DSS012 - Data Sync - How to collect and analyse performance of on - premise Data Sync member

Last updated by | Keith Elmore | Apr 5, 2021 at 7:57 AM PDT

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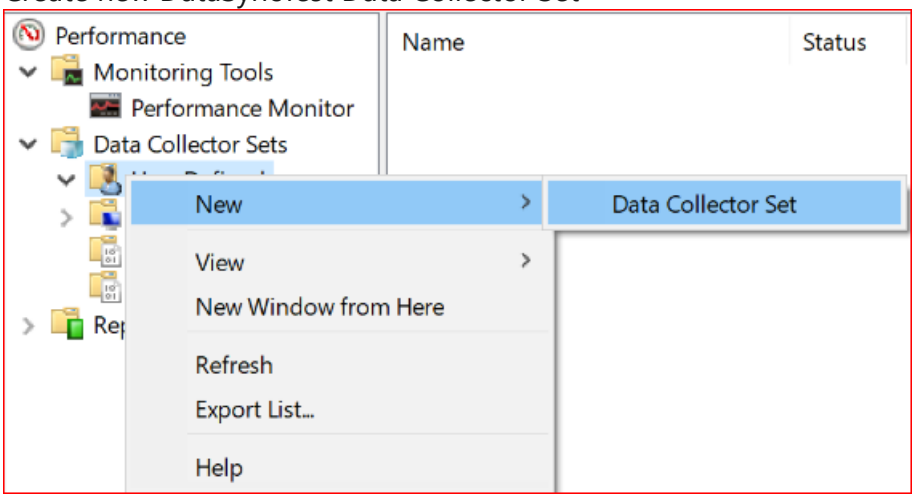
Collect Performance monitor log while reproducing the issue.

