

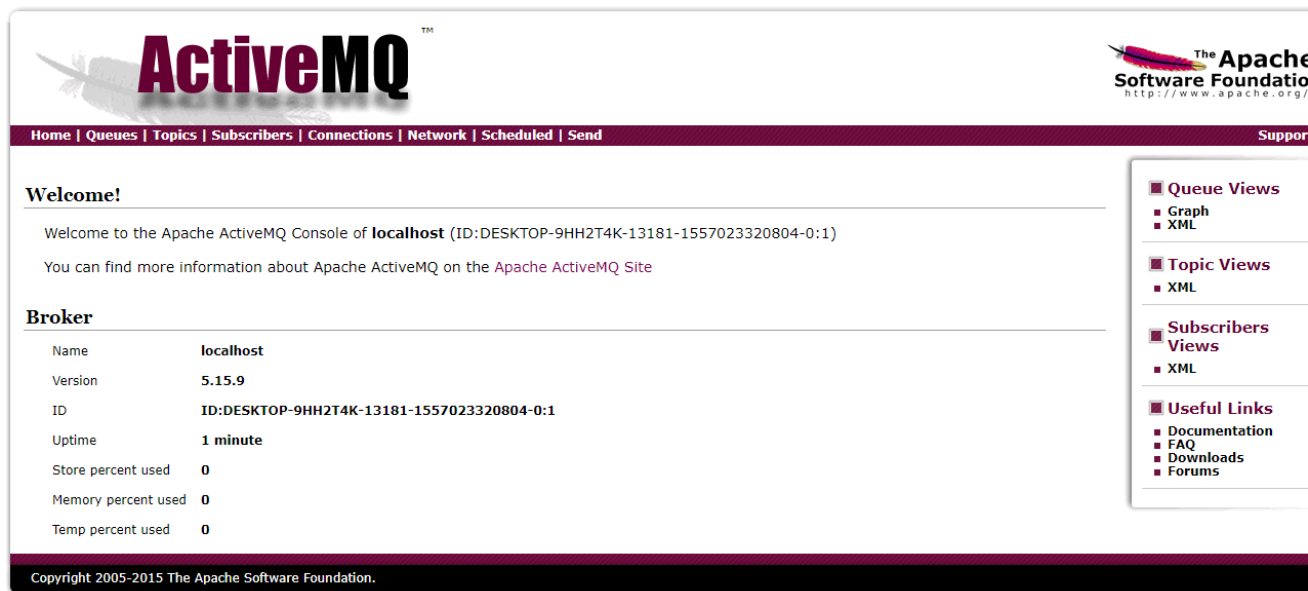
# 分布式随机信号分析系统设计说明

## 1.首先开启ActiveMQ

找到 `bin/win64/wrapper.exe` 双击运行

```
ActiveMQ
Size=104857600
jvm 1      INFO | Connector amqp started
jvm 1      INFO | Listening for connections at: stomp://DESKTOP-9HH2T4K:61613?maximumConnections=1000&wireFormat.maxFra
meSize=104857600
jvm 1      INFO | Connector stomp started
jvm 1      INFO | Listening for connections at: mqtt://DESKTOP-9HH2T4K:1883?maximumConnections=1000&wireFormat.maxFrame
Size=104857600
jvm 1      INFO | Connector mqtt started
jvm 1      INFO | Starting Jetty server
jvm 1      INFO | Creating Jetty connector
jvm 1      WARN | ServletContext@o.e.j.s.ServletContextHandler@7b0e50b9 {/,null,STARTING} has uncovered http methods for
path: /
jvm 1      INFO | Listening for connections at ws://DESKTOP-9HH2T4K:61614?maximumConnections=1000&wireFormat.maxFrameSi
ze=104857600
jvm 1      INFO | Connector ws started
jvm 1      INFO | Apache ActiveMQ 5.15.9 (localhost, ID:DESKTOP-9HH2T4K-13181-1557023320804-0:1) started
jvm 1      INFO | For help or more information please see: http://activemq.apache.org
jvm 1      WARN | Store limit is 102400 mb (current store usage is 0 mb). The data directory: F:\大三下课程\分布式计算\
tools\apache-activemq-5.15.9-bin\apache-activemq-5.15.9\bin\win64\...\data\kahadb only has 26602 mb of usable space. -
resetting to maximum available disk space: 26602 mb
jvm 1      WARN | Temporary Store limit is 51200 mb (current store usage is 0 mb). The data directory: F:\大三下课程\分
布式计算\tools\apache-activemq-5.15.9-bin\apache-activemq-5.15.9\bin\win64\...\data only has 26602 mb of usable space.
- resetting to maximum available disk space: 26602 mb
jvm 1      INFO | No Spring WebApplicationInitializer types detected on classpath
jvm 1      INFO | ActiveMQ WebConsole available at http://0.0.0.0:8161/
jvm 1      INFO | ActiveMQ Jolokia REST API available at http://0.0.0.0:8161/api/jolokia/
jvm 1      INFO | Initializing Spring FrameworkServlet 'dispatcher'
jvm 1      INFO | No Spring WebApplicationInitializer types detected on classpath
jvm 1      INFO | jolokia-agent: Using policy access restrictor classpath:/jolokia-access.xml
```

