

SchedulerX 常见问题及解决办法

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机器繁忙

应用管理，连接机器，如果机器是红色的【繁忙】，说明机器繁忙了，可以点击繁忙/健康，看到当前机器的水位。

连接机器

刷新

<input type="checkbox"/>	机器ip	状态	版本号	启动方式
<input type="checkbox"/>	11.227.224.117(1)	健康	1.0.4-SNAPSHOT	springboot
<input type="checkbox"/>	11.227.224.118(1)	繁忙	1.0.4-SNAPSHOT	springboot
<input type="checkbox"/>	11.227.224.119(1)	繁忙	1.0.4-SNAPSHOT	springboot
<input type="checkbox"/>	11.227.224.119(1)	健康	1.0.4-SNAPSHOT	springboot

×

load5 / CPU核数 : 0.02 / 4
内存使用率 : 33%
磁盘使用率 : 13%

如果机器繁忙了，默认是无法触发任务的，想要触发任务，有如下解决方案：

- 1. 根据机器水位进行处理，比如磁盘超过 90%，就清理磁盘。如果 Load 或者 CPU 高，最好排查出是哪里比较耗 CPU，在业务层面解决，如果解决不了最好升级到高配的机器。
- 2. 如果只是测试，机器繁忙也想继续触发，可以在应用管理 -> 高级配置下，调整响应的阈值，或者关闭【不触发繁忙机器】的开关，如下图

编辑应用分组

* 应用名

* Group ID ?

描述

高级配置

繁忙机器配置:

load5 ?

0

内存使用率 ?

90

%

磁盘使用率 (?)

95

%

不触发繁忙机器



开

暂无可用的机器 (no worker available)

首先排除不是机器繁忙造成的，那么就是接入失败了。登陆自己的机器，找到 SchedulerX 的日志，

1. 日志路径在 `${user.home}/logs/schedulerx/worker.log`
 - 如果进程是通过 root 启动的，目录为 `/root/logs/schedulerx/worker.log`
 - 如果进程是通过 admin 账户启动的，目录为 `/home/admin/schedulerx/worker.log`
2. 如果日志报 `groupId is not existed`，说明是配置问题，在 `worker.log` 里搜索 `Schedulerx WorkerConfig`，可以看到当前的配置，然后和控制台确认下，注意 namespace 要填 SchedulerX 控制台 -> 命令空间 -> 命名空间 Id。
3. 如果日志报了其他异常，基本是 Jar 包冲突引起的，可以看下 Jar 包冲突章节。

Jar 包冲突

可以在 `worker.log` 里搜一下 `maven dependencies`，可以看到每个 Jar 的版本和路径，帮助快速定位和解决 Jar 包冲突

```
2019-06-11 10:29:23.702 [main] INFO com.alibaba.schedulerx.worker.SchedulerxWorker - Schedulerx Worker starting...
2019-06-11 10:29:23.705 [main] INFO com.alibaba.schedulerx.worker.SchedulerxWorker - ===maven dependencies===
2019-06-11 10:29:23.707 [main] INFO com.alibaba.schedulerx.worker.SchedulerxWorker - netty:jar:file:/Users/armon/.m2/repository/io/netty/netty/3.10.6.Final/netty-3.10.6.Final.jar!/org/
jboss/netty/channel/socket/nio/
2019-06-11 10:29:23.708 [main] INFO com.alibaba.schedulerx.worker.SchedulerxWorker - protobuf-java:jar:file:/Users/armon/.m2/repository/com/google/protobuf/protobuf-java/2.6.1/protobuf
-java-2.6.1.jar!/com/google/protobuf/
2019-06-11 10:29:23.712 [main] INFO com.alibaba.schedulerx.worker.SchedulerxWorker - javaassist:jar:file:/Users/armon/.m2/repository/org/javassist/javassist/3.18.2-GA/javassist-3.18.2-
GA.jar!/javassist/compiler/
2019-06-11 10:29:23.712 [main] INFO com.alibaba.schedulerx.worker.SchedulerxWorker - commons-configuration:jar:file:/Users/armon/.m2/repository/commons-configuration/commons-configurat
ion/1.10/commons-configuration-1.10.jar!/org/apache/commons/configuration/
2019-06-11 10:29:23.713 [main] INFO com.alibaba.schedulerx.worker.SchedulerxWorker - config:jar:file:/Users/armon/.m2/repository/com/typesafe/config/1.3.0/config-1.3.0.jar!/com/typesaf
e/config/
2019-06-11 10:29:23.713 [main] INFO com.alibaba.schedulerx.worker.SchedulerxWorker - =====
```