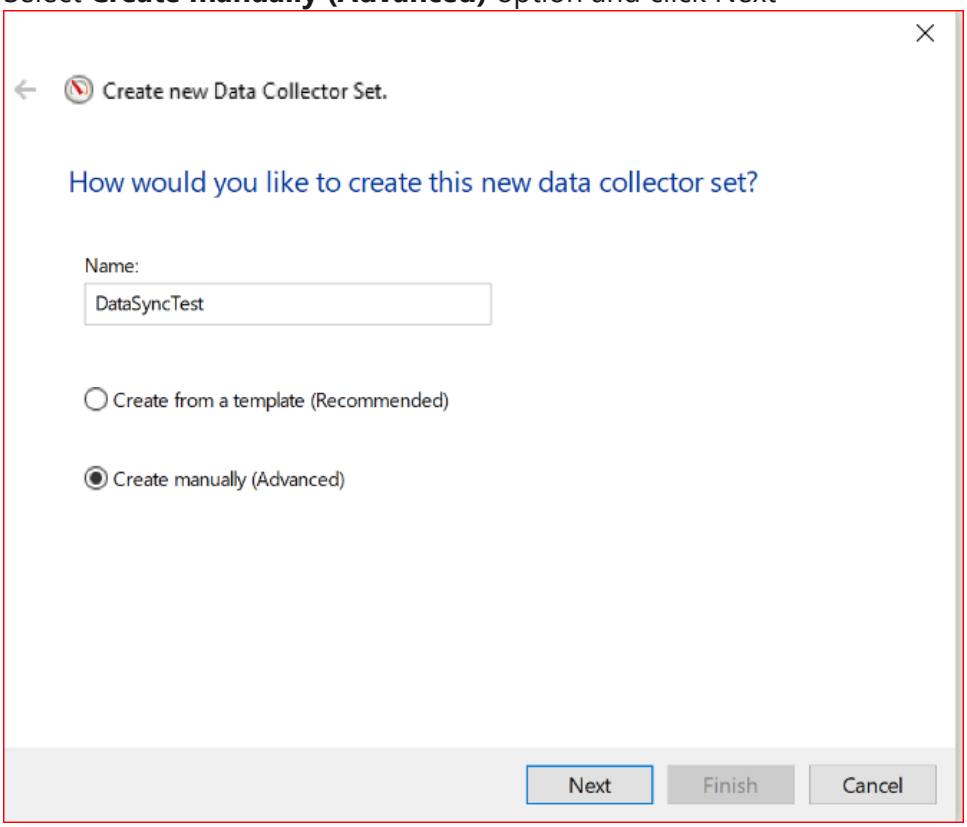
Below is a customer- ready action plan

1. Open performance monitor. Start -> Run -> **perfmon**

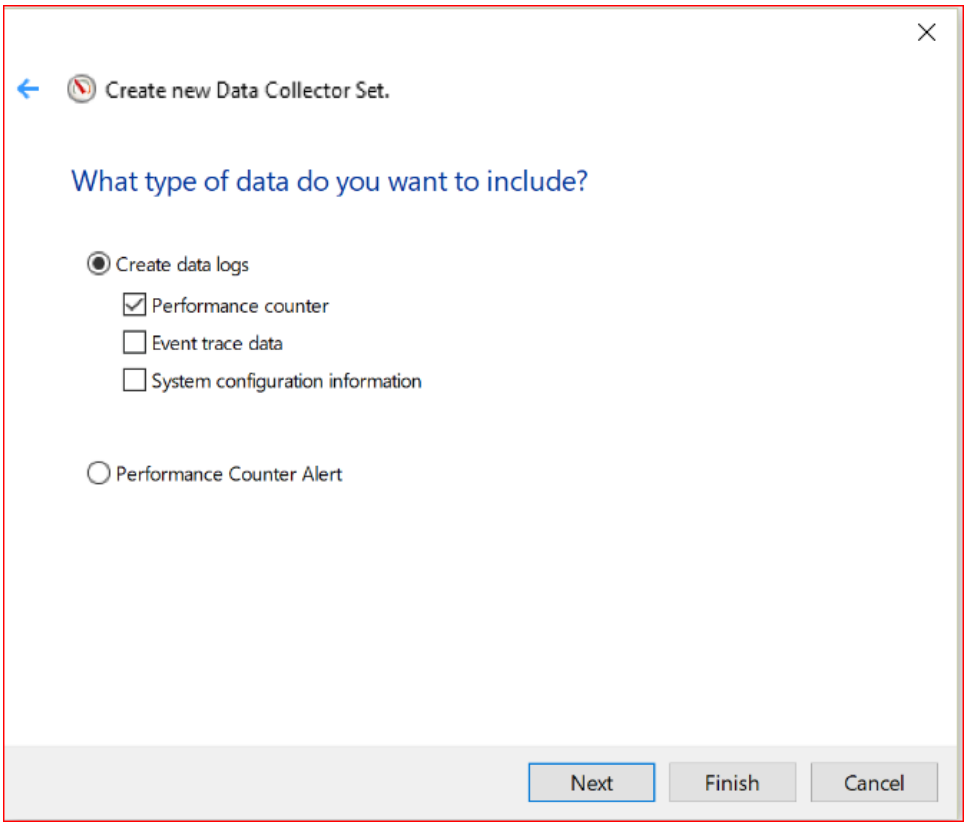
2. Create new DataSyncTest Data Collector Set



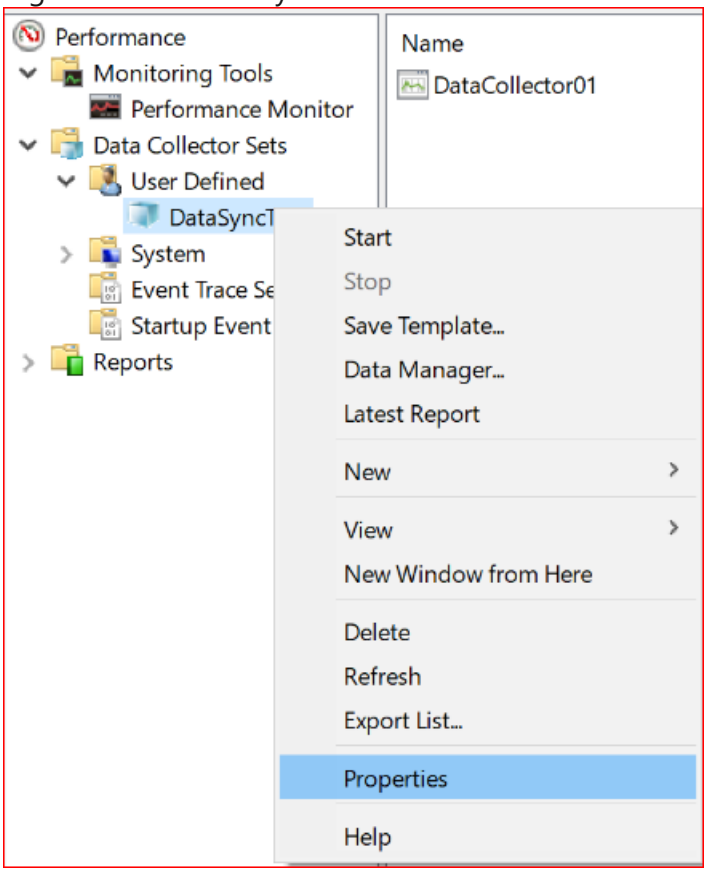
3. Select **Create manually (Advanced)** option and click Next



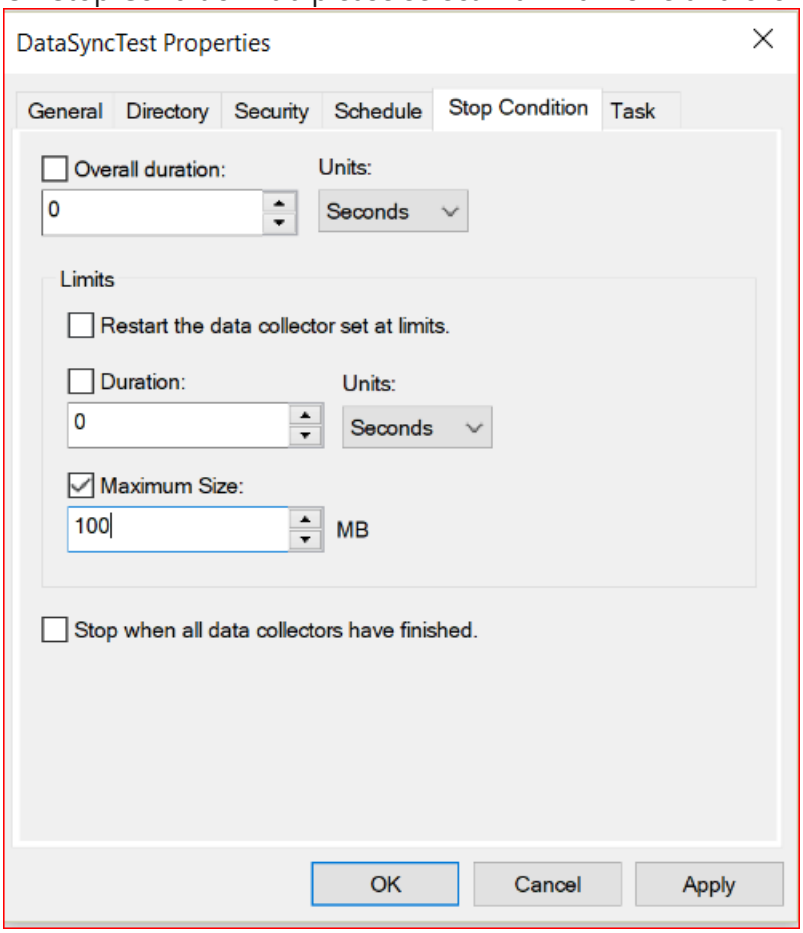
4. Select Performance Counter and click on Finish



