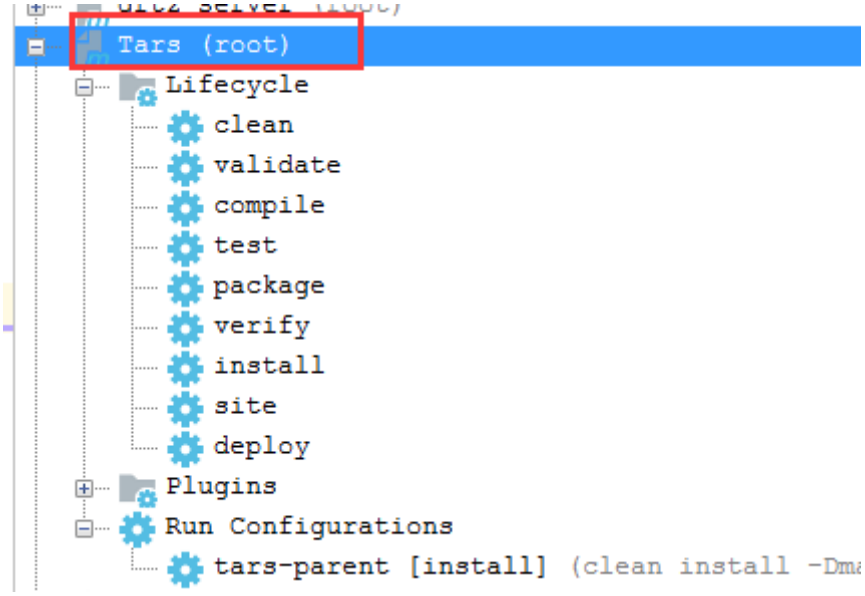


其次需要把tars源码装载到本地，比如我的是：

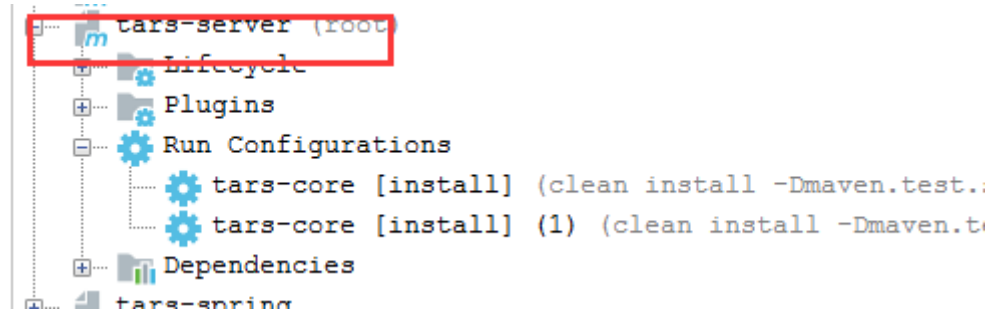


当在tars源码的处理是：

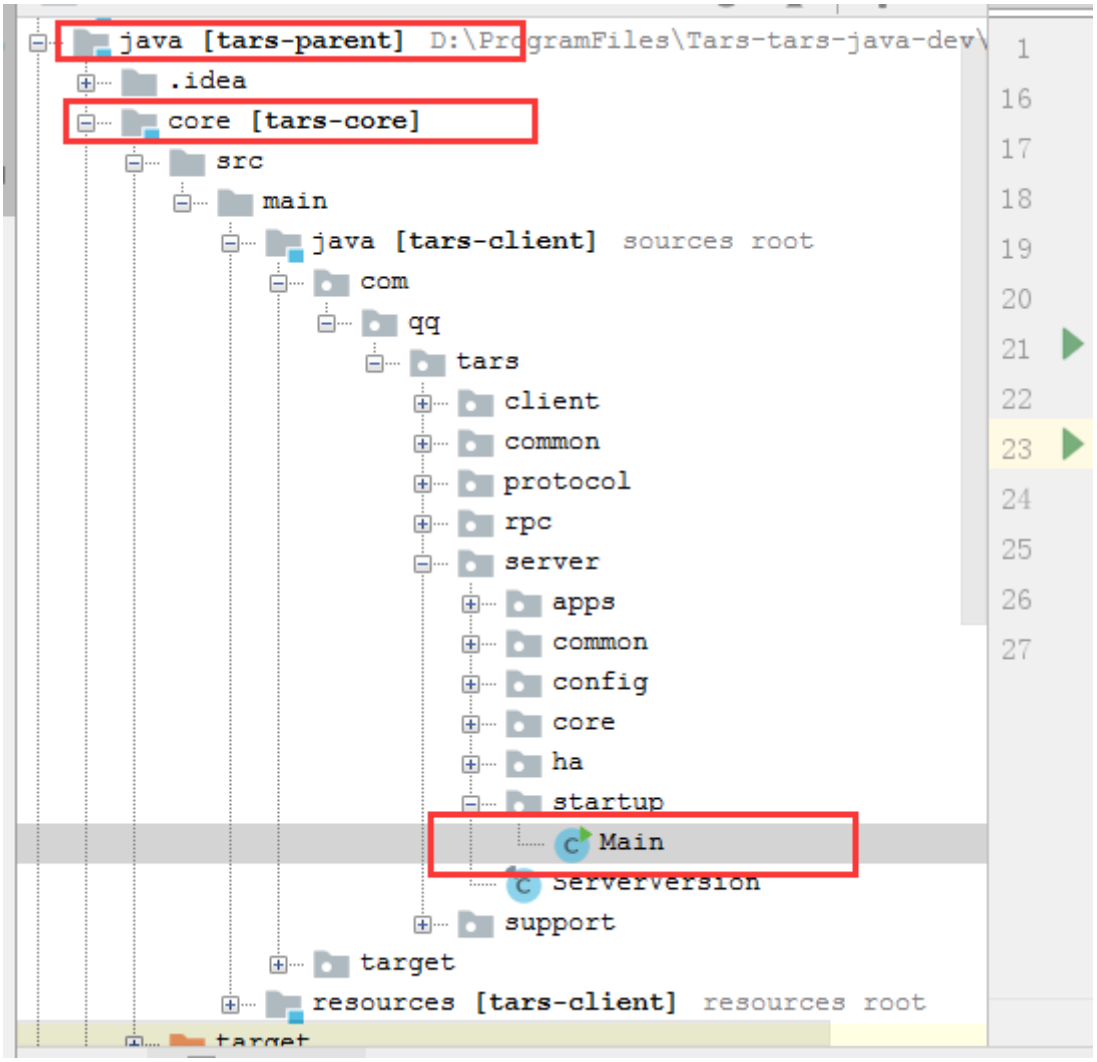
先tars根项目reimport，以及install。



再tars-server项目reimport，以及install：



其实在项目就是先大环境再里面的小的：



二、tars服务项目的处理

1、由于我用的是servant-spring处理，所以，项目的mvn tars:tars2java,就没有运行，当然你也可以运行一下。

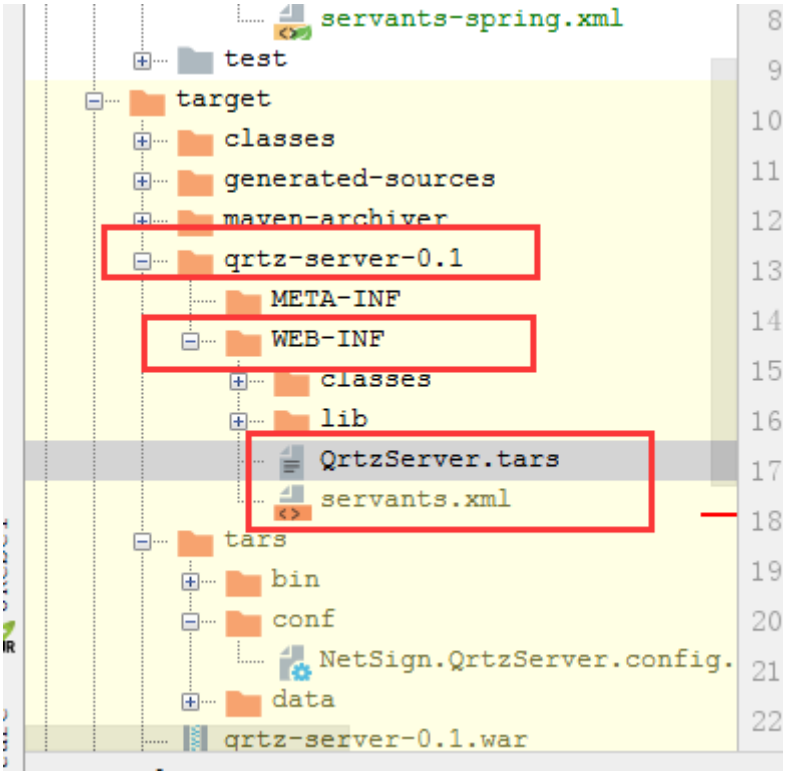
2、编译项目

3、获取tars服务代码

运行

mvn tars:build -Dapp=NetSign -Dserver=QrtzServer -DjvmParams="-Xms256m -Xmx256m -Dcom.sun.management.jmxremote.ssl=false -Dcom.sun.management.jmxremote.authenticate=false -Xdebug -Xrunjdwp:transport=dt_socket,address=9000,server=y,suspend=n" -DskipTests

