# D4Science Infrastructure - Task #10662

# orientdb01-d4s.d4science.org keeps crashing badly

Dec 12, 2017 12:19 PM - Andrea Dell'Amico

Status: Closed Start date: Dec 12, 2017 **Priority:** Urgent Due date: Assignee: Luca Frosini % Done: 100% Category: Application **Estimated time:** 0.00 hour Target version: No Sprint Infrastructure: Production

## **Description**

It stops in state that it's impossible for a nagios handler to restart it: the process must be brutally killed. The server runs for 6 days at most and then stops responding, always with the same error:

```
Error during WAL background flush
java.lang.OutOfMemoryError: Java heap space
java.lang.OutOfMemoryError: GC overhead limit exceeded
java.lang.OutOfMemoryError: GC overhead limit exceeded
Error during WAL background flush
java.lang.OutOfMemoryError: Java heap space
Error during fuzzy checkpoint
java.lang.OutOfMemoryError: GC overhead limit exceeded
java.lang.OutOfMemoryError: GC overhead limit exceeded
```

Can you investigate what's needed? More heap? a different GC configuration? a newer version? I don't want to spend time killing and restarting the process every few days.

#### History

#### #1 - Dec 12, 2017 12:45 PM - Luca Frosini

- Status changed from New to In Progress

Searching the error I found this solution:

 $\underline{https://stackoverflow.com/questions/37419616/orientdb-2-1-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-1-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-1-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-1-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-1-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-1-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-1-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-1-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-1-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-1-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-1-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-1-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-1-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-1-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outofm/2-exception-in-thread-orientdb-wal-flush-task-with-java-lang-outoff-wal-flush-task-with-java-lang-outoff-wal-flush-task-with-java-lang-outoff-wal-flush-task-with-java-lang-outoff-wal-flush-task-with-java-lang-outoff-wal-flush-task-with-java-lang-outoff-wal-flush-task-with-java-lang-outoff-wal-flush-task-with-java-lang-outoff-wal-flush-task-with-java-lang-outoff-wal-flush-task-with-java-lang-outoff-wal-flush-task-with-java-lang-outoff-wal-flush-task-with-java-lang-outoff-wal-flush-task-with-java-lang-outoff-wal-flush-task-with-java-lang-outoff-wal-flush-outoff-wal-flush-dask-with-java-with-java-with-java-with-java-with-java-with-java-with-java-with-java-with-ja$ 

## Moreover I found:

https://stackoverflow.com/questions/40013369/orientdb-java-heap-error/

The answer of Oleksandr Gubchenko point to this:

http://orientdb.com/docs/last/Performance-Tuning.html

#### #2 - Dec 12, 2017 07:40 PM - Andrea Dell'Amico

So they say that we need more heap and more memory. The tuning doc seems to have some good advice, you should try something with the devinstances maybe?

### #3 - Dec 13, 2017 04:10 PM - Luca Frosini

Andrea Dell'Amico wrote:

So they say that we need more heap and more memory.

Yes, please provide 4G if possible

The tuning doc seems to have some good advice, you should try something with the dev instances maybe?

????

#### #4 - Dec 13, 2017 07:28 PM - Andrea Dell'Amico

- % Done changed from 0 to 30

Dec 14, 2025 1/2

I just increased the RAM of the three orientdb production servers to 6GB each. You can comfortably add another GB of heap on each server, and maybe play with the disk buffer parameters to relieve pressure from the memory.

### #5 - Dec 15, 2017 05:48 PM - Luca Frosini

- Assignee changed from Luca Frosini to \_InfraScience Systems Engineer

Launching the playbook startService script is overwritten. This causes problems because instance 2 and 3 must be down. Can you please fix it?

### #6 - Dec 15, 2017 05:51 PM - Andrea Dell'Amico

@luca.frosini@isti.cnr.it just remove the two nodes from the inventory file. When we will be able to use them we'll add them again.

#### #7 - Dec 15, 2017 05:51 PM - Andrea Dell'Amico

- Assignee changed from \_InfraScience Systems Engineer to Luca Frosini

### #8 - Dec 15, 2017 06:02 PM - Luca Frosini

thank you. I'm testing version 2.2.30 in dev and I hope to add all of them again soon

### #9 - Dec 15, 2017 06:03 PM - Luca Frosini

- Status changed from In Progress to Closed
- % Done changed from 30 to 100

For the moment the solution was adding -Dstorage.diskCache.bufferSize=7200

So we have:

orientdb\_java\_heap: '-Xms3072m -Xmx3072m -Dstorage.diskCache.bufferSize=7200'

Dec 14, 2025 2/2