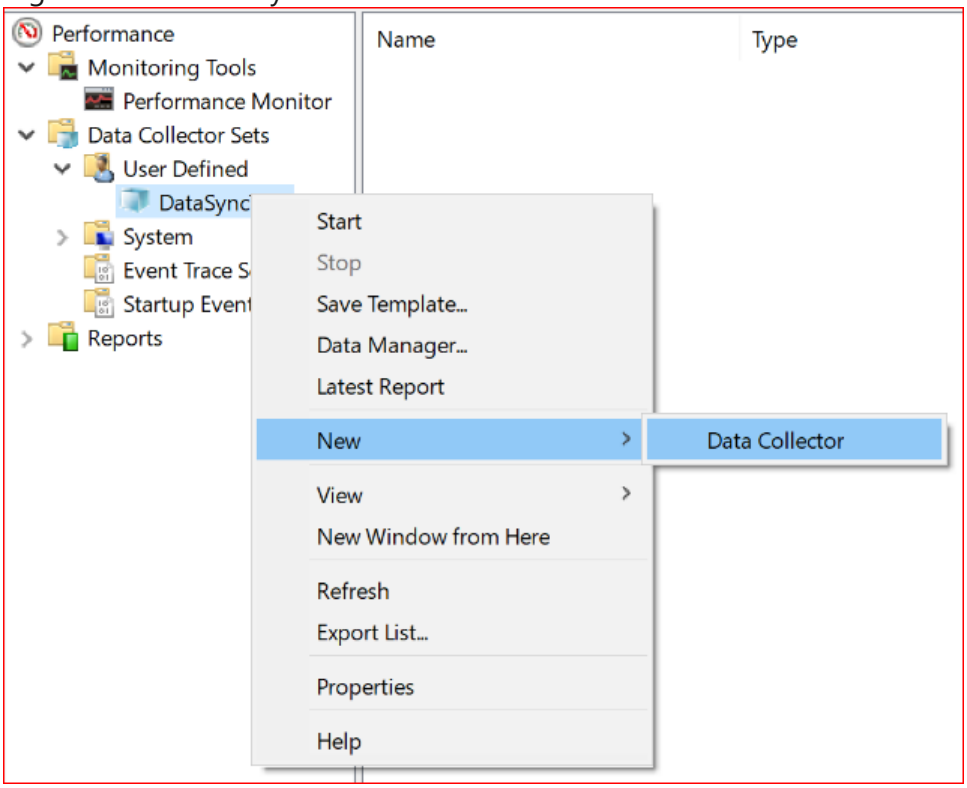
5. Right-Click on DataSyncTest data collector and select Properties



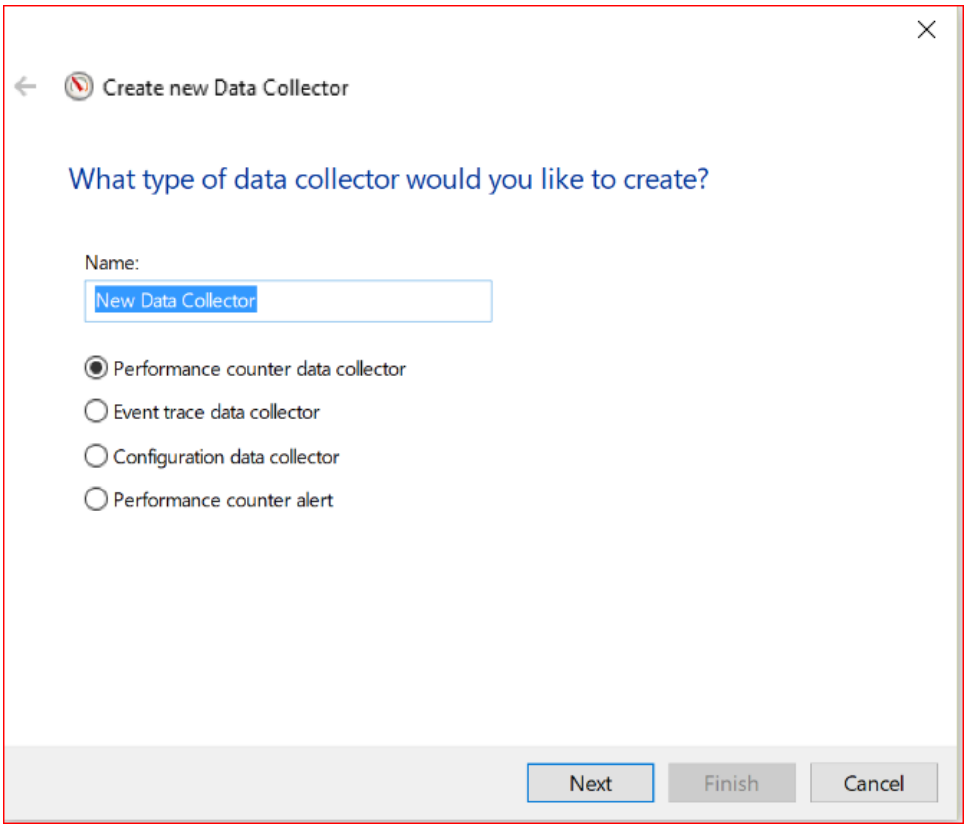
6. On Stop Condition Tab please select Maximum size and click OK.