打开网站确认<http://127.0.0.1:8161/admin/>



## 2.编译文件

```
javac *.java
```

```
C:\Users\王\Desktop\第3次作业>javac *.java
注：某些输入文件使用或覆盖了已过时的 API。
注：有关详细信息，请使用 -Xlint:deprecation 重新编译。
注：某些输入文件使用了未经检查或不安全的操作。
注：有关详细信息，请使用 -Xlint:unchecked 重新编译。

C:\Users\王\Desktop\第3次作业>
```

### 3.运行程序

- 在cmd窗口1输入 `java Publisher`

```
C:\Users\王\Desktop\第3次作业>java Publisher
please input a, b as parameters of the Gaussian
```

- 在cmd窗口2输入 `java ASyncConsumer_average`

```
C:\Users\王\Desktop\第3次作业>java ASyncConsumer_average
Press any key to exit.
```

- 在cmd窗口3输入 `java ASyncConsumer_var` 再输入过去N次的信号

```
C:\Users\王\Desktop\第3次作业>java ASyncConsumer_var
Press the N :
100
Press any key to exit.
```

- 在cmd窗口4输入 `java ASyncConsumer_err`

```
C:\Users\王\Desktop\第3次作业>java ASyncConsumer_err
Press any key to exit.
```

- 在Publisher 窗口中键入产生随机信号的均值为a，方差为b的随机信号

```
C:\Users\王\Desktop\第3次作业>java Publisher
please input a, b as parameters of the Gaussian
20 2
```

- 可以看到其他窗口同时滚动显示各自模块的信息

<pre>Microsoft Windows [版本 10.0.17134.706] (c) 2018 Microsoft Corporation。保留所有权利。  C:\Users\王\Desktop\第3次作业&gt;javac *.java 注：某些输入文件使用或覆盖了已过时的 API。 注：有关详细信息，请使用 -Xlint:deprecation 重新编译。 注：某些输入文件使用了未经检查或不安全的操作。 注：有关详细信息，请使用 -Xlint:unchecked 重新编译。  C:\Users\王\Desktop\第3次作业&gt;java Publisher please input a, b as parameters of the Gaussian 20 2  C:\Users\王\Desktop\第3次作业&gt;java Publisher please input a, b as parameters of the Gaussian 20 2</pre>	<pre>current var: 2.20621116852511586093 current var: 2.23989629763874643631 current var: 2.25555558140820180216 current var: 2.17089942558709706503 current var: 2.16963694559751919395 current var: 2.16093567417990204351 current var: 2.18834265386603471708 current var: 2.18852043850208870123 current var: 2.18276298137345614601 current var: 2.18189416117066561203 current var: 2.11917933030972241952 current var: 2.21036781036564349768 current var: 2.17278716560477111011 current var: 2.16469067816878519942 current var: 2.13401390647613939914 current var: 2.12686812070522406582 current var: 2.33710503219052523457 current var: 2.33523961949546491458 current var: 2.31877359675844318440 current var: 2.30363619379287347186 current var: 2.30159883092657810916 current var: 2.32591826151261999609 current var: 2.38441645185281472404</pre>
<pre>C:\Windows\System32\cmd.exe - java ASyncConsumer_average  current num: 5399 average: 20.01257366694465 current num: 5400 average: 20.012226446913886 current num: 5401 average: 20.011986233099186 current num: 5402 average: 20.011914345883756 current num: 5403 average: 20.012239536411094 current num: 5404 average: 20.01229464131597 current num: 5405 average: 20.012711382344886 current num: 5406 average: 20.012631118473273 current num: 5407 average: 20.012590851883925 current num: 5408 average: 20.012561944357394 current num: 5409 average: 20.012444673091295 current num: 5410 average: 20.013005629998116 current num: 5411 average: 20.013228627425395 current num: 5412 average: 20.013221781075227 current num: 5413 average: 20.01353285492801 current num: 5414 average: 20.013782898535734 current num: 5415 average: 20.012934594590856 current num: 5416 average: 20.013073505204517 current num: 5417 average: 20.013300088749858 current num: 5418 average: 20.013340634965967 current num: 5419 average: 20.013656080469843 current num: 5419 average: 20.013656080469843</pre>	<pre>C:\Windows\System32\cmd.exe - java ASyncConsumer_err  current_num: 5398 err_num: 18 current_num: 5399 err_num: 18 current_num: 5400 err_num: 18 current_num: 5401 err_num: 18 current_num: 5402 err_num: 18 current_num: 5403 err_num: 18 current_num: 5404 err_num: 18 current_num: 5405 err_num: 18 current_num: 5406 err_num: 18 current_num: 5407 err_num: 18 current_num: 5408 err_num: 18 current_num: 5409 err_num: 18 current_num: 5410 err_num: 18 current_num: 5411 err_num: 18 current_num: 5412 err_num: 18 current_num: 5413 err_num: 18 current_num: 5414 err_num: 18 current_num: 5415 err_num: 19 current_num: 5416 err_num: 19 current_num: 5417 err_num: 19 current_num: 5418 err_num: 19 current_num: 5419 err_num: 19 current_num: 5420 err_num: 19</pre>

## 5.说明

运行程序时尽量保证和上述顺序一致。