请对照 SchedulerX 使用的 Jar 包，把自己低版本的排掉。

Jar 包	版本
guava	20.0
com.typesafe.config	1.3
protobuf-java	2.6.1
io.netty	3.10.6.Final
javassist	3.21.0-GA
hessian	4.0.51
commons-configuration	1.10
commons-validator	1.4.0
akka	2.4.20
scala	2.11

下面放一些常见的 Jar 包冲突

1. protobuf冲突

```

at scala.concurrent.forkjoin.ForkJoinWorkerThread.run(ForkJoinWorkerThread.java:107) [scala-library-2.11.11.jar:?]
2019-11-13 16:41:19.738 [011139045003_3231_98400-akka.actor.default-dispatcher-339] WARN com.alibaba.schedulerx.worker.SchedulerxWorker - heartbeat error
java.lang.VerifyError: com/alibaba/schedulerx/protocol/Worker$WorkerHeartBeatRequest
    at com.alibaba.schedulerx.worker.SchedulerxWorker$2.run(SchedulerxWorker.java:549) [schedulerx-worker-1.0.9-hotfix-v3.jar:??]
    at akka.actor.LightArrayRevolverScheduler$anon$2$$anon$1.run(LightArrayRevolverScheduler.scala:102) [akka-actor_2.11-2.4.20.jar:??]
    at akka.dispatch.TaskInvocation.run(AbstractDispatcher.scala:39) [akka-actor_2.11-2.4.20.jar:??]
    at akka.dispatch.ForkJoinExecutorConfigurator$AkkaForkJoinTask.exec(AbstractDispatcher.scala:415) [akka-actor_2.11-2.4.20.jar:??]
    at scala.concurrent.forkjoin.ForkJoinTask.doExec(ForkJoinTask.java:260) [scala-library-2.11.11.jar:??]
    at scala.concurrent.forkjoin.ForkJoinPool$WorkQueue.runTask(ForkJoinPool.java:1339) [scala-library-2.11.11.jar:??]
    at scala.concurrent.forkjoin.ForkJoinPool.runWorker(ForkJoinPool.java:1979) [scala-library-2.11.11.jar:??]
    at scala.concurrent.forkjoin.ForkJoinWorkerThread.run(ForkJoinWorkerThread.java:107) [scala-library-2.11.11.jar:??]
2019-11-13 16:41:24.738 [011139045003_3231_98400-akka.actor.default-dispatcher-339] WARN com.alibaba.schedulerx.worker.SchedulerxWorker - heartbeat error
java.lang.VerifyError: com/alibaba/schedulerx/protocol/Worker$WorkerHeartBeatRequest
    at com.alibaba.schedulerx.worker.SchedulerxWorker$2.run(SchedulerxWorker.java:549) [schedulerx-worker-1.0.9-hotfix-v3.jar:??]
    at akka.actor.LightArrayRevolverScheduler$anon$2$$anon$1.run(LightArrayRevolverScheduler.scala:102) [akka-actor_2.11-2.4.20.jar:??]
    at akka.dispatch.TaskInvocation.run(AbstractDispatcher.scala:39) [akka-actor_2.11-2.4.20.jar:??]
    at akka.dispatch.ForkJoinExecutorConfigurator$AkkaForkJoinTask.exec(AbstractDispatcher.scala:415) [akka-actor_2.11-2.4.20.jar:??]
    at scala.concurrent.forkjoin.ForkJoinTask.doExec(ForkJoinTask.java:260) [scala-library-2.11.11.jar:??]
    at scala.concurrent.forkjoin.ForkJoinPool$WorkQueue.runTask(ForkJoinPool.java:1339) [scala-library-2.11.11.jar:??]
    at scala.concurrent.forkjoin.ForkJoinPool.runWorker(ForkJoinPool.java:1979) [scala-library-2.11.11.jar:??]
    at scala.concurrent.forkjoin.ForkJoinWorkerThread.run(ForkJoinWorkerThread.java:107) [scala-library-2.11.11.jar:??]
^C^Z
[2]+  Stopped                  tail -f -n 1000 worker.log

[admin@yk-materialcenter011139045003.zbyk.na61 /home/admin/logs/schedulerx]
$