7. Right-click on DataSyncTest data collector and select New -> Data Collector



8. Select Performance Counter and then click on Next

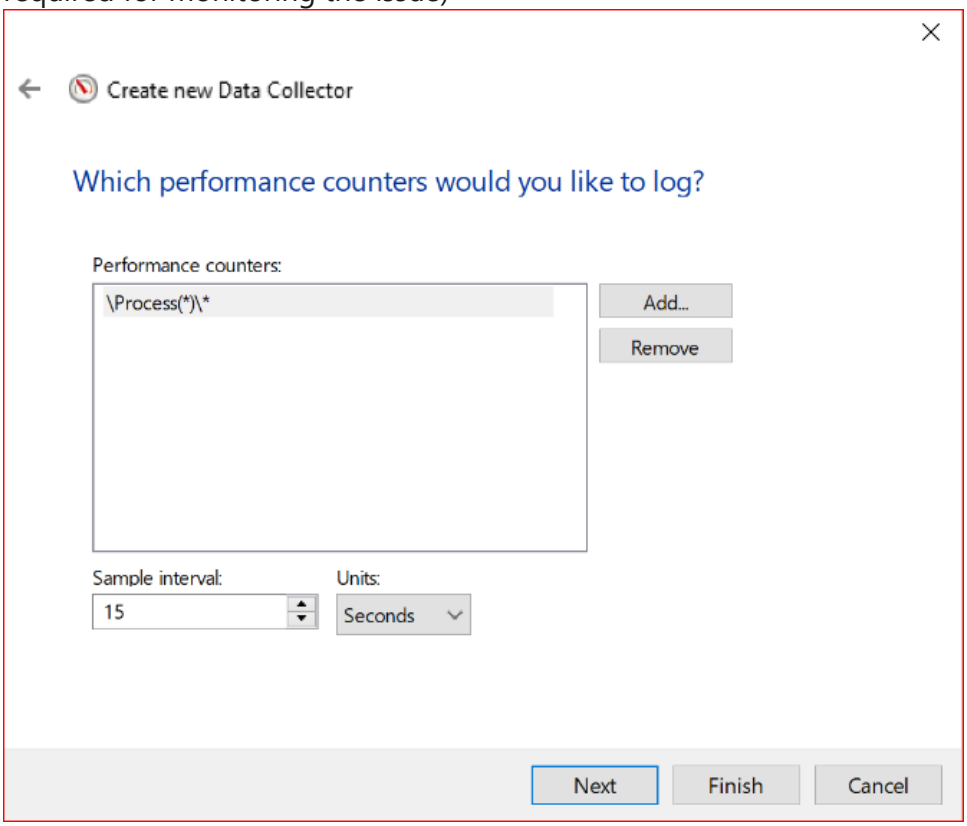


9. Add following Performance Counters and for each Counters select the options "all counters" and "all instances"

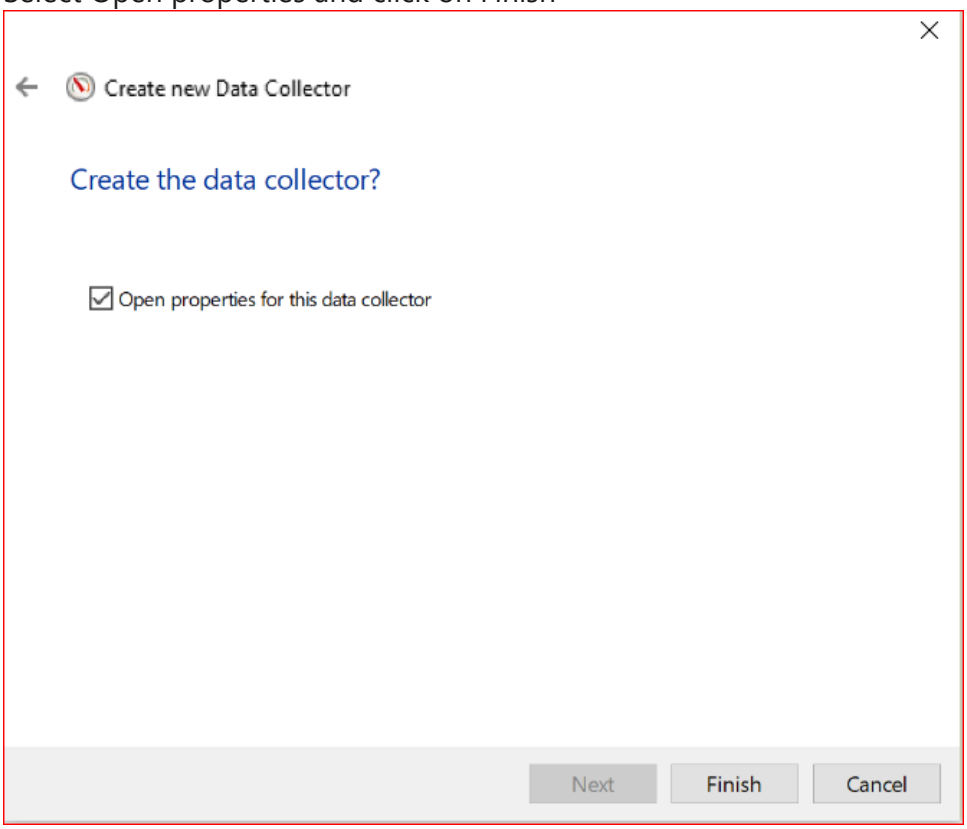
- all SQL Server counters (all counters that begin with Sqlserver or MSSQL$...)
- Logical disk