当然运行前需要把两个文件放入WEB-INF目录下：



qrtz-server-0.1是install项目得到的目录

QrtzServer.tars(我的好像可以忽略)，servants.xml是需要放进去的文件：

QrtzServer.tars文件如下：

```
module NetSign
{
 interface QrtzServer
 {

 /**
 * 添加任务
 * @param quartzDto
 * @param quartzStr
  * @param msg
  * @return
  */
  int addSchedule(String quartzDto, out string quartzStr, out string msg);

  /**
  * 获取任务列表
  * @param quartzDto
  * @param quartzStr
  * @param msg
  * @return
```

```
21    */
22    int getScheduleList(String quartzDto, out string quartzStr, out string
msg);
23
24    /**
25    * 运行任务
26    * @param quartzDto
27    * @param quartzStr
28    * @param msg
29    * @return
30    */
31    int doSchedule(String quartzDto, out string quartzStr, out string msg);
32
33    /**
34    * 暂停任务
35    * @param quartzDto
36    * @param quartzStr
37    * @param msg
38    * @return
39    */
40    int pauseSchedule(String quartzDto, out string quartzStr, out string ms
g);
41
42    /**
43    * 从暂停中恢复任务运行
44    * @param quartzDto
45    * @param quartzStr
46    * @param msg
47    * @return
48    */
49    int recoverSchedule(String quartzDto, out string quartzStr, out string
msg);
50
51    /**
52    * 删除任务
53    * @param quartzDto
54    * @param quartzStr
55    * @param msg
56    * @return
57    */
58    int deleteSchedule(String quartzDto, out string quartzStr, out string m
sg);
```

```
59   };
60 };
```

servant.xml文件如下：

```
1  <?xml version="1.0" encoding="UTF-8"?>
2  <servants>
3   <servant name="QrtzServerObj">
4   <home-api>com.ancun.netsign.qrtz.netsign.QrtzServerServant</home-api>
5   <home-class>com.ancun.netsign.qrtz.netsign.impl.QrtzServerServantImpl</h
ome-class>
6   </servant>
7   <listener>
8   <listener-class>com.ancun.netsign.qrtz.listener.QrtzServerListener</list
ener-class>
9   </listener>
10  </servants>
```

到项目根目录下运行：

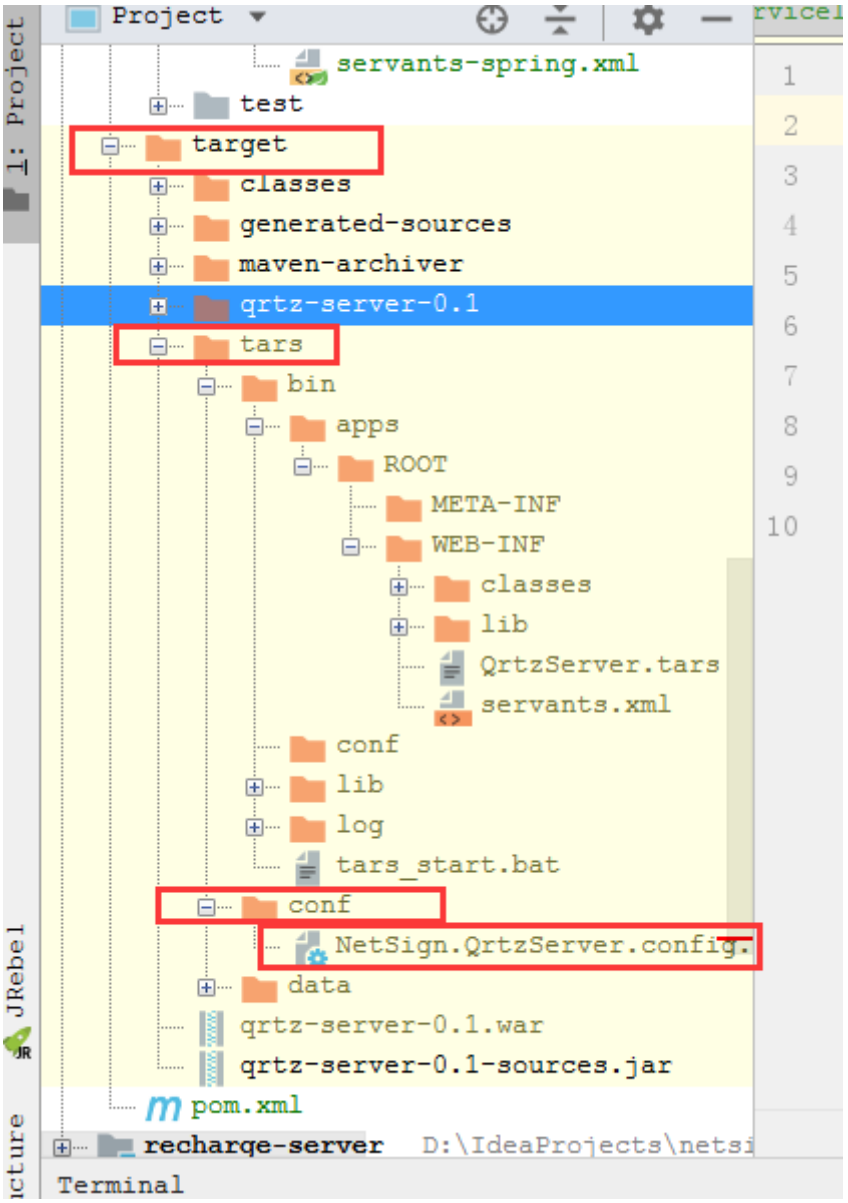
```
1  mvn tars:build -Dapp=NetSign -Dserver=QrtzServer -DjvmParams="-Xms256m -X
mx256m -Dcom.sun.management.jmxremote.ssl=false -Dcom.sun.management.jmxrem
ote.authenticate=false -Xdebug -Xrunj
2  dwp:transport=dt_socket,address=9000,server=y,suspend=n" -DskipTests
```

-Dapp=NetSign -Dserver=QrtzServer 就是QrtzServer.tars里面的module NetSign interface QrtzServer

当然我用的是idea里面自带的命令窗口，你也可以用cmd来运行：

4、添加配置

需要修改conf下的NetSign.QrtzServer.config.conf文件



修改后的NetSign.QrtzServer.config.conf文件如下：标红的是需要注意修改的地方

```
<tars>
 <application>
 enableset=N
 setdivision=NULL
 <client>
 locator=tars.tarsregistry.QueryObj@tcp -h 192.168.0.36 -p 17890
 sync-invoke-timeout=20000
 async-invoke-timeout=20000
 refresh-endpoint-interval=60000
  stat=tars.tarsstat.StatObj
  property=tars.tarsproperty.PropertyObj
  report-interval=60000
  modulename=NetSign.QrtzServer
```

```
</client>
<server>
node=tars.tarsnode.ServerObj@tcp -h 192.168.0.36 -p 19386 -t 60000
app=NetSign
server=QrtzServer
localip=192.168.0.36
local=tcp -h 127.0.0.1 -p 18015 -t 3000
basepath=D:\IdeaProjects\netsign\code\qrtz-server\target\tars\bin
datapath=D:\IdeaProjects\netsign\code\qrtz-server\target\tars\data
logpath=D:\IdeaProjects\netsign\code\qrtz-server\target\tars\bin\log
loglevel=DEBUG
logsize=15M
log=tars.tarslog.LogObj
config=tars.tarsconfig.ConfigObj
notify=tars.tarsnotify.NotifyObj
mainclass=com.qq.tars.server.startup.Main
jvmparams=-Xms256m -Xmx256m -Dcom.sun.management.jmxremote.ssl=false -Dcom.sun.management.jmxremote.authenticate=false -Xdebug -Xrunjdwp:transport=dt_socket,address=9000,server=y,suspend=n
sessiontimeout=120000
sessioncheckinterval=60000
tcpnodelay=true
udpbuffersize=8192
charsetname=UTF-8
<NetSign.QrtzServer.QetzServerObjAdapter>
allow
endpoint=tcp -h 192.168.0.36 -p 18015 -t 60000
handlegroup=NetSign.QrtzServer.QetzServerObjAdapter
maxconns=200000
protocol=tars
queuecap=10000
queuetimeout=60000
```

```
44  servant=NetSign.QrtzServer.QetzServerObj
45  shmcap=0
46  shmkey=0
47  threads=5
48  </NetSign.QrtzServer.QetzServerObjAdapter>
49  </server>
50  </application>
51 </tars>
```