```

2. netty冲突

Uncaught error from thread [030011244063_1935_44810-akka.remote.default-remote-dispatcher-6]: org.jboss.netty.channel.socket.nio.NioWorker.<init>
(Ljava/util/concurrent/Executor;Lorg/jboss/netty/util/ThreadNameDeterminer;)V, shutting down
for ActorSystem[030011244063_1935_44810]
java.lang.NoSuchMethodError: org.jboss.netty.channel.socket.nio.NioWorker.<init>
(Ljava/util/concurrent/Executor;Lorg/jboss/netty/util/ThreadNameDeterminer;)V

3. netty或者protobuf冲突

```

2019-11-04 10:32:42:094 WARN com.alibaba.schedulerx.worker.SchedulerXWorker - active server=11.15.113.162:52014 lost.
java.util.concurrent.TimeoutException: Futures timed out after [5 seconds]
    at scala.concurrent.impl.Promise$DefaultPromise.ready(Promise.scala:223)
    at scala.concurrent.impl.Promise$DefaultPromise.result(Promise.scala:227)
    at scala.concurrent.Await$$anonfun$result$1.apply(package.scala:190)
    at akka.dispatch.MonitorableThreadFactory$AkkaForkJoinWorkerThread$$anon$3.block(ThreadPoolBuilder.scala:167)
    at scala.concurrent.forkjoin.ForkJoinPool.managedBlock(ForkJoinPool.java:3640)
    at akka.dispatch.MonitorableThreadFactory$AkkaForkJoinWorkerThread.blockOn(ThreadPoolBuilder.scala:165)
    at scala.concurrent.Await$.result(package.scala:190)
    at scala.concurrent.Await$.result(package.scala)
    at com.alibaba.schedulerx.protocol.utils.FutureUtils.awaitResult(FutureUtils.java:39)
    at com.alibaba.schedulerx.worker.SchedulerXWorker$2.run(SchedulerXWorker.java:560)
    at akka.actor.LightArrayRevolverScheduler$$anon$2$$anon$1.run(LightArrayRevolverScheduler.scala:102)
    at akka.dispatch.TaskInvocation.run(AbstractDispatcher.scala:39)
    at akka.dispatch.ForkJoinExecutorConfigurator$AkkaForkJoinTask.exec(AbstractDispatcher.scala:415)
    at scala.concurrent.forkjoin.ForkJoinTask.doExec(ForkJoinTask.java:260)
    at scala.concurrent.forkjoin.ForkJoinPool$WorkQueue.runTask(ForkJoinPool.java:1339)
    at scala.concurrent.forkjoin.ForkJoinPool.runWorker(ForkJoinPool.java:1979)
    at scala.concurrent.forkjoin.ForkJoinWorkerThread.run(ForkJoinWorkerThread.java:107)

2019-11-06 10:15:47:113 ERROR com.alibaba.schedulerx.worker.SchedulerXWorker - SchedulerX Worker error
java.util.concurrent.TimeoutException: Futures timed out after [10000 milliseconds]
    at scala.concurrent.impl.Promise$DefaultPromise.ready(Promise.scala:223)
    at scala.concurrent.impl.Promise$DefaultPromise.result(Promise.scala:227)
    at scala.concurrent.Await$$anonfun$result$1.apply(package.scala:190)
    at scala.concurrent.BlockContext$DefaultBlockContext$.blockOn(BlockContext.scala:53)
    at scala.concurrent.Await$.result(package.scala:190)
    at akka.remote.RemoteTransport.start(Remoting.scala:189)
    at akka.remote.RemoteActorRefProvider.init(RemoteActorRefProvider.scala:212)
    at akka.actor.ActorSystemImpl.liftedTree2$1(ActorSystem.scala:828)
    at akka.actor.ActorSystemImpl._start$1zycompute(ActorSystem.scala:825)
    at akka.actor.ActorSystemImpl._start(ActorSystem.scala:825)
    at akka.actor.ActorSystemImpl.start(ActorSystem.scala:841)
    at akka.actor.ActorSystem$.apply(ActorSystem.scala:245)
    at akka.actor.ActorSystem$.apply(ActorSystem.scala:288)
    at akka.actor.ActorSystem$.apply(ActorSystem.scala:263)
    at akka.actor.ActorSystem$.create(ActorSystem.scala:191)
    at akka.actor.ActorSystem.create(ActorSystem.scala)
    at com.alibaba.schedulerx.worker.SchedulerXWorker.restartActorSystem(SchedulerXWorker.java:632)
    at com.alibaba.schedulerx.worker.SchedulerXWorker.init(SchedulerXWorker.java:157)
    at com.alibaba.schedulerx.worker.SchedulerXWorker.afterPropertiesSet(SchedulerXWorker.java:569)
    at org.springframework.beans.factory.support.AbstractAutowireCapableBeanFactory.invokeInitMethods(AbstractAutowireCapableBeanFactory.java:1687)
    at org.springframework.beans.factory.support.AbstractAutowireCapableBeanFactory.initializeBean(AbstractAutowireCapableBeanFactory.java:1624)
    at org.springframework.beans.factory.support.AbstractAutowireCapableBeanFactory.doCreateBean(AbstractAutowireCapableBeanFactory.java:555)
    at org.springframework.beans.factory.support.AbstractAutowireCapableBeanFactory.createBean(AbstractAutowireCapableBeanFactory.java:483)
    at org.springframework.beans.factory.support.AbstractBeanFactory$1.getObject(AbstractBeanFactory.java:306)
    at org.springframework.beans.factory.support.DefaultSingletonBeanRegistry.getSingleton(DefaultSingletonBeanRegistry.java:230)
    at org.springframework.beans.factory.support.AbstractBeanFactory.doGetBean(AbstractBeanFactory.java:302)
    at org.springframework.beans.factory.support.AbstractBeanFactory.getBean(AbstractBeanFactory.java:197)
    at org.springframework.beans.factory.support.DefaultListableBeanFactory.preInstantiateSingletons(DefaultListableBeanFactory.java:761)
    at org.springframework.context.support.AbstractApplicationContext.finishBeanFactoryInitialization(AbstractApplicationContext.java:867)
    at org.springframework.context.support.AbstractApplicationContext.refresh(AbstractApplicationContext.java:543)
    at org.springframework.boot.context.embedded.EmbeddedWebApplicationContext.refresh(EmbeddedWebApplicationContext.java:122)
    at org.springframework.boot.SpringApplication.refresh(SpringApplication.java:693)
    at org.springframework.boot.SpringApplication.refreshContext(SpringApplication.java:360)
    at org.springframework.boot.SpringApplication.run(SpringApplication.java:303)
    at org.springframework.boot.SpringApplication.run(SpringApplication.java:1118)
    at org.springframework.boot.SpringApplication.run(SpringApplication.java:1107)
    at cn.mc.PushApplication.main(PushApplication.java:25)
    at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
    at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)
    at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
    at java.lang.reflect.Method.invoke(Method.java:498)
    at com.taobao.pandora.boot.loader.LaunchRunner.run(LaunchRunner.java:38)
    at java.lang.Thread.run(Thread.java:748)