- physical disk
- processor
- system
- memory
- process

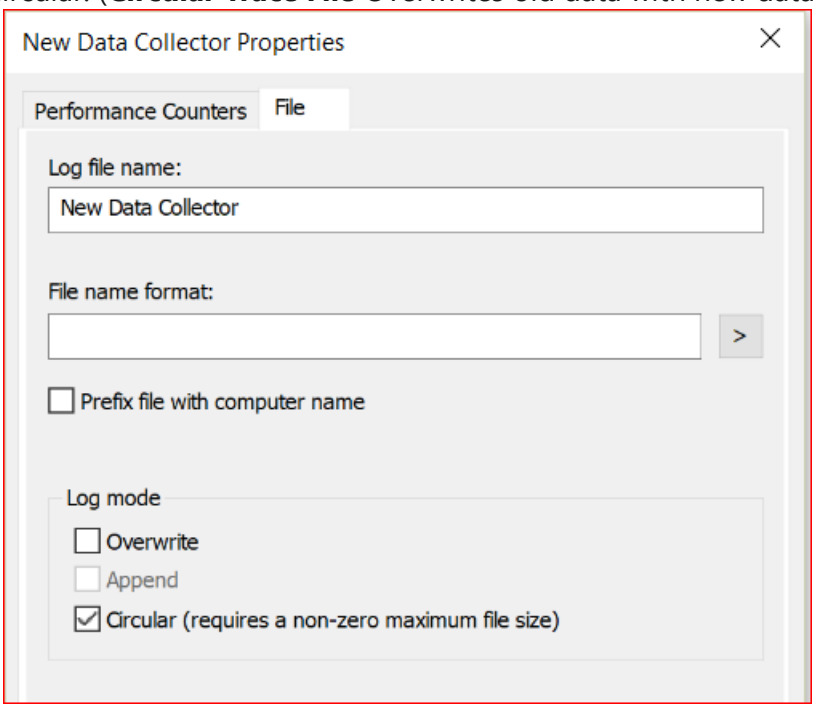
10. Click on Next (on the screenshot below only one Performance counter is selected, please select counters required for monitoring the issue)



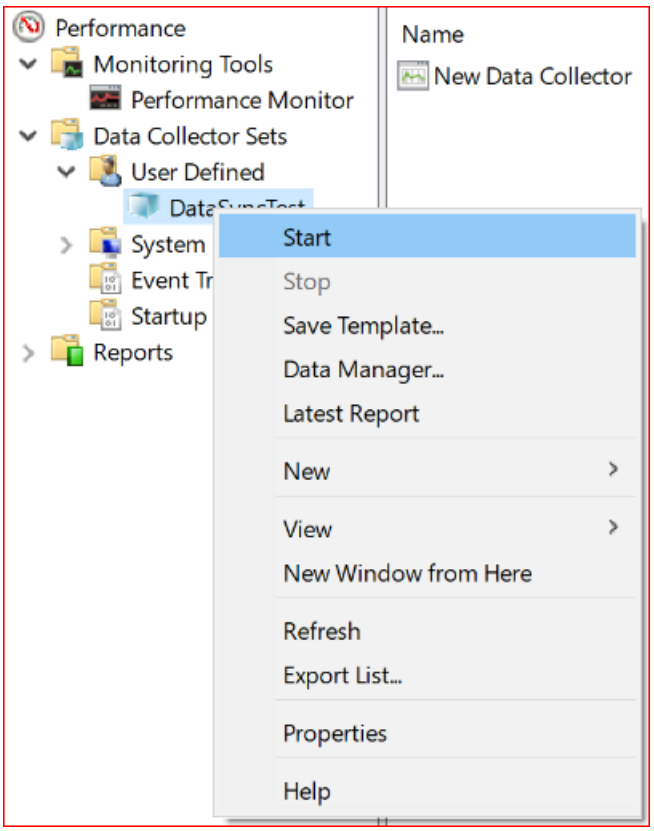
11. Select Open properties and click on Finish



12. On the File Tab select log mode Circular. (**Circular Trace File** Overwrites old data with new data when the file reaches a specified size limit.)