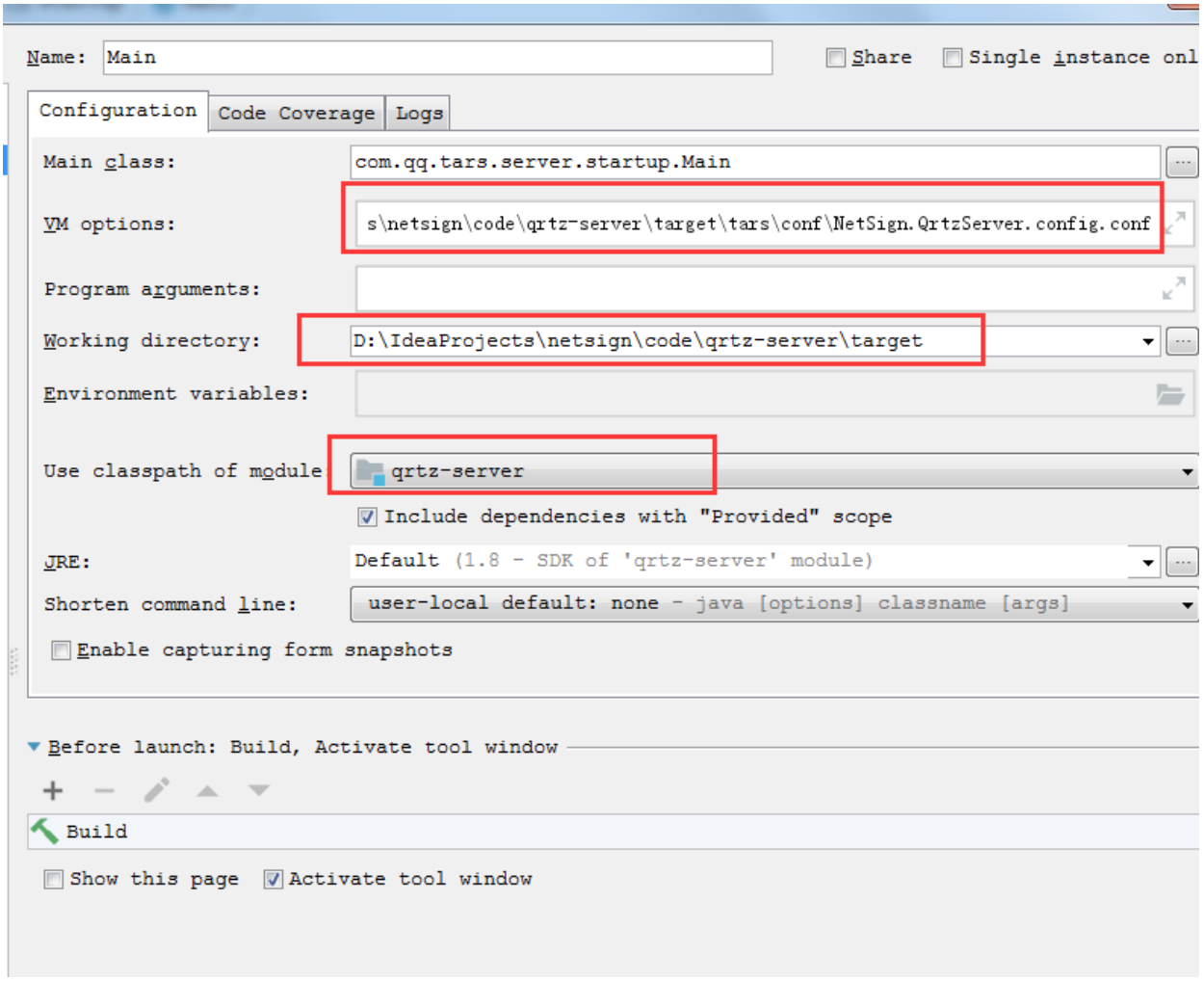
qrtz-server > target > tars > conf > NetSign.QrtzServer.config.conf

JobServiceImpl.java | quartz.properties | NetSign.QrtzServer.config.conf | QrtzServer.tars

```
1  <tars>
2    <application>
3      enableset=N
4      setdivision=NULL
5      <client>
6        locator=tars.tarsregistry.QueryObj@tcp -h 192.168.0.36 -p 17890
7        sync-invoke-timeout=20000
8        async-invoke-timeout=20000
9        refresh-endpoint-interval=60000
10       stat=tars.tarsstat.StatObj
11       property=tars.tarsproperty.PropertyObj
12       report-interval=60000
13       modulename=NetSign.QrtzServer
14     </client>
15     <server>
16       node=tars.tarsnode.ServerObj@tcp -h 192.168.0.36 -p 19386 -t 60000
17       app=NetSign
18       server=QrtzServer
19       localip=192.168.0.36
20       local=tcp -h 127.0.0.1 -p 18015 -t 3000
21       basepath=D:\IdeaProjects\netsign\code\qrtz-server\target\tars\bin
22       datapath=D:\IdeaProjects\netsign\code\qrtz-server\target\tars\data
23       logpath=D:\IdeaProjects\netsign\code\qrtz-server\target\tars\bin\log
24       loglevel=DEBUG
25       logsize=15M
26       log=tars.tarslog.LogObj
27       config=tars.tarsconfig.ConfigObj
28       notify=tars.tarsnotify.NotifyObj
29       mainclass=com.qq.tars.server.startup.Main
30       jvmparams=-Xms256m -Xmx256m -Dcom.sun.management.jmxremote.ssl=false -Dcom.sun.manageme
31       sessiontimeout=120000
32       sessioncheckinterval=60000
33       tcpnodelay=true
34       udpbuffersize=8192
```

```
        tcpnodelay=true
        udpbuffersize=8192
        charsetname=UTF-8
          <NetSign.QrtzServer.QetzServerObjAdapter>
      allow
      endpoint=tcp -h 192.168.0.36 -p 18015 -t 60000
      handlegroup=NetSign.QrtzServer.QetzServerObjAdapter
      maxconns=200000
      protocol=tars
      queuecap=10000
      queuetimeout=60000
      servant=NetSign.QrtzServer.QetzServerObj
      shmcap=0
      shmkey=0
      threads=5
    </NetSign.QrtzServer.QetzServerObjAdapter>
      </server>
    </application>
</tars>
```

三、运行Main进行调试



通过idea Application启动

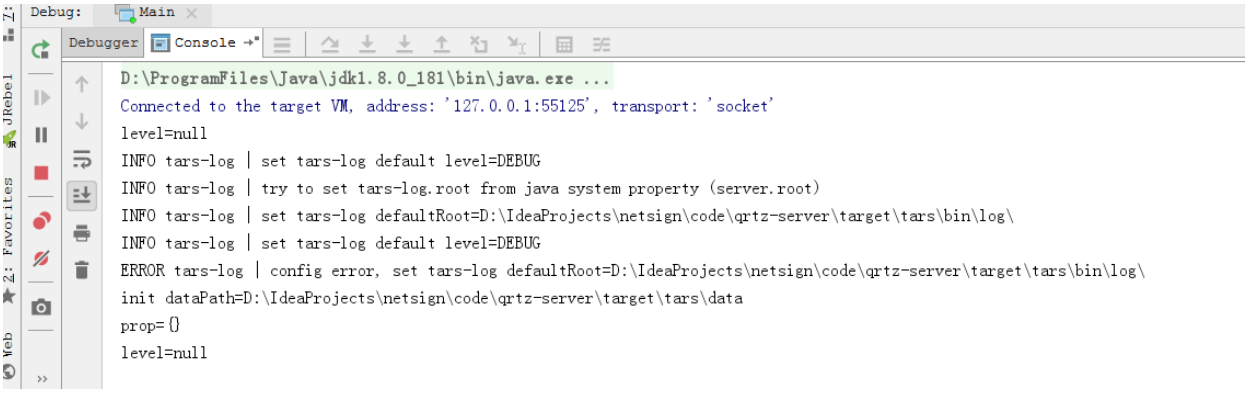
Main class: com.qq.tars.server.startup.Main

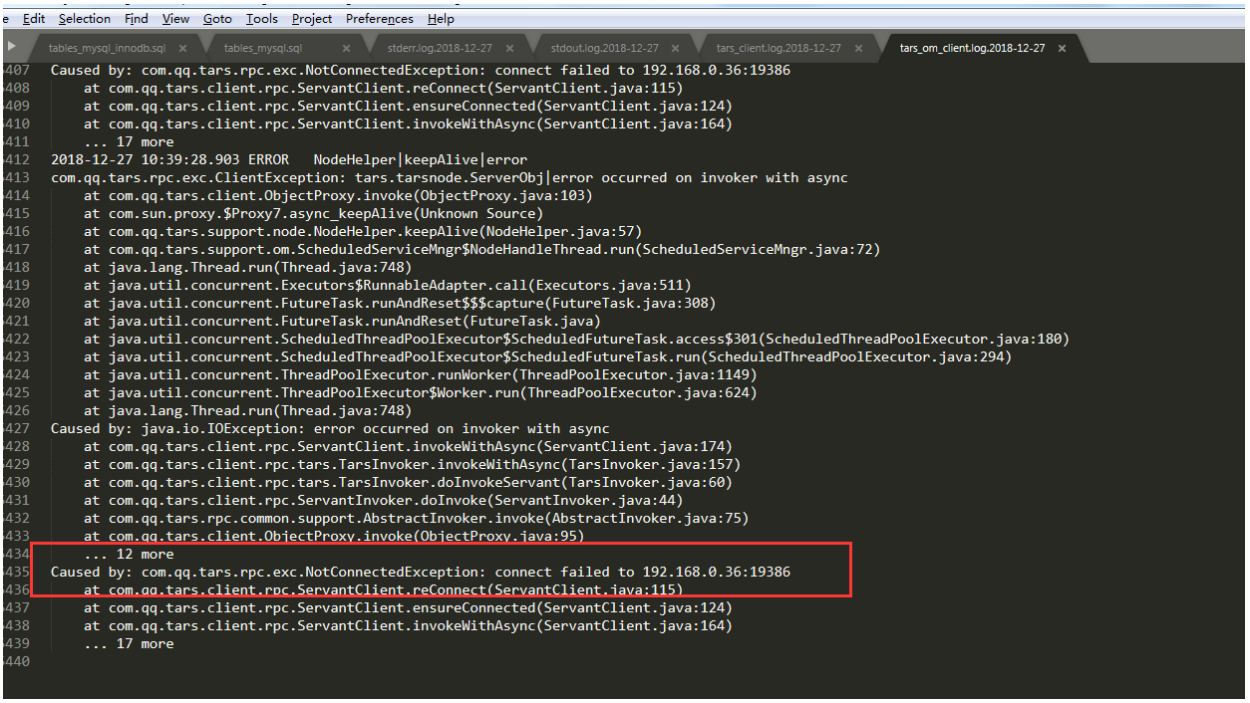
Vm options; -Xms256m -Xmx256m -Dcom.sun.management.jmxremote.ssl=false -Dcom.sun.management.jmxremote.authenticate=false -Dconfig=D:\IdeaProjects\netsign\code\qrtz-server\target\tars\conf\NetSign.QrtzServer.config.conf

