8 Replies

jgeronimo
Aug 3, 2016 9:34 AM

Thanks for posting, great question! We are also tracking this question via a Support Case, once resolved we will update this post with the resolution for consumption/use by the rest of the Community.

Actions Like • 0

andypern
Aug 4, 2016 10:02 AM

FYI: I don't work for mapR, so if you want a supportable response..wait for someone official to weigh in

Is MRv1 installed on this cluster/node? If so, warden will allocate by default 50% of leftover RAM to jobtracker/tasktracker. When I say 'leftover', I mean after warden has allocated for:

* MFS
* NFS
* ResourceManager (when applicable)
* Operating System
* a small number of other services

The simplest way to know how much is being allocated to various services is to take a look at the `/opt/mapr/conf/warden.conf file. Basically look for anything that says 'heapsize' . Note that there are three types of entries here:`

`*.heapsize.percent -> the percentage of total system RAM that it will attempt to allocate.`
*.heapsize.max -> the 'high water mark' that it will alllocate : this will take precedence over the 'percent' value.
* heapsize.min -> the 'low water mark' that it will allocate : this will take precedence over the 'percent' value.

Note that there will be a number of *heapsize* values that will appear in warden.conf that will NOT apply to you. EG: if you don't have hbase installed, then all of the 'hbmaster/hbregion' entries are ignorable.

Now If you do have MRv1 installed, and want to continue using it, you can adjust the amount of resource that it is granted via the warden.conf file via the

> mr1.memory.percent

directive.

If you have MRv1 installed, and do NOT wish to continue using it, you can remove the jobtracker/tasktracker services from your nodes. There are some additional packages you can remove as well, however verify w/ MapR support before doing so.

Obviously after doing either of these things, warden (and as a result all cluster services including the MFS filesytem) will need to be restarted.

If this isn't the cause, then additional investigation will need to occur..

2 people found this helpful

Actions Like • 2

jgeronimo
Aug 5, 2016 10:07 AM

Thanks for the input Andrew Pernsteiner, as usual you're spot on

We have a MapR Blog post on this topic, please refer to Memory Management & Calculations for Clusters Running Both MR1 and MR2 Services | MapR

1 person found this helpful

Actions Like • 0

asukhenko
Sep 5, 2016 3:19 AM

Do you have these properties defined in yarn-site.xml on each node?:

yarn.nodemanager.resource.memory-mb

yarn.scheduler.maximum-allocation-mb

Actions Like • 0

kaushal_jha
@ asukhenko on Sep 5, 2016 8:14 AM

Nopes, it's been default.

Actions Like • 0

asukhenko
@ kaushal_jha on Sep 5, 2016 8:33 AM

These are my configs for 4 CPUs and 20GB RAM node (yarn-site.xml) :

```
...
<property>
   <name>yarn.scheduler.maximum-allocation-mb</name>
   <value>19000</value>
</property>
<property>
  <name>yarn.scheduler.maximum-allocation-vcores</name>
  <value>4</value>
</property>
<property>
  <name>yarn.nodemanager.resource.memory-mb</name>
  <value>20000</value>
</property>
 <property>
  <name>yarn.nodemanager.resource.cpu-vcores</name>
  <value>4</value>
</property>
...
```

Actions Like • 1

kaushal_jha
@ asukhenko on Sep 5, 2016 8:41 AM

Thank you very much !

Actions Like • 1

kaushal_jha
Sep 19, 2016 3:59 PM

yes , i was able to test it out and it worked as needed.

Thank you

Actions

Like • 1