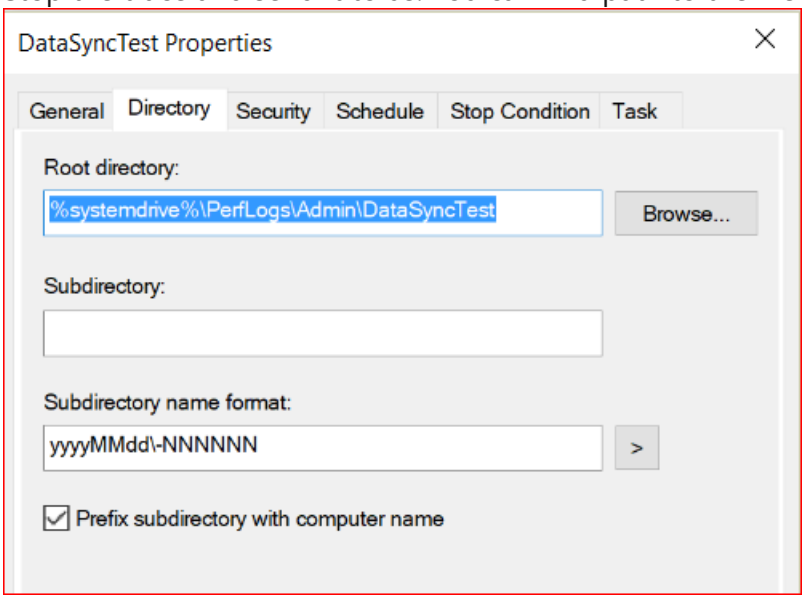


13. Click on Start



14. Reproduce the issue

15. Stop the trace and send it to us. You can find path to the file in DataSyncTest properties

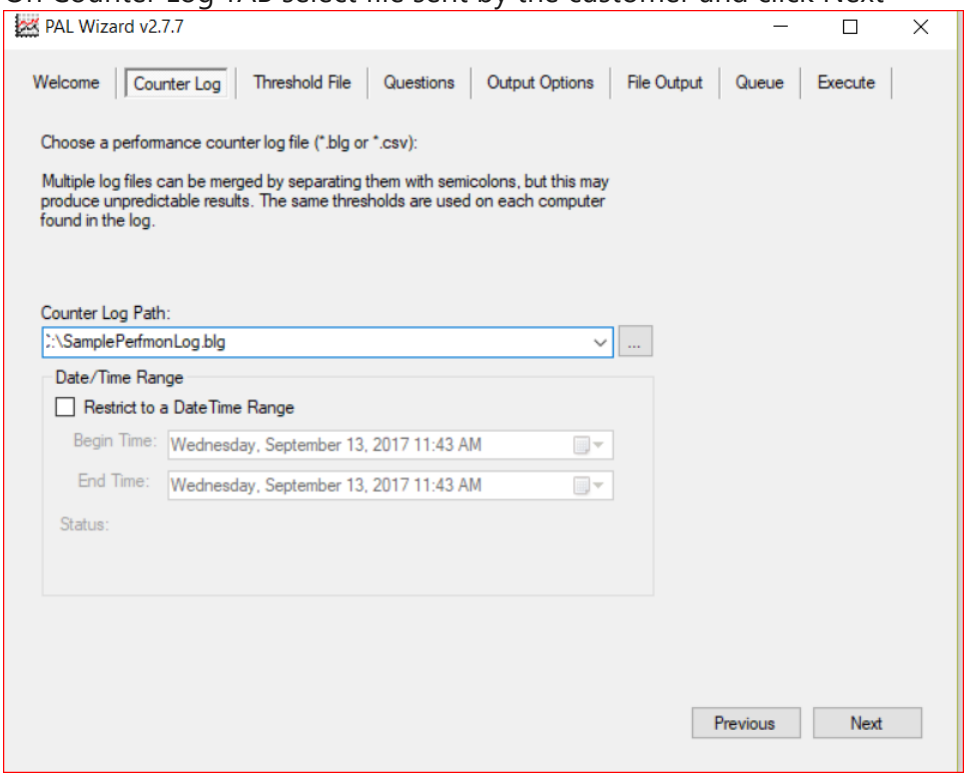


16. Please send also the latest SQL Server ERRORLOG related to the timeframe of the issue.

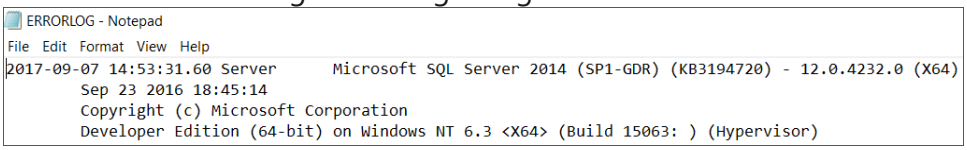
Analyze collected Performance Counters

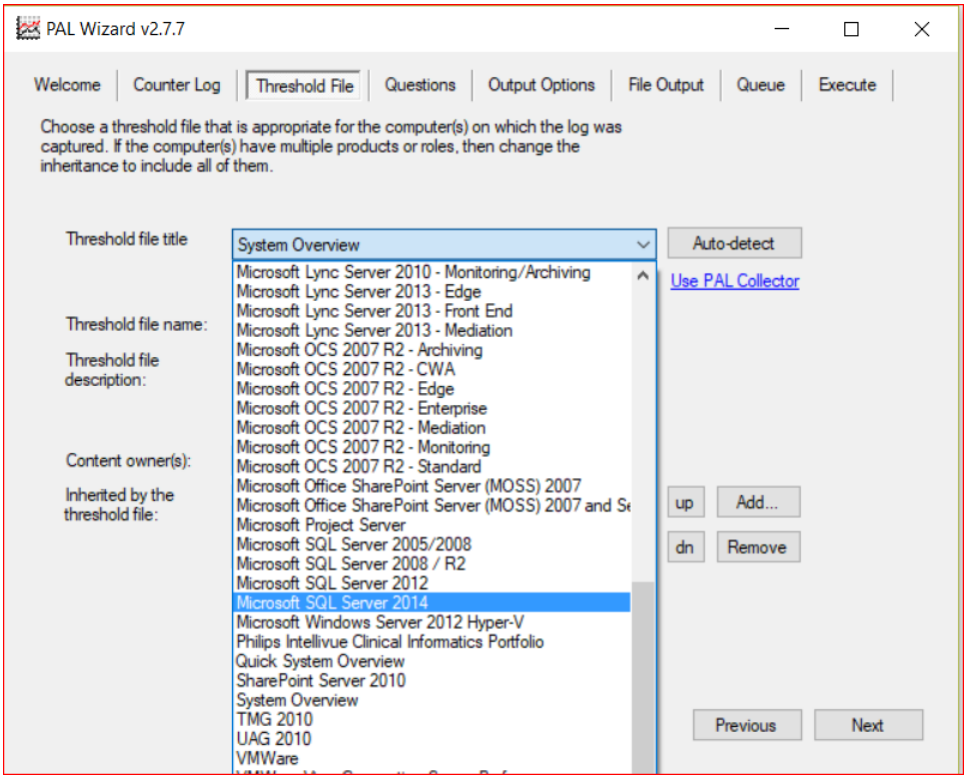
1. Download PAL tool from https://github.com/clinthuffman/PAL and start it.