Working directory: D:\IdeaProjects\netsign\code\qrtz-server\target

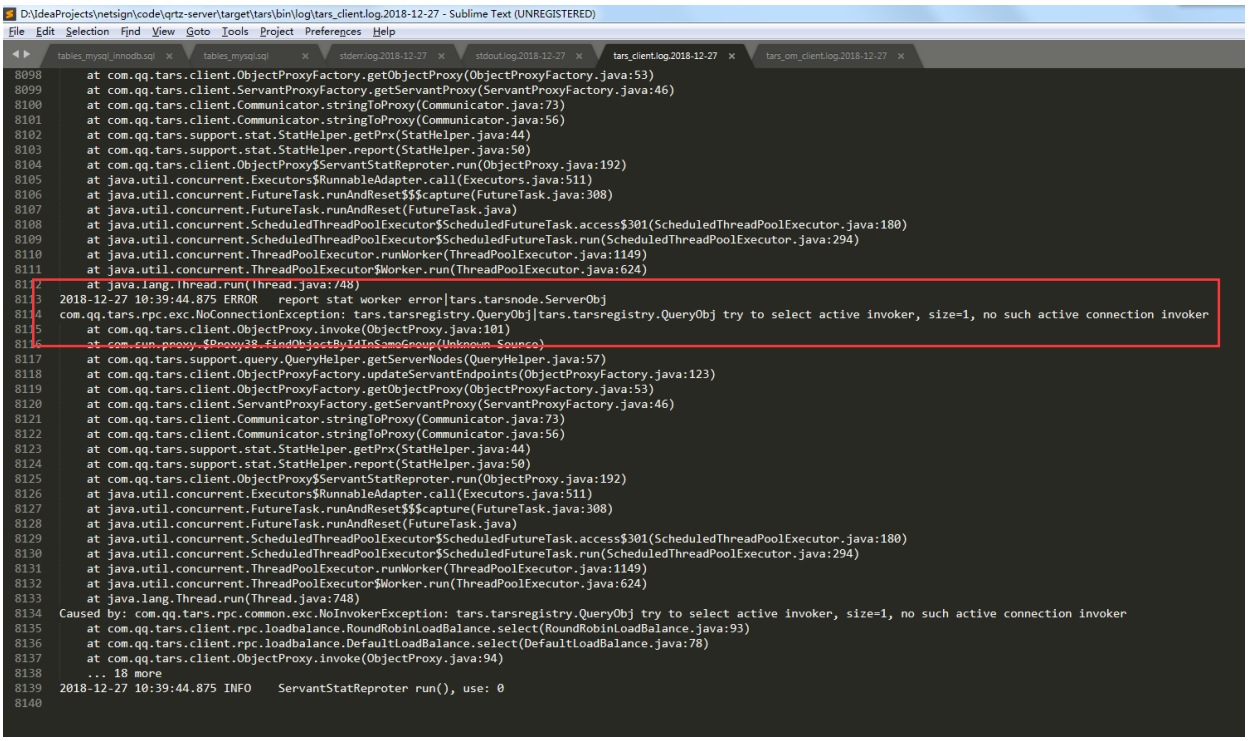
Use classpath of module: qrtz-server

（不知道是什么原因，虽然我启动成功了但是还是连接不上）

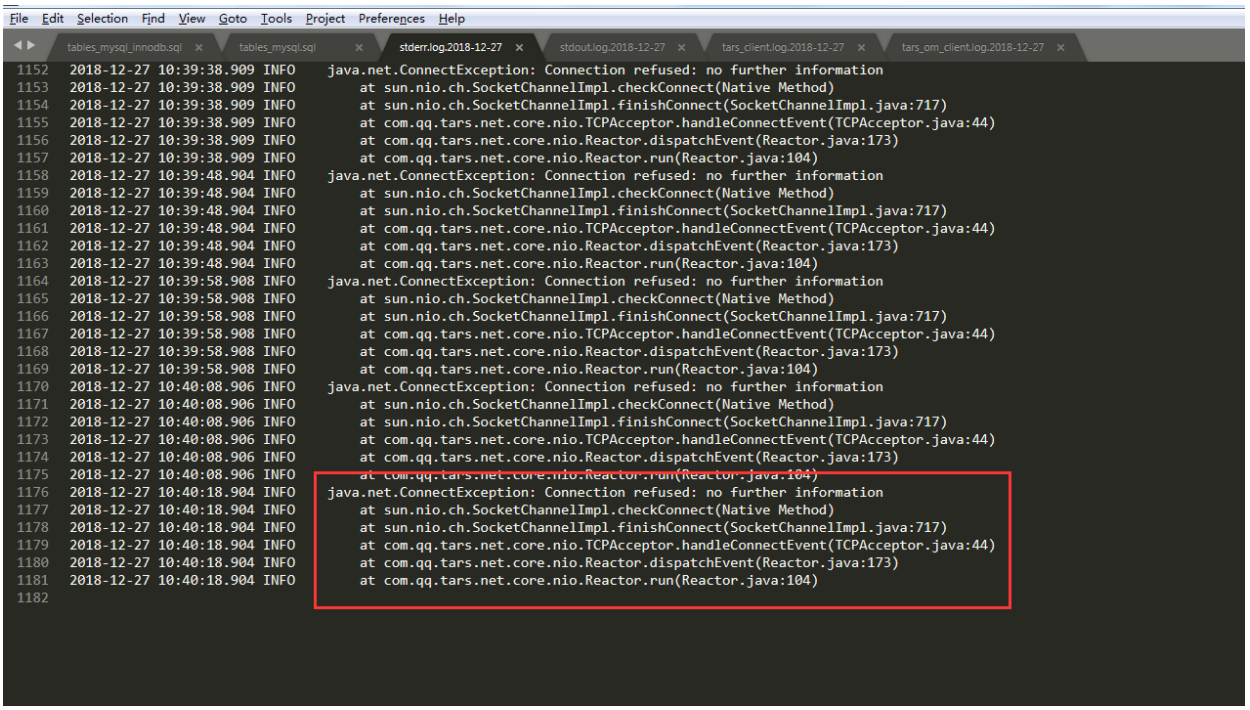




```
e  Edit  Selection  Find  View  Goto  Tools  Project  Preferences  Help
tables_mysql_innodb.sql × | tables_mysql.sql × | stderr.log.2018-12-27 × | stdout.log.2018-12-27 × | tars_client.log.2018-12-27 × | tars_om_client.log.2018-12-27 ×
4407  Caused by: com.qq.tars.rpc.exc.NotConnectedException: connect failed to 192.168.0.36:19386
4408      at com.qq.tars.client.rpc.ServantClient.reConnect(ServantClient.java:115)
4409      at com.qq.tars.client.rpc.ServantClient.ensureConnected(ServantClient.java:124)
4410      at com.qq.tars.client.rpc.ServantClient.invokeWithAsync(ServantClient.java:164)
4411      ... 17 more
4412  2018-12-27 10:39:28.903 ERROR   NodeHelper|keepAlive|error
4413  com.qq.tars.rpc.exc.ClientException: tars.tarsnode.ServerObj|error occurred on invoker with async
4414      at com.qq.tars.client.ObjectProxy.invoke(ObjectProxy.java:103)
4415      at com.sun.proxy.$Proxy7.async_keepAlive(Unknown Source)
4416      at com.qq.tars.support.node.NodeHelper.keepAlive(NodeHelper.java:57)
4417      at com.qq.tars.support.om.ScheduledServiceMngr$NodeHandleThread.run(ScheduledServiceMngr.java:72)
4418      at java.lang.Thread.run(Thread.java:748)
4419      at java.util.concurrent.Executors$RunnableAdapter.call(Executors.java:511)
4420      at java.util.concurrent.FutureTask.runAndReset$$$capture(FutureTask.java:308)
4421      at java.util.concurrent.FutureTask.runAndReset(FutureTask.java)
4422      at java.util.concurrent.ScheduledThreadPoolExecutor$ScheduledFutureTask.access$301(ScheduledThreadPoolExecutor.java:180)
4423      at java.util.concurrent.ScheduledThreadPoolExecutor$ScheduledFutureTask.run(ScheduledThreadPoolExecutor.java:294)
4424      at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149)
4425      at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624)
4426      at java.lang.Thread.run(Thread.java:748)
4427  Caused by: java.io.IOException: error occurred on invoker with async
4428      at com.qq.tars.client.rpc.ServantClient.invokeWithAsync(ServantClient.java:174)
4429      at com.qq.tars.client.rpc.tars.TarsInvoker.invokeWithAsync(TarsInvoker.java:157)
4430      at com.qq.tars.client.rpc.tars.TarsInvoker.doInvokeServant(TarsInvoker.java:60)
4431      at com.qq.tars.client.rpc.ServantInvoker.doInvoke(ServantInvoker.java:44)
4432      at com.qq.tars.rpc.common.support.AbstractInvoker.invoke(AbstractInvoker.java:75)
4433      at com.qq.tars.client.ObjectProxy.invoke(ObjectProxy.java:95)
4434      ... 12 more
4435  Caused by: com.qq.tars.rpc.exc.NotConnectedException: connect failed to 192.168.0.36:19386
4436      at com.qq.tars.client.rpc.ServantClient.reConnect(ServantClient.java:115)
4437      at com.qq.tars.client.rpc.ServantClient.ensureConnected(ServantClient.java:124)
4438      at com.qq.tars.client.rpc.ServantClient.invokeWithAsync(ServantClient.java:164)
4439      ... 17 more
4440
```



```
D:\IdeaProjects\netsign\code\qrtz-server\target\tars\bin\log\tars_client.log.2018-12-27 - Sublime Text (UNREGISTERED)
File  Edit  Selection  Find  View  Goto  Tools  Project  Preferences  Help
tables_mysql_innodb.sql × | tables_mysql.sql × | stderr.log.2018-12-27 × | stdout.log.2018-12-27 × | tars_client.log.2018-12-27 × | tars_om_client.log.2018-12-27 ×
8098      at com.qq.tars.client.ObjectProxyFactory.getObjectProxy(ObjectProxyFactory.java:53)
