# Troubleshoot on How to Clean AMQP Heartbeats Queue

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## Introduction

This document describes the procedure to troubleshoot how to clean Advance Message Queuing Protocol (AMQP) heartbeats queue

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## Prerequisites

### Requirements

Cisco recommends that you have knowledge of these topics:

- Linux Interface
- Virtual Machine Environments
- Rabbit

### Components Used

The information in this document is based on these software versions:

- CloudCenter version 4.3.x to 4.6.x
- CloudCenter Message Buss (RabbitMQ_Server)

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

## Background Information

The active thread size of the pool is 64 where the threads submitted corresponding to the jobs were more than 3000 which will be rejected as the code cannot handle more than 64 threads at a time hence it will wait for previous task to get completed and execute the other task.

Any task which are greater that what a threadpool executed can consume will be rejected.

# Problem

the filecliqr-connection.log locate in /usr/local/tomcatgua/logs/  report error:

```
Caused by: org.springframework.core.task.TaskRejectedException: Executor
[java.util.concurrent.ThreadPoolExecutor@6737f4fb[Running, pool size = 64, active threads = 64,
queued tasks = 3000, completed tasks = 413]] did not accept task:
org.springframework.aop.interceptor.AsyncExecutionInterceptor$1@6b0517b3
at
org.springframework.scheduling.concurrent.ThreadPoolTaskExecutor.submit(ThreadPoolTaskExecutor.j
ava:284)
at
org.springframework.aop.interceptor.AsyncExecutionAspectSupport.doSubmit(AsyncExecutionAspectSup
port.java:186)
at
org.springframework.aop.interceptor.AsyncExecutionInterceptor.invoke(AsyncExecutionInterceptor.j
ava:123)
at
org.springframework.aop.framework.ReflectiveMethodInvocation.proceed(ReflectiveMethodInvocation.
java:179)
at org.springframework.aop.framework.JdkDynamicAopProxy.invoke(JdkDynamicAopProxy.java:208)
at com.sun.proxy.$Proxy84.processMessage(Unknown Source)
at
com.osmosix.commons.messaging.listeners.impl.DefaultNodeMessageListener.handleMessage(DefaultNod
eMessageListener.java:35)
at sun.reflect.GeneratedMethodAccessor78.invoke(Unknown Source)
at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
at java.lang.reflect.Method.invoke(Method.java:497)
at org.springframework.util.MethodInvoker.invoke(MethodInvoker.java:269)
at
org.springframework.amqp.rabbit.listener.adapter.MessageListenerAdapter.invokeListenerMethod(Mes
sageListenerAdapter.java:383)
... 12 more
Caused by: java.util.concurrent.RejectedExecutionException: Task
java.util.concurrent.FutureTask@3911a213 rejected from
java.util.concurrent.ThreadPoolExecutor@6737f4fb[Running, pool size = 64, active threads = 64,
queued tasks = 3000, completed tasks = 413]
at
java.util.concurrent.ThreadPoolExecutor$AbortPolicy.rejectedExecution(ThreadPoolExecutor.java:20
47)
at java.util.concurrent.ThreadPoolExecutor.reject(ThreadPoolExecutor.java:823)
at java.util.concurrent.ThreadPoolExecutor.execute(ThreadPoolExecutor.java:1369)
at java.util.concurrent.AbstractExecutorService.submit(AbstractExecutorService.java:134)
at
org.springframework.scheduling.concurrent.ThreadPoolTaskExecutor.submit(ThreadPoolTaskExecutor.j
ava:281)
... 23 more
2016-10-19 02:32:32,205 INFO annotation.RequestMappingHandlerMapping [localhost-startStop-1] -
Mapped "{[/image/service/dltargetlocal],methods=[POST]}" onto public
java.util.Map<java.lang.String, ?>
com.osmosix.gateway.image.transform.ImageTransformController.downloadToTargetLocal(com.osmosix.c
ommons.image.transform.DownloadImageFileRequest)
2016-10-19 02:32:32,206 WARN listener.ConditionalRejectingErrorHandler [SimpleAsyncTaskExecutor-
1] - Execution of Rabbit message listener failed.
org.springframework.amqp.rabbit.listener.exception.ListenerExecutionFailedException: Listener
method 'handleMessage' threw exception
at
org.springframework.amqp.rabbit.listener.adapter.MessageListenerAdapter.invokeListenerMethod(Mes
```

```
sageListenerAdapter.java:391)
at
org.springframework.amqp.rabbit.listener.adapter.MessageListenerAdapter.onMessage(MessageListene
rAdapter.java:294)
at
org.springframework.amqp.rabbit.listener.AbstractMessageListenerContainer.doInvokeListener(Abstr
actMessageListenerContainer.java:757)
at
org.springframework.amqp.rabbit.listener.AbstractMessageListenerContainer.invokeListener(Abstrac
tMessageListenerContainer.java:680)
at
org.springframework.amqp.rabbit.listener.SimpleMessageListenerContainer.access$001(SimpleMessage
ListenerContainer.java:93)
at
org.springframework.amqp.rabbit.listener.SimpleMessageListenerContainer$1.invokeListener(SimpleM
essageListenerContainer.java:183)
at
org.springframework.amqp.rabbit.listener.SimpleMessageListenerContainer.invokeListener(SimpleMes
sageListenerContainer.java:1352)
at
org.springframework.amqp.rabbit.listener.AbstractMessageListenerContainer.executeListener(Abstra
ctMessageListenerContainer.java:661)
at
org.springframework.amqp.rabbit.listener.SimpleMessageListenerContainer.doReceiveAndExecute(Simp
leMessageListenerContainer.java:1096)
at
org.springframework.amqp.rabbit.listener.SimpleMessageListenerContainer.receiveAndExecute(Simple
MessageListenerContainer.java:1080)
at
org.springframework.amqp.rabbit.listener.SimpleMessageListenerContainer.access$800(SimpleMessage
ListenerContainer.java:93)
at
org.springframework.amqp.rabbit.listener.SimpleMessageListenerContainer$AsyncMessageProcessingCo
nsumer.run(SimpleMessageListenerContainer.java:1197)
at java.lang.Thread.run(Thread.java:745)
```