2. On Counter Log TAB select file sent by the customer and click Next

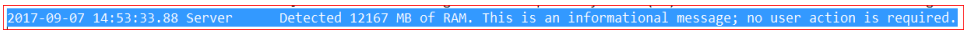


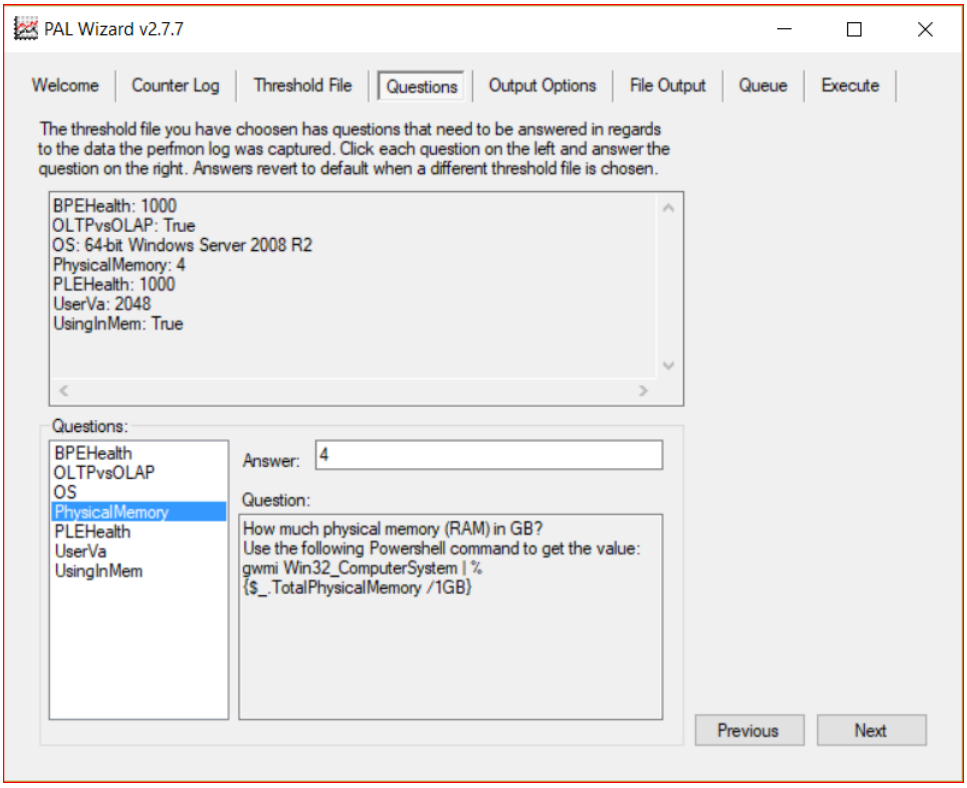
3. On Threshold File TAB select SQL Server version of the on-premise Data Sync member and click Next.
NOTE: You can check the file version in the ERRORLOG file sent by the customer. You should see something similar to the following at the beginning of the file.



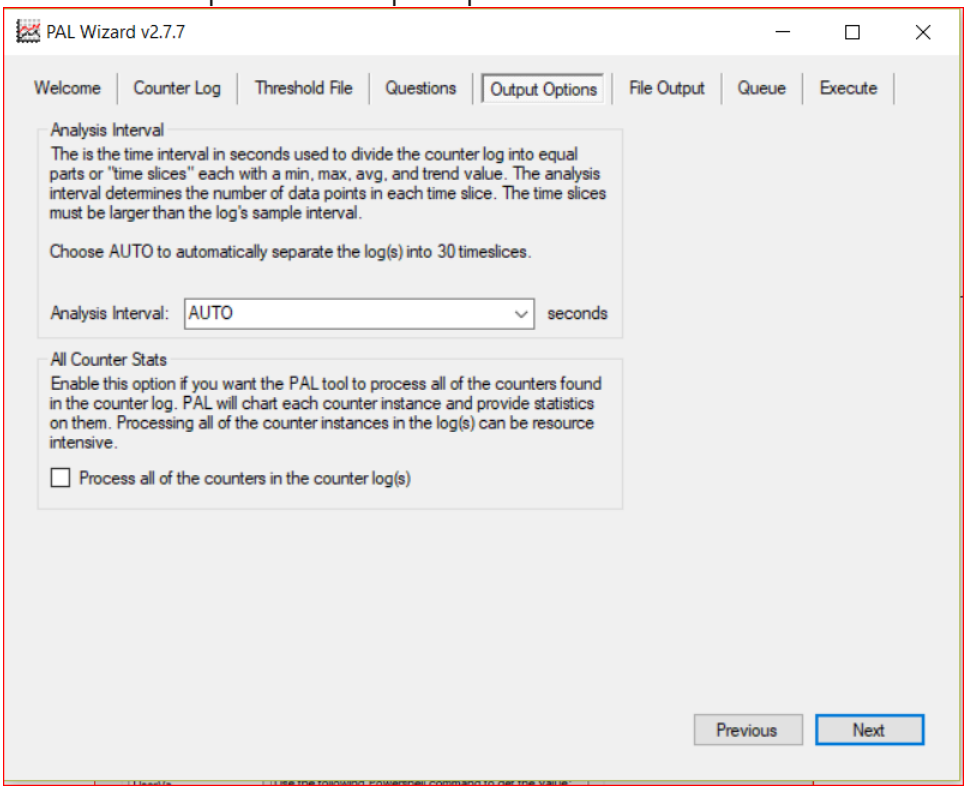


4. Provide additional information about the on-premise server in Question TAB. You can find Memory value in SQL ERRORLOG. You should see some similar

