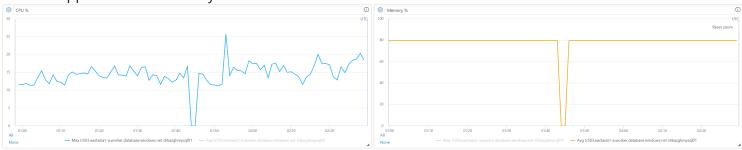
## Metrics\_drop\_to\_zero

Last updated by | Shawn Xiao | Jan 8, 2023 at 10:54 PM PST

## Metrics Dropped to 0 suddenly and then auto recovered

## Symptom

In some cases, customers may discovered that the metrics like CPU, Memory, etc. shown in Metrics blade of Portal dropped to zero suddenly. It will look like one below:



## **Issue Cause And Investigations**

There could be different different causes contributed to this issue, please check if it fit in each scenario below:

- CPU pressure will be the most likely the cause in most cases, which will lead to the MDS agent failed to upload those metrics data. A simple way to verify is to see if it aligned with CPU consumptiom;
- In addition, if there was a server crash occurred at the same time, it would cause the MDS agent failed to push those metrics data too;
- Since the metrics data was to be uploaded by MDS agent, then the metrics could be lost if MDS agent was not working as expected.
  - Below query can be used to check if MDS agent restarted. Each row returned will represent a record of restart. If you only see one record, it means it did not restart on the timeframe used in the query

```
AlrMAEventFiveMinutes
| where PreciseTimeStamp >= datetime(2020-11-30 01:40 ) and PreciseTimeStamp <= datetime(2020-11-30 01:50 | where LogicalServerName == "servername" | summarize min(PreciseTimeStamp), max(PreciseTimeStamp) by Pid
```

Below guery can be used to check detailed MDS log.

```
AlrMAEventFiveMinutes
| where PreciseTimeStamp >= datetime(2020-11-30 01:40) and PreciseTimeStamp <= datetime(2020-11-30 01:50)
| where LogicalServerName == "servername"
| where Level <= 2
| project TIMESTAMP, Level, File, Function, Line, MDRESULT, ErrorCode, Message, ErrorType
```

The sample return like below in *Message* column indicated that the storage quota was hit and caused the metrics data push failed.

Data row garbage collected from table  $MonDmOsGeneralStatisticsCounters\_D1754AD$  before task MonDmOsGeneral this could be caused by the disk quota limit in the config being hit.

Current Interval Start: 2020-11-30T01:35:00.000Z Current First Record: 2020-11-30T01:38:14.000Z



And the sample RCA for this one could be referred as below:

Alongside the MySQL server, there is a standalone log process to upload the log and monitoring data. The log process will first write the log and monitoring data to the local disk and then push them to the remote storage. To ensure the server's resource usage, it has a disk quota for the log and monitoring data. In this time range, the log and monitoring data was not pushed to remote storage in time. Then the log and monitoring data hit the disk quota and made the new-coming monitoring data was purged earlier without pushing to remote storage.

If you have any doubts when following this page, please reach out to xixia@microsoft.com for clarification and wiki/TSG improvement.