# Resolution

Step 1**.** Login to RabbitMQ server via SSH.

Step 2. Switch to root user.

```
# sudo -i
```

Step 3. Enable Manegement Plugin.

```
# rabbitmq-plugins enable rabbitmq_management
```

Step 4. Enable access to rabbitmqadmin command.

```
# chmod +x `find /var/lib/rabbitmq/ -name "rabbitmqadmin"`
# ln -s `find /var/lib/rabbitmq/ -name "rabbitmqadmin"` /usr/sbin
```

Step 5. RabbitMQ can be accessed via GUI.

```
http://<RabbitMQ_Server_IP>:15672 (username=cliqr password=cliqr)
```

**Note**: Replace RabbitMQ_Server_IP in the configuration with your RabbitMQ server address

Navigate queues tab to see the details

or

CLI:

```
# rabbitmqadmin -V /cliqr -u cliqr -p cliqr list queues
# rabbitmqadmin -V /cliqr -u cliqr -p cliqr list exchanges
# rabbitmqadmin -V /cliqr -u cliqr -p cliqr list channels
```

Step 6. To delete the gateway heartbeat queue.

```
#rabbitmqadmin -V /cliqr delete queue name=cliqr.gateway.heartbeat.queue --username=cliqr --
password=cliqr
```

Step 7. Restart tomcat service in RabbitServer.

```
#/etc/init.d/tomcatgua stop
#/etc/init.d/tomcatgua start
```

**Note**: If cliqr.gateway.heartbeat.queue is missing, restart CCO tomcat service by following the below steps:

Step 8. Login to CCO server via SSH.

Step 9. Switch to root user.

```
# sudo -i
```

Step 10. Restart Tomcat server.

```
#/etc/init.d/tomcat stop
#/etc/init.d/tomcat start
```