> MAPR CORE **PRODUCT**

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Troubleshooting Guide: NODE_ALARM_HIGH_MFS_MEMORY alarm triggered on few MFS nodes.

NODE ALARM HIGH MFS MEMORY alarm is triggered if RSS memory consumed by fileserver service on the node exceeds allotted memory.

() Jan 23, 2018 · Generic - Issue Resolution

Environment

5.x or 6.x

Symptom 6

NODE ALARM HIGH MFS MEMORY alarm is triggered if RSS memory consumed by fileserver service on the node exceeds 8% of allotted MFS memory.

Diagnostics

Stats to be collected:

Here is the list of logs to be collected. Log collection should be every 5 second interval and should be collected during problematic time frame.

- · Collect "/opt/mapr/server/mrconfig info slabs"
- · Collect "/opt/mapr/server/mrconfig info threads"
- · Collect "/opt/mapr/server/mrconfig dbinfo mem" (For Mapr-DB nodes)
- · Collect "/opt/mapr/server/mrconfig dbinfo threads" (For Mapr-DB nodes)
- · System resource related information like ps aux, iostat, vmstat, mpstat and top -H -p <mfs process>
- · Collect mfs.err, mfs.log-3 and mfs.log-5 from the node where alarm was triggered .

MFS Core:

- · Along with above stats core will be needed, Please set "mfs.mem.debug.enabled=1" in /opt/mapr/conf/mfs.conf and restart Fileserver for the config to be picked up. (If the mem debug is not enable we won't find useful memory related debug information from the core)
- · Collect mfs core (kill -11 <MFS pid>) from the problematic fileserver node with kernel and mapr package related information so MapR can build an internal machine for opening the core.

Root Cause

Depending on the stats and logs collected root cause can be one of below or new issue

- · mfs using more memory due to sudden burst of load on the MFS, eventually it will free up memory and clears the alarm (Usually for this simple solution would be to give MFS more memory)
- · memory is fragmented in mfs causing high memory usage.
- · There is a memory leak.

MapR periodically monitor mfs memory usage, if it crosses certain threshold (>8% of given mfs) we raise an Alarm, and if it crosses a higher threshold (>28%) we restart mfs.

Note: - This alarm is not FATAL if RSS memory for MFS goes up temporarily.

Solutions 6

There are multiple approaches to effectively address the above general root causes. The primary intent of this article is to provide diagnostic tips (collect all required info in one-pass rather than iteratively). This expedites narrowing-down a root cause. At this time, no direct or elaborate solutions are being offered here. However, as we determine common solutions that work for most user set ups, we will document them here.

Technology Group

MapR Core

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