```

Spring 应用找不到 Bean

1. 应用管理链接机器看启动方式，确保是 Spring 或者 SpringBoot。
2. JobProcessor 要注入为 bean，比如加 @Component 注解。
3. 排查 pom 依赖如果依赖 spring-boot-devtools 请排除掉。
4. JobProcessor 和 process 方法不要加事务注解。

tablestore protobuf-2.4.1 和 SchedulerX 不兼容

https://help.aliyun.com/knowledge_detail/58568.html

任务运行中卡住

schedulerx-worker 执行每个 processor 的时候会把任务实例 id 放到线程名中，方便查看线程栈。这里以分布式任务某个子任务卡住为例，单机执行/广播执行类似。

1. 首先控制台执行列表查看卡住的任务实例的详情，获取实例id

任务实例列表

Group ID: 全部分组 任务ID: 请输入任务ID 搜索 重置

全部 242 成功 150 失败 90 运行中 2

ID	任务名称	任务ID	流程实例ID	Group ID
58903617	dataimport1tp3	7642	/	aliyun-ticket.defaultGroup
56780749	issueIndex	2366	/	aliyun-issue-center.inde...
58843208	dataimport1tp3	7642	/	aliyun-ticket.defaultGroup
58842725	dataimport1tp3	7642	/	aliyun-ticket.defaultGroup
58842305	dataimport1tp3	7642	/	aliyun-ticket.defaultGroup
58841792	dataimport1tp3	7642	/	aliyun-ticket.defaultGroup
58841215	dataimport1tp3	7642	/	aliyun-ticket.defaultGroup
58840745	dataimport1tp3	7642	/	aliyun-ticket.defaultGroup
58840322	dataimport1tp3	7642	/	aliyun-ticket.defaultGroup
58839835	dataimport1tp3	7642	/	aliyun-ticket.defaultGroup