8099      at com.qq.tars.client.ServantProxyFactory.getServantProxy(ServantProxyFactory.java:46)
8100      at com.qq.tars.client.Communicator.stringToProxy(Communicator.java:73)
8101      at com.qq.tars.client.Communicator.stringToProxy(Communicator.java:56)
8102      at com.qq.tars.support.stat.StatHelper.getPrx(StatHelper.java:44)
8103      at com.qq.tars.support.stat.StatHelper.report(StatHelper.java:50)
8104      at com.qq.tars.client.ObjectProxy$ServantStatReproter.run(ObjectProxy.java:192)
8105      at java.util.concurrent.Executors$RunnableAdapter.call(Executors.java:511)
8106      at java.util.concurrent.FutureTask.runAndReset$$$capture(FutureTask.java:308)
8107      at java.util.concurrent.FutureTask.runAndReset(FutureTask.java)
8108      at java.util.concurrent.ScheduledThreadPoolExecutor$ScheduledFutureTask.access$301(ScheduledThreadPoolExecutor.java:180)
8109      at java.util.concurrent.ScheduledThreadPoolExecutor$ScheduledFutureTask.run(ScheduledThreadPoolExecutor.java:294)
8110      at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149)
8111      at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624)
8112      at java.lang.Thread.run(Thread.java:748)
8113  2018-12-27 10:39:44.875 ERROR   report stat worker error|tars.tarsnode.ServerObj
8114  com.qq.tars.rpc.exc.NoConnectionException: tars.tarsregistry.QueryObj|tars.tarsregistry.QueryObj try to select active invoker, size=1, no such active connection invoker
8115      at com.qq.tars.client.ObjectProxy.invoke(ObjectProxy.java:101)
8116      at com.sun.proxy.$Proxy38.findObjectByIdInSameGroup(Unknown Source)
8117      at com.qq.tars.support.query.QueryHelper.getServerNodes(QueryHelper.java:57)
8118      at com.qq.tars.client.ObjectProxyFactory.updateServantEndpoints(ObjectProxyFactory.java:123)
8119      at com.qq.tars.client.ObjectProxyFactory.getObjectProxy(ObjectProxyFactory.java:53)
8120      at com.qq.tars.client.ServantProxyFactory.getServantProxy(ServantProxyFactory.java:46)
8121      at com.qq.tars.client.Communicator.stringToProxy(Communicator.java:73)
8122      at com.qq.tars.client.Communicator.stringToProxy(Communicator.java:56)
8123      at com.qq.tars.support.stat.StatHelper.getPrx(StatHelper.java:44)
8124      at com.qq.tars.support.stat.StatHelper.report(StatHelper.java:50)
8125      at com.qq.tars.client.ObjectProxy$ServantStatReproter.run(ObjectProxy.java:192)
8126      at java.util.concurrent.Executors$RunnableAdapter.call(Executors.java:511)
8127      at java.util.concurrent.FutureTask.runAndReset$$$capture(FutureTask.java:308)
8128      at java.util.concurrent.FutureTask.runAndReset(FutureTask.java)
8129      at java.util.concurrent.ScheduledThreadPoolExecutor$ScheduledFutureTask.access$301(ScheduledThreadPoolExecutor.java:180)
8130      at java.util.concurrent.ScheduledThreadPoolExecutor$ScheduledFutureTask.run(ScheduledThreadPoolExecutor.java:294)
8131      at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149)
8132      at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624)
8133      at java.lang.Thread.run(Thread.java:748)
8134  Caused by: com.qq.tars.rpc.common.exc.NoInvokerException: tars.tarsregistry.QueryObj try to select active invoker, size=1, no such active connection invoker
8135      at com.qq.tars.client.rpc.loadbalance.RoundRobinLoadBalance.select(RoundRobinLoadBalance.java:93)
8136      at com.qq.tars.client.rpc.loadbalance.DefaultLoadBalance.select(DefaultLoadBalance.java:78)
8137      at com.qq.tars.client.ObjectProxy.invoke(ObjectProxy.java:94)
8138      ... 18 more
8139  2018-12-27 10:39:44.875 INFO    ServantStatReproter run(), use: 0
8140
```



