

# 知 DataEngine集群异常处理方法

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节点node1不再发送心跳，集群异常。

The screenshot shows the H3C DataEngine Manager web interface. At the top, there are several tabs and a navigation bar with 'DataEngine - cluster' selected. A prominent red alert icon indicates a critical issue. On the left, a sidebar lists 'DataEngine Agent Heartbeat' and '集群'. The main content area displays a configuration form for an alert. The 'Description' field contains the text: 'This alert is triggered if the server has lost contact with an agent.' Below it, 'Check Interval' is set to 2 minutes. To the right, detailed alert information is shown: '当前状态: 自用' (Current Status: Self-used), '服务: Ambari', '组件: Ambari Server', '类型: SERVER', '告警组: AMBARI Default', and '上次更改: 2017/06/11 16:06:17'. Below this, a table titled '实例' (Instances) lists two hosts: 'Ambari / node1.hde.h3c.com' with a 'CRIT' status and '约18分钟' (about 18 minutes) since the last heartbeat, and 'Ambari / node2.hde.h3c.com' with an 'OK' status and '约2天' (about 2 days) since the last heartbeat. At the bottom of the page, a Windows taskbar is visible.

node1.hde.h3c.com is not sending heartbeats.

```
[root@node1 ~]# jps
Error occurred during initialization of VM
java.lang.OutOfMemoryError: unable to create new native thread
[root@node1 ~]# su - hdfs
[hdfs@node1 ~]$ jps
Error occurred during initialization of VM
java.lang.OutOfMemoryError: unable to create new native thread
[hdfs@node1 ~]$ exit
[root@node1 ~]# jps
#
# There is insufficient memory for the Java Runtime Environment to continue.
# Cannot create GC thread. Out of system resources.
# An error report file with more information is saved as:
#/root/hs_err_pid34510.log
[root@node1 ~]# jps
Error occurred during initialization of VM
java.lang.OutOfMemoryError: unable to create new native thread
    at java.lang.Thread.start0(Native Method)
    at java.lang.Thread.start(Thread.java:714)
    at java.lang.ref.Finalizer.<clinit>(Finalizer.java:226)
[root@node1 ~]# jps
24930 pentaho-application-launcher-6.0.0.0-353.jar
6589 -- process information unavailable
4132 -- process information unavailable
6515 -- process information unavailable
5598 -- process information unavailable
7506 -- process information unavailable
8968 -- process information unavailable
5292 -- process information unavailable
1996 Jps
[root@node1 ~]# su - hdfs
[hdfs@node1 ~]$ jps
#
# There is insufficient memory for the Java Runtime Environment to continue.
# Cannot create GC thread. Out of system resources.
# An error report file with more information is saved as:
#/home/hdfs/hs_err_pid45812.log
初步排查，是当前进程数超过最大进程数。
[root@node1 home]# ps -elf | wc -
-bash: fork: Cannot allocate memory
[root@node1 home]# sysctl kernel.pid_max
```

```
-bash: fork: Cannot allocate memory
```

查看node2上相关值做参考

```
[root@node2 ~]# ps -eLf | wc -l
```

61614

```
[root@node2 ~]# sysctl kernel.pid_max
```

kernel.pid\_max = 65536

可以看出node2上当前进程数据也接近最大进程数了。

增大最大进程数

分别在node1和node2上修改最大进程数

```
echo 1000000 > /proc/sys/kernel/pid_max
```

```
echo "kernel.pid_max=1000000" >> /etc/sysctl.conf
```

```
sysctl -p
```

重启ambari服务后，恢复正常。

名称	IP地址	机架	核数	内存	磁盘使用情况	负载均值	版本	组件
任意值	任意值	任意值	任意值	任意值	任意值	任意值	任意值	任意值
node1.hde.h3c.com	10.254.12.119	default-rack	16 (2)	189.12 G	1.09	HDP-2.3.4.0-3485	12 组件	
node2.hde.h3c.com	10.254.12.120	default-rack	16 (2)	189.12 G	0.28	HDP-2.3.4.0-3485	14 组件	

集群异常，可先查看进程是否运行正常，然后再逐步排查。