基本信息 执行日志

实例ID: 58903617	重试次数: 0
任务ID: 7642	任务名: dataimport1tp3
开始时间: 2019-10-17 14:19:08	结束时间:
调度时间: 2019-10-17 14:19:08	数据时间: 2019-10-17 14:19:08
serverip: 11.8.238.134	workAddr: 11.135.169.236:29359
结果或错误信息:	

2. 登入卡住的机器，查看线程栈，执行 `jstack [pid] | grep [实例id] -A 20`，如下图所示，发现是业务自己卡住了。

U 11.135.169.236 X 详情

```
jstack 29191 | grep 58903617 -A 200
"Schedulerrx-Container-Thread-58903617-0" #4093 prio=5 os_prio=0 tid=0x00002ad3edcb4800 nid=0x172f7 waiting on condition [0x00002ad443101000]
  java.lang.Thread.State: WAITING (parking)
    at sun.misc.Unsafe.park(Native Method)
    - parking to wait for <0x0000000072b837ae0> (a java.util.concurrent.CountDownLatch$Sync)
    at java.util.concurrent.locks.LockSupport.park(LockSupport.java:175)
    at java.util.concurrent.locks.AbstractQueuedSynchronizer.parkAndCheckInterrupt(AbstractQueuedSynchronizer.java:836)
    at java.util.concurrent.locks.AbstractQueuedSynchronizer.doAcquireSharedInterruptibly(AbstractQueuedSynchronizer.java:997)
    at java.util.concurrent.locks.AbstractQueuedSynchronizer.acquireSharedInterruptibly(AbstractQueuedSynchronizer.java:1304)
    at java.util.concurrent.CountDownLatch.await(CountDownLatch.java:231)
    at com.aliyun.ticket.importworker.WOImportJob.startImport(WOImportJob.java:353)
    at com.aliyun.ticket.importworker.WOImportJob.doImportForAll(WOImportJob.java:242)
    at com.aliyun.ticket.importworker.WOImportJob.process(WOImportJob.java:163)
    at com.alibaba.schedulerx.worker.container.ThreadContainer.start(ThreadContainer.java:90)
    at com.alibaba.schedulerx.worker.container.ThreadContainer.run(ThreadContainer.java:60)
    at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1142)
    at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:617)
    at java.lang.Thread.run(Thread.java:756)

"Container-Batch-Statuses-Retrieve-Thread-58903617" #4092 prio=5 os_prio=0 tid=0x00002ad3edcb4000 nid=0x172f6 waiting on condition [0x00002ad44fe0e000]
  java.lang.Thread.State: TIMED_WAITING (sleeping)
    at java.lang.Thread.sleep(Native Method)
    at com.alibaba.schedulerx.worker.batch.BaseReqHandler$2.run(BaseReqHandler.java:74)
    at java.lang.Thread.run(Thread.java:756)

"TDL-Druid-ConnectionPool-DestroyScheduler--2-thread-237" #4052 daemon prio=5 os_prio=0 tid=0x00002ad3f4bf0800 nid=0x16df5 waiting on condition [0x00002ad462e000]
  java.lang.Thread.State: TIMED_WAITING (parking)
    at sun.misc.Unsafe.park(Native Method)
    - parking to wait for <0x000000007436c7190> (a java.util.concurrent.locks.AbstractQueuedSynchronizer$ConditionObject)
    at java.util.concurrent.locks.LockSupport.parkNanos(LockSupport.java:215)
    at java.util.concurrent.locks.AbstractQueuedSynchronizer$ConditionObject.awaitNanos(AbstractQueuedSynchronizer.java:2078)
    at java.util.concurrent.ScheduledThreadPoolExecutor$DelayedWorkQueue.poll(ScheduledThreadPoolExecutor.java:1129)
    at java.util.concurrent.ScheduledThreadPoolExecutor$DelayedWorkQueue.poll(ScheduledThreadPoolExecutor.java:809)
    at java.util.concurrent.ThreadPoolExecutor.getTask(ThreadPoolExecutor.java:1066)
    at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1127)
    at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:617)
```

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