接下来，继续处理这个问题：应该是数据源获取不到的原因吧

附加：

1、由于我设置的tars服务平台地址有问题，所以启动的时候一直报连接不上的问题，只要重新修改tarsconf的配置就好了，重新配置的代码如下：

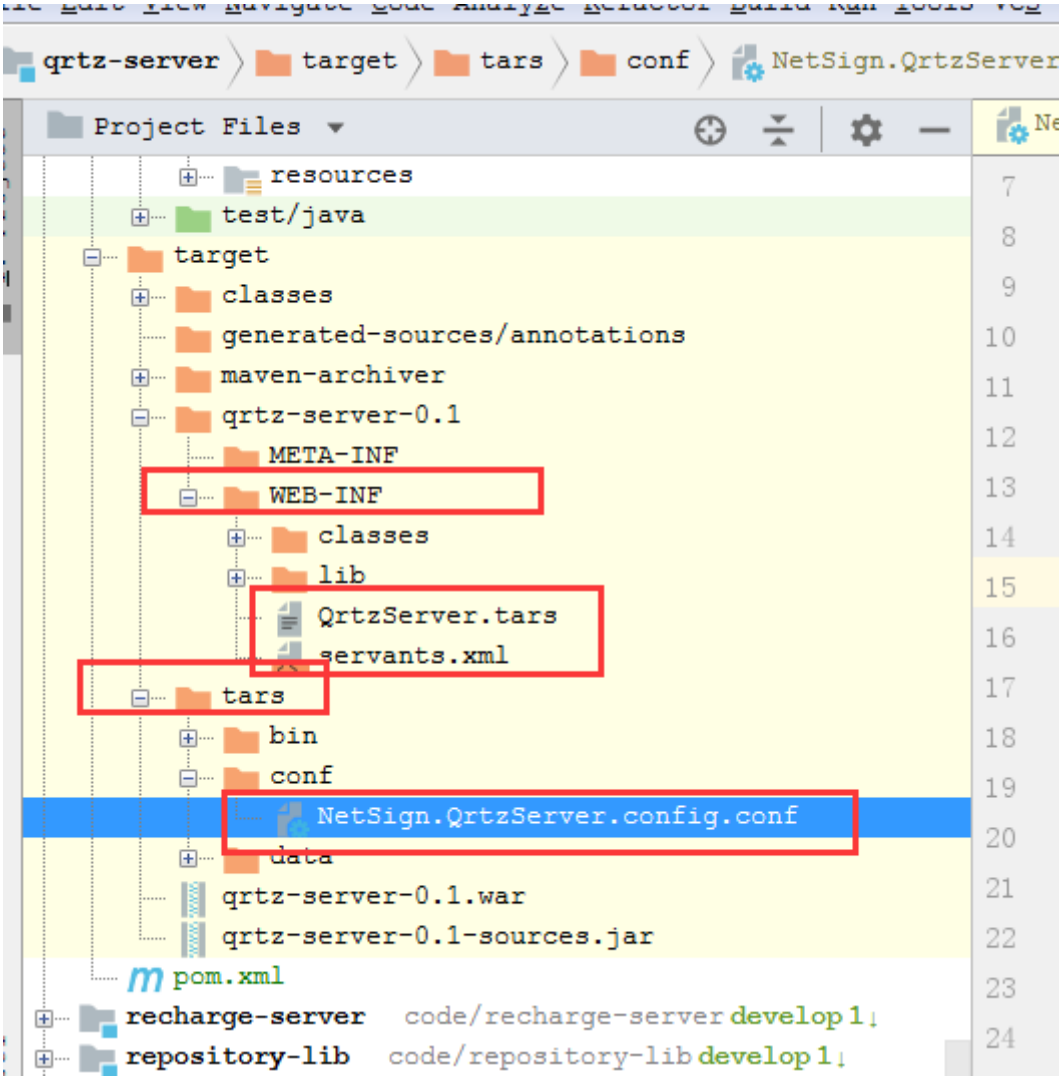
```
<application>
 <qz>
 refreshJobTime=5
 </qz>
 <db>
 driverClass = com.mysql.jdbc.Driver
 jdbcUrl = jdbc:mysql://192.168.0.93:3306/ancun_netsign_new?useU
nicode\=true&characterEncoding\=UTF-8&autoReconnect\=true&failOver
ReadOnly\=false&useSSL\=false
 user = root
 password = 123456
  maxPoolSize = 100
  minIdle = 3
  maxLifetime = 60000
  connectivityCheckTimeoutMs = 1000
```

```
  expected99thPercentileMs = 10
  </db>
 </application>
 <tars>
  <application>
  enableset = N
  setdivision = NULL
  <client>
  locator = tars.tarsregistry.QueryObj@tcp -h 192.168.0.239 -p 17890
  sync-invoke-timeout = 20000
  async-invoke-timeout = 20000
  refresh-endpoint-interval = 60000
  stat = tars.tarsstat.StatObj
  property = tars.tarsproperty.PropertyObj
  report-interval = 60000
  modulename = NetSign.QrtzServer
  </client>
  <server>
  node = tars.tarsnode.ServerObj@tcp -h 192.168.0.239 -p 19386 -t 60000
  app = NetSign
  server = QrtzServer
  localip = 192.168.0.36
  local = tcp -h 127.0.0.1 -p 18015 -t 3000
  basepath = D:\IdeaProjects\netsign\code\qrtz-server\target\tars\bin
  datapath = D:\IdeaProjects\netsign\code\qrtz-server\target\tars\data
  logpath = D:\qrtz-server\\log
  loglevel = DEBUG
  logsize = 15M
  log = tars.tarslog.LogObj
  config = tars.tarsconfig.ConfigObj
  notify = tars.tarsnotify.NotifyObj
  mainclass = com.qq.tars.server.startup.Main
```

```
46  jvmparams = -Xms256m -Xmx256m -Dcom.sun.management.jmxremote.s
sl=false -Dcom.sun.management.jmxremote.authenticate=false -Xdebug
-Xrunjdwp:transport=dt_socket, address = 9000, server = y, suspend
= n
47  sessiontimeout = 120000
48  sessioncheckinterval = 60000
49  tcpnodelay = true
50  udpbuffersize = 8192
51  charsetname = UTF-8
52  <NetSign.QrtzServer.QrtzServerObjAdapter>
53  allow
54  endpoint = tcp -h 192.168.0.36 -p 18015 -t 60000
55  handlegroup = NetSign.QrtzServer.QrtzServerObjAdapter
56  maxconns = 200000
57  protocol = tars
58  queuecap = 10000
59  queuetimeout = 60000
60  servant = NetSign.QrtzServer.QrtzServerObj
61  shmcap = 0
62  shmkey = 0
63  threads = 5
64  </NetSign.QrtzServer.QrtzServerObjAdapter>
65  </server>
66  </application>
67 </tars>
```

2、在运行的时候添加上配置文件，一定要添加到编译后的地方

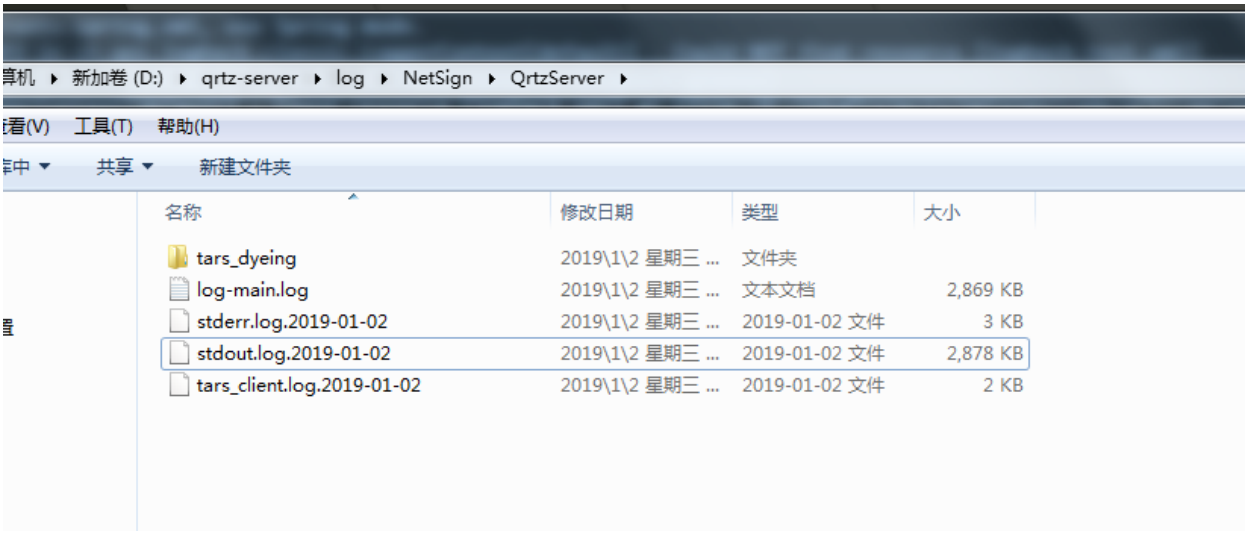
如图：

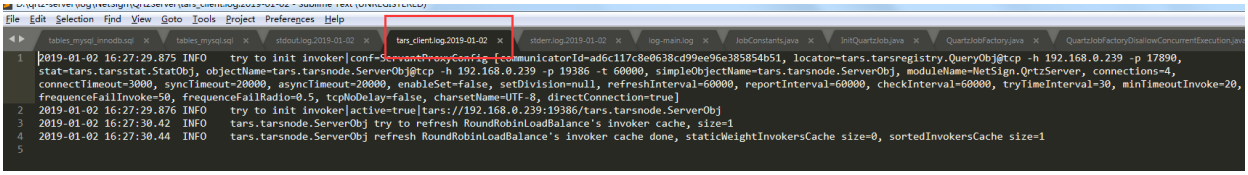


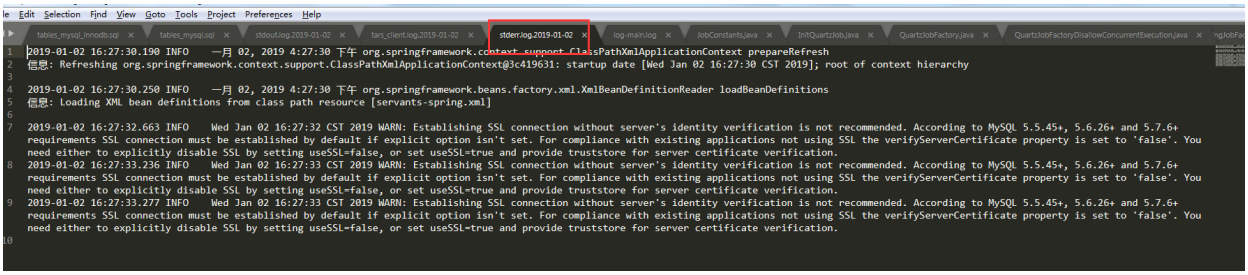
3、由于未知原因导致自动注入不了bean（需要继续研究），所以我这边直接使用springUtils来获取容器里面的bean了。

