

华东师范大学数据科学与工程学院实验报告

课程名称： 分布式模型与编程

年级： 2016 级

上机实践成绩：

指导教师： 徐辰

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上机实践名称： Storm 部署

学号： 10165101180

上机实践日期：

上机实践编号： 10

组号：

上机实践时间：

一、实验目的

部署 Storm

二、实验任务

部署 storm+ookeeper，并运行 wordCount 样例

三、使用环境

Storm1.2.2

四、实验过程

启动后用 jps 查看是否启动成功

```
hadoop@PC-honwee: /usr/local/storm/examples/storm-starter/target$ jps
22033 Supervisor
13923 Jps
21560 nimbus
18984
1002 JobHistoryServer
22204 core
30206 QuorumPeerMain
```

运行样例

```
hadoop@PC-honwee:~/Documents/distribution/10$ storm jar ~/Documents/distribution/10/wordcount.jar Word
CountTopology
Running: /usr/java/jdk1.8.0_181/bin/java -client -Ddaemon.name= -Dstorm.options= -Dstorm.home=/usr/loc
al/storm -Dstorm.log.dir=/usr/local/storm/logs -Djava.library.path=/usr/local/lib:/opt/local/lib:/usr/
lib -Dstorm.conf.file= -cp /usr/local/storm/*:/usr/local/storm/lib/*:/usr/local/storm/extlib/*:/home/h
adoop/Documents/distribution/10/wordcount.jar:/usr/local/storm/conf:/usr/local/storm/bin -Dstorm.jar=/
home/hadoop/Documents/distribution/10/wordcount.jar -Dstorm.dependency.jars= -Dstorm.dependency.artifa
cts={} WordCountTopology
```

运行结果:

```
the: 1
cow: 1
jumped: 1
over: 1
the: 2
moon: 1
an: 1
apple: 1
a: 1
day: 1
keeps: 1
the: 3
doctor: 1
away: 1
four: 1
score: 1
and: 1
seven: 1
years: 1
ago: 1
snow: 1
white: 1
and: 2
the: 4
```

编译样例库

```
[INFO] 编译的项名，比如 DRPC、WordCount 等
[INFO] BUILD SUCCESS
[INFO] Total time: 24.617 s
[INFO] Finished at: 2018-11-20T08:43:03+08:00
[INFO] Final Memory: 48M/1546M
[INFO] 目录下生成 target 目录，其中的
```

运行结果

```
hadoop@PC-honwee: /usr/local/storm/examples/storm-starter/target$ storm jar storm-starter-1.2.2.jar org.apache.storm.starter.WordCountTopology aa
Running: /usr/java/jdk1.8.0_181/bin/java -client -Ddaemon.name= -Dstorm.options= -Dstorm.home=/usr/local/storm -Dstorm.log.dir=/usr/local/storm/logs -Djava.library.path=/usr/local/lib:/opt/local/lib:/usr/lib -Dstorm.conf.file= -cp /usr/local/storm/*:/usr/local/storm/lib/*:/usr/local/storm/extlib/*:storm-starter-1.2.2.jar:/usr/local/storm/conf:/usr/local/storm/bin -Dstorm.jar=storm-starter-1.2.2.jar -Dstorm.dependencies.jars= -Dstorm.dependency.artifacts={} org.apache.storm.starter.WordCountTopology aa
503 [main] WARN o.a.s.u.Utils - STORM-VERSION new 1.2.2 old null
524 [main] INFO o.a.s.StormSubmitter - Generated ZooKeeper secret payload for MD5-digest: -5994683889502143458:-9100192359114989505
610 [main] INFO o.a.s.u.NimbusClient - Found leader nimbus : PC-honwee:6627
627 [main] INFO o.a.s.a.AuthUtils - Got AutoCreds []
630 [main] INFO o.a.s.u.NimbusClient - Found leader nimbus : PC-honwee:6627
644 [main] INFO o.a.s.StormSubmitter - Uploading dependencies - jars...
645 [main] INFO o.a.s.StormSubmitter - Uploading dependencies - artifacts...
645 [main] INFO o.a.s.StormSubmitter - Dependency Blob keys - jars : [] / artifacts : []
657 [main] INFO o.a.s.StormSubmitter - Uploading topology jar storm-starter-1.2.2.jar to assigned location: /usr/local/storm/storm-local/nimbus/inbox/stormjar-980ee89f-c0f7-462f-978f-7997d7d180d3.jar
Start uploading file 'storm-starter-1.2.2.jar' to '/usr/local/storm/storm-local/nimbus/inbox/stormjar-980ee89f-c0f7-462f-978f-7997d7d180d3.jar' (106520250 bytes)
[=====] 106520250 / 106520250
File 'storm-starter-1.2.2.jar' uploaded to '/usr/local/storm/storm-local/nimbus/inbox/stormjar-980ee89f-c0f7-462f-978f-7997d7d180d3.jar' (106520250 bytes)
2103 [main] INFO o.a.s.StormSubmitter - Successfully uploaded topology jar to assigned location: /usr/local/storm/storm-local/nimbus/inbox/stormjar-980ee89f-c0f7-462f-978f-7997d7d180d3.jar
2103 [main] INFO o.a.s.StormSubmitter - Submitting topology aa in distributed mode with conf {"storm.zookeeper.topology.auth.scheme":"digest","storm.zookeeper.topology.auth.payload":"-5994683889502143458:-9100192359114989505","topology.workers":3,"topology.debug":true}
2103 [main] WARN o.a.s.u.Utils - STORM-VERSION new 1.2.2 old 1.2.2
3680 [main] INFO o.a.s.StormSubmitter - Finished submitting topology: aa
```

五、总结

个人感觉 storm 的代码实现主要通过重写父类的函数，所以对父类函数需要十分了解。