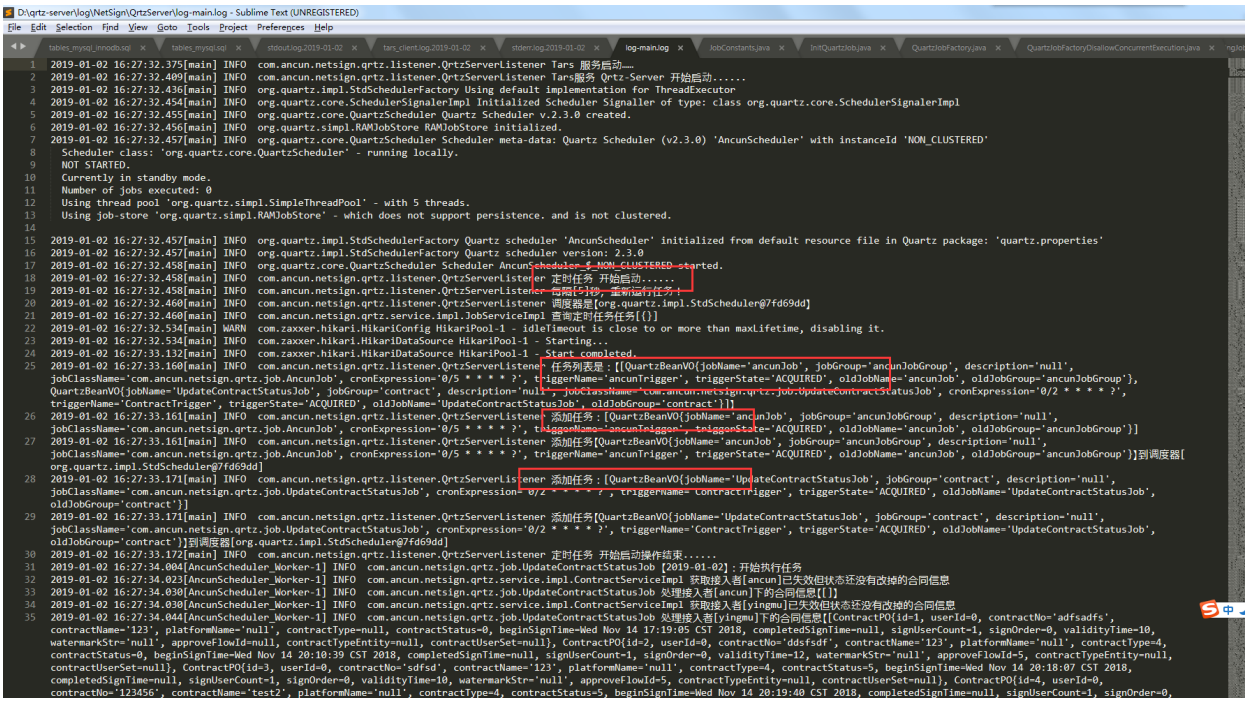
```
public  JobService getJobService(){
    if(null == jobService){
        return SpringUtils.getBean(JobService.class);
    }
    return jobService;
}
```

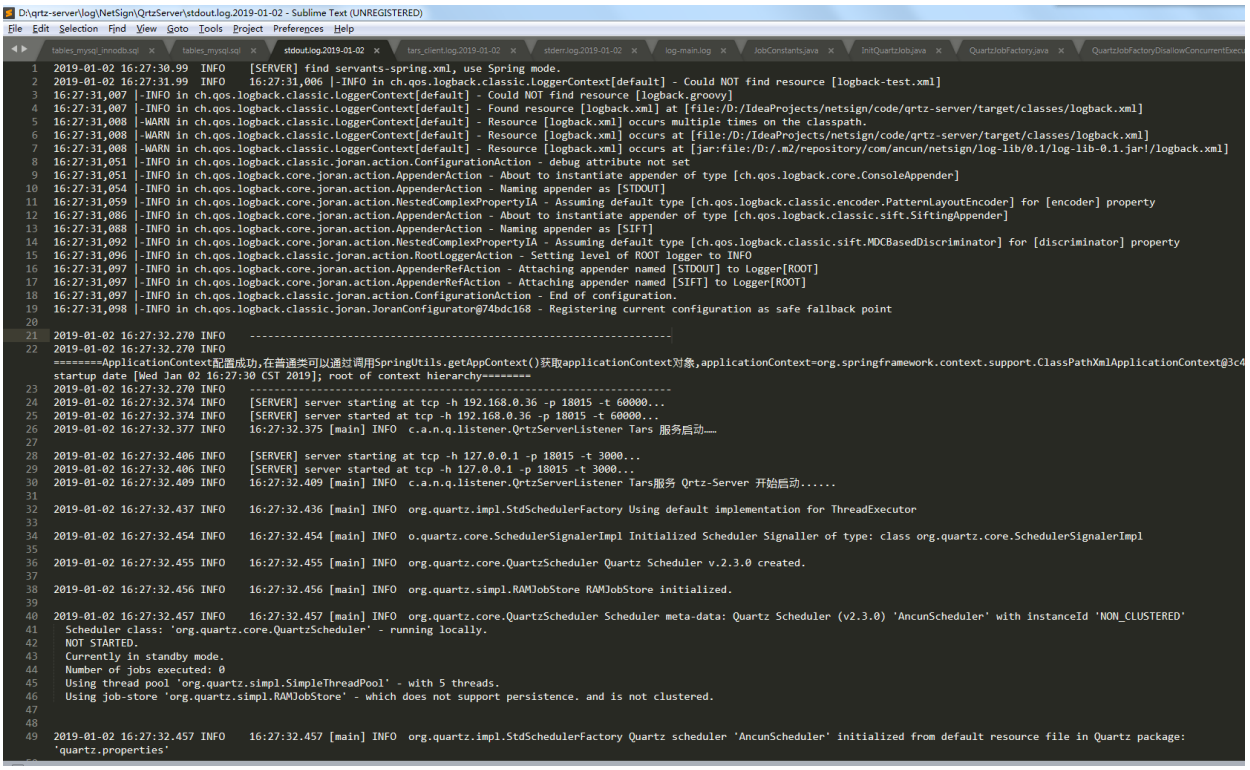
4、最后提供一个启动成功的日志，给大家看看


算机 ▸ 新加卷 (D:) ▸ qrtz-server ▸ log ▸ NetSign ▸ QrtzServer ▸
查看(V) 工具(T) 帮助(H)
共享 ▾ 新建文件夹
名称 修改日期 类型 大小
tars_dyeing 2019\1\2 星期三 ... 文件夹
log-main.log 2019\1\2 星期三 ... 文本文档 2,869 KB
stderr.log.2019-01-02 2019\1\2 星期三 ... 2019-01-02 文件 3 KB
stdout.log.2019-01-02 2019\1\2 星期三 ... 2019-01-02 文件 2,878 KB
tars_client.log.2019-01-02 2019\1\2 星期三 ... 2019-01-02 文件 2 KB


2019-01-02 16:27:29.875 INFO try to init invoker|conf=ServantProxyConfig [communicatorId=ad6c117c8e0638cd99ee96e385854b51, locator=tars.tarsregistry.QueryObj@tcp -h 192.168.0.239 -p 17890,
stat=tars.tarsstat.StatObj, objectName=tars.tarsnode.ServerObj@tcp -h 192.168.0.239 -p 19386 -t 60000, simpleObjectName=tars.tarsnode.ServerObj, moduleName=NetSign.QrtzServer, connections=4,
connectTimeout=3000, syncTimeout=20000, asyncTimeout=20000, enableSet=false, setDivision=null, refreshInterval=60000, reportInterval=60000, checkInterval=60000, tryTimeInterval=30, minTimeoutInvoke=20,
frequenceFailInvoke=50, frequenceFailRadio=0.5, tcpNoDelay=false, charsetName=UTF-8, directConnection=true]
2019-01-02 16:27:29.876 INFO try to init invoker|active=true|tars://192.168.0.239:19386/tars.tarsnode.ServerObj
2019-01-02 16:27:30.42 INFO tars.tarsnode.ServerObj try to refresh RoundRobinLoadBalance's invoker cache, size=1
2019-01-02 16:27:30.44 INFO tars.tarsnode.ServerObj refresh RoundRobinLoadBalance's invoker cache done, staticWeightInvokersCache size=0, sortedInvokersCache size=1


2019-01-02 16:27:30.190 INFO 一月 02, 2019 4:27:30 下午 org.springframework.context.support.ClassPathXmlApplicationContext prepareRefresh
信息: Refreshing org.springframework.context.support.ClassPathXmlApplicationContext@3c419631: startup date [Wed Jan 02 16:27:30 CST 2019]; root of context hierarchy
2019-01-02 16:27:30.250 INFO 一月 02, 2019 4:27:30 下午 org.springframework.beans.factory.xml.XmlBeanDefinitionReader loadBeanDefinitions
信息: Loading XML bean definitions from class path resource [servants-spring.xml]
2019-01-02 16:27:32.663 INFO Wed Jan 02 16:27:32 CST 2019 WARN: Establishing SSL connection without server's identity verification is not recommended. According to MySQL 5.5.45+, 5.6.26+ and 5.7.6+
requirements SSL connection must be established by default if explicit option isn't set. For compliance with existing applications not using SSL the verifyServerCertificate property is set to 'false'. You
need either to explicitly disable SSL by setting useSSL=false, or set useSSL=true and provide truststore for server certificate verification.
2019-01-02 16:27:33.236 INFO Wed Jan 02 16:27:33 CST 2019 WARN: Establishing SSL connection without server's identity verification is not recommended. According to MySQL 5.5.45+, 5.6.26+ and 5.7.6+
requirements SSL connection must be established by default if explicit option isn't set. For compliance with existing applications not using SSL the verifyServerCertificate property is set to 'false'. You
need either to explicitly disable SSL by setting useSSL=false, or set useSSL=true and provide truststore for server certificate verification.
2019-01-02 16:27:33.277 INFO Wed Jan 02 16:27:33 CST 2019 WARN: Establishing SSL connection without server's identity verification is not recommended. According to MySQL 5.5.45+, 5.6.26+ and 5.7.6+
requirements SSL connection must be established by default if explicit option isn't set. For compliance with existing applications not using SSL the verifyServerCertificate property is set to 'false'. You
need either to explicitly disable SSL by setting useSSL=false, or set useSSL=true and provide truststore for server certificate verification.


D:\qrtz-server\log\NetSign\QrtzServer\log-main.log - Sublime Text (UNREGISTERED)
2019-01-02 16:27:32.375[main] INFO com.ancun.netsign.qrtz.listener.QrtzServerListener Tars 服务启动……
2019-01-02 16:27:32.409[main] INFO com.ancun.netsign.qrtz.listener.QrtzServerListener Tars服务 Qrtz-Server 开始启动.....
2019-01-02 16:27:32.436[main] INFO org.quartz.impl.StdSchedulerFactory Using default implementation for ThreadExecutor
2019-01-02 16:27:32.454[main] INFO org.quartz.core.SchedulerSignalerImpl Initialized Scheduler Signaller of type: class org.quartz.core.SchedulerSignalerImpl
2019-01-02 16:27:32.455[main] INFO org.quartz.core.QuartzScheduler Quartz Scheduler v.2.3.0 created.
2019-01-02 16:27:32.456[main] INFO org.quartz.simpl.RAMJobStore RAMJobStore initialized.
2019-01-02 16:27:32.457[main] INFO org.quartz.core.QuartzScheduler Scheduler meta-data: Quartz Scheduler (v2.3.0) 'AncunScheduler' with instanceId 'NON_CLUSTERED'
Scheduler class: 'org.quartz.core.QuartzScheduler' - running locally.
NOT STARTED.
Currently in standby mode.
Number of jobs executed: 0
Using thread pool 'org.quartz.simpl.SimpleThreadPool' - with 5 threads.
Using job-store 'org.quartz.simpl.RAMJobStore' - which does not support persistence. and is not clustered.
2019-01-02 16:27:32.457[main] INFO org.quartz.impl.StdSchedulerFactory Quartz scheduler 'AncunScheduler' initialized from default resource file in Quartz package: 'quartz.properties'
2019-01-02 16:27:32.457[main] INFO org.quartz.impl.StdSchedulerFactory Quartz scheduler version: 2.3.0
2019-01-02 16:27:32.458[main] INFO org.quartz.core.QuartzScheduler Scheduler AncunScheduler_$_NON_CLUSTERED started.
2019-01-02 16:27:32.458[main] INFO com.ancun.netsign.qrtz.listener.QrtzServerListener 定时任务 开始启动.....
2019-01-02 16:27:32.458[main] INFO com.ancun.netsign.qrtz.listener.QrtzServerListener 每隔[5]秒, 重新运行任务!
2019-01-02 16:27:32.460[main] INFO com.ancun.netsign.qrtz.listener.QrtzServerListener 调度器是[org.quartz.impl.StdScheduler@7fd69dd]
2019-01-02 16:27:32.460[main] INFO com.ancun.netsign.qrtz.service.impl.JobServiceImpl 查询定时任务任务[{}]
2019-01-02 16:27:32.534[main] WARN com.zaxxer.hikari.HikariConfig HikariPool-1 - idleTimeout is close to or more than maxLifetime, disabling it.
2019-01-02 16:27:32.534[main] INFO com.zaxxer.hikari.HikariDataSource HikariPool-1 - Starting...
2019-01-02 16:27:33.132[main] INFO com.zaxxer.hikari.HikariDataSource HikariPool-1 - Start completed.
2019-01-02 16:27:33.160[main] INFO com.ancun.netsign.qrtz.listener.QrtzServerListener 任务列表是：[[QuartzBeanVO{jobName='ancunJob', jobGroup='ancunJobGroup', description='null',
jobClassName='com.ancun.netsign.qrtz.job.AncunJob', cronExpression='0/5 * * * * ?', triggerName='ancunTrigger', triggerState='ACQUIRED', oldJobName='ancunJob', oldJobGroup='ancunJobGroup'},
QuartzBeanVO{jobName='UpdateContractStatusJob', jobGroup='contract', description='null', jobClassName='com.ancun.netsign.qrtz.job.UpdateContractStatusJob', cronExpression='0/2 * * * * ?',
triggerName='ContractTrigger', triggerState='ACQUIRED', oldJobName='UpdateContractStatusJob', oldJobGroup='contract'}]]
2019-01-02 16:27:33.161[main] INFO com.ancun.netsign.qrtz.listener.QrtzServerListener 添加任务：[QuartzBeanVO{jobName='ancunJob', jobGroup='ancunJobGroup', description='null',
jobClassName='com.ancun.netsign.qrtz.job.AncunJob', cronExpression='0/5 * * * * ?', triggerName='ancunTrigger', triggerState='ACQUIRED', oldJobName='ancunJob', oldJobGroup='ancunJobGroup'}]
2019-01-02 16:27:33.161[main] INFO com.ancun.netsign.qrtz.listener.QrtzServerListener 添加任务[QuartzBeanVO{jobName='ancunJob', jobGroup='ancunJobGroup', description='null',
jobClassName='com.ancun.netsign.qrtz.job.AncunJob', cronExpression='0/5 * * * * ?', triggerName='ancunTrigger', triggerState='ACQUIRED', oldJobName='ancunJob', oldJobGroup='ancunJobGroup'}]到调度器[
org.quartz.impl.StdScheduler@7fd69dd]
2019-01-02 16:27:33.171[main] INFO com.ancun.netsign.qrtz.listener.QrtzServerListener 添加任务：[QuartzBeanVO{jobName='UpdateContractStatusJob', jobGroup='contract', description='null',
jobClassName='com.ancun.netsign.qrtz.job.UpdateContractStatusJob', cronExpression='0/2 * * * * ?', triggerName='ContractTrigger', triggerState='ACQUIRED', oldJobName='UpdateContractStatusJob',
oldJobGroup='contract'}]
2019-01-02 16:27:33.171[main] INFO com.ancun.netsign.qrtz.listener.QrtzServerListener 添加任务[QuartzBeanVO{jobName='UpdateContractStatusJob', jobGroup='contract', description='null',
jobClassName='com.ancun.netsign.qrtz.job.UpdateContractStatusJob', cronExpression='0/2 * * * * ?', triggerName='ContractTrigger', triggerState='ACQUIRED', oldJobName='UpdateContractStatusJob',
oldJobGroup='contract'}]到调度器[org.quartz.impl.StdScheduler@7fd69dd]
2019-01-02 16:27:33.172[main] INFO com.ancun.netsign.qrtz.listener.QrtzServerListener 定时任务 开始启动操作结束.....
2019-01-02 16:27:34.004[AncunScheduler_Worker-1] INFO com.ancun.netsign.qrtz.job.UpdateContractStatusJob 【2019-01-02】：开始执行任务
2019-01-02 16:27:34.023[AncunScheduler_Worker-1] INFO com.ancun.netsign.qrtz.service.impl.ContractServiceImpl 获取接入者[ancun]已失效但状态还没有改掉的合同信息
2019-01-02 16:27:34.030[AncunScheduler_Worker-1] INFO com.ancun.netsign.qrtz.job.UpdateContractStatusJob 处理接入者[ancun]下的合同信息[[]]
2019-01-02 16:27:34.030[AncunScheduler_Worker-1] INFO com.ancun.netsign.qrtz.service.impl.ContractServiceImpl 获取接入者[yingmu]已失效但状态还没有改掉的合同信息
2019-01-02 16:27:34.044[AncunScheduler_Worker-1] INFO com.ancun.netsign.qrtz.job.UpdateContractStatusJob 处理接入者[yingmu]下的合同信息[[ContractPO{id=1, userId=0, contractNo='adfsadfs',
contractName='123', platformName='null', contractType=null, contractStatus=0, beginSignTime=Wed Nov 14 17:19:05 CST 2018, completedSignTime=null, signUserCount=1, signOrder=0, validityTime=10,
watermarkStr='null', approveFlowId=null, contractTypeEntity=null, contractUserSet=null}, ContractPO{id=2, userId=0, contractNo='ddsfsdf', contractName='123', platformName='null', contractType=4,
contractStatus=0, beginSignTime=Wed Nov 14 20:10:39 CST 2018, completedSignTime=null, signUserCount=1, signOrder=0, validityTime=12, watermarkStr='null', approveFlowId=5, contractTypeEntity=null,
contractUserSet=null}, ContractPO{id=3, userId=0, contractNo='sdfsd', contractName='123', platformName='null', contractType=4, contractStatus=5, beginSignTime=Wed Nov 14 20:18:07 CST 2018,
completedSignTime=null, signUserCount=1, signOrder=0, validityTime=10, watermarkStr='null', approveFlowId=5, contractTypeEntity=null, contractUserSet=null}, ContractPO{id=4, userId=0,
contractNo='123456', contractName='test2', platformName='null', contractType=4, contractStatus=5, beginSignTime=Wed Nov 14 20:19:40 CST 2018, completedSignTime=null, signUserCount=1, signOrder=0,



参考资料：

https://tars.tencent.com/base/help/TARS_quick_start_Java.html

https://wenku.baidu.com/view/77bfc3ffb04e852458fb770bf78a6529647d35c8.html

http://www.quartz-scheduler.org/

https://github.com/quartz-scheduler/quartz