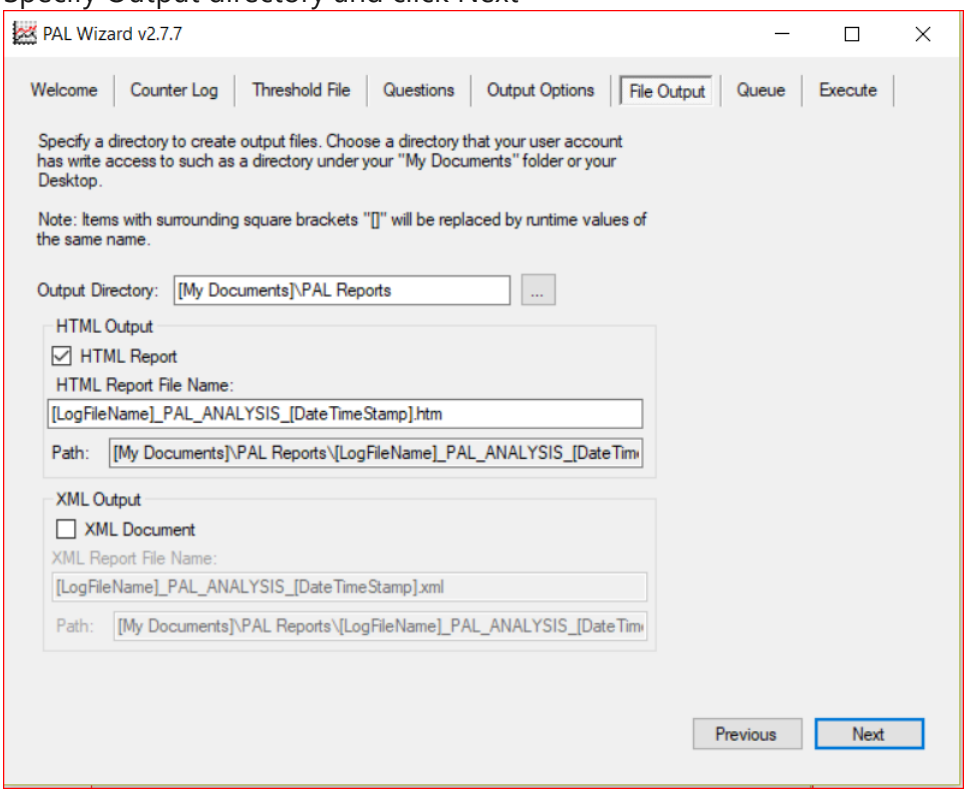




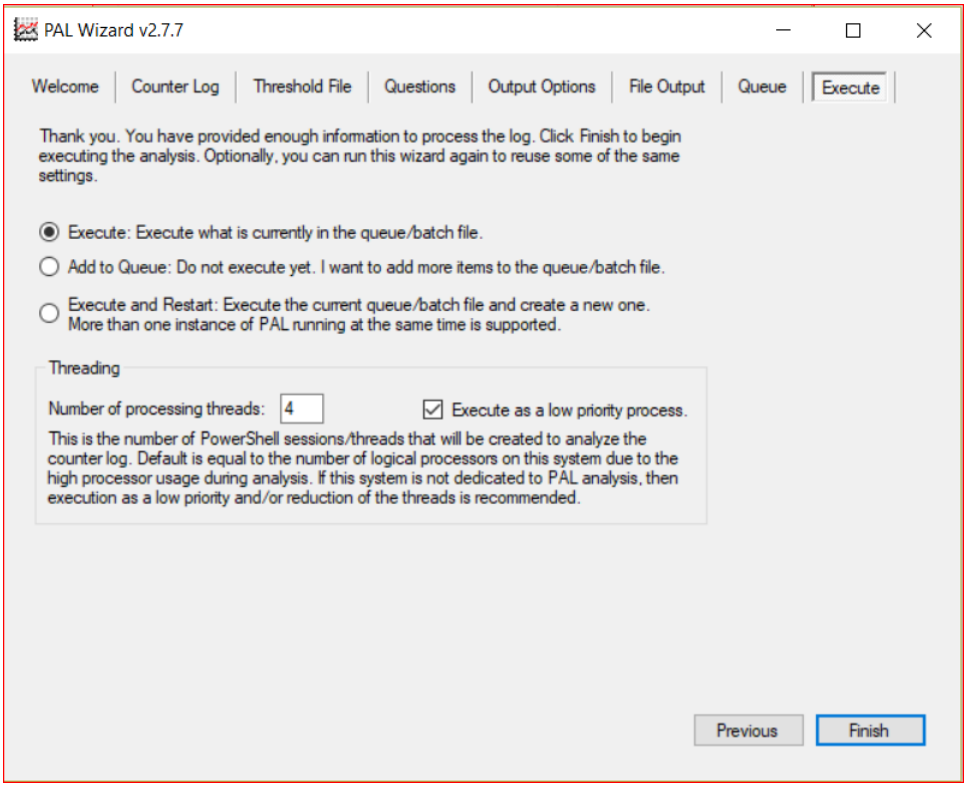
5. Leave Default options on Output Options TAB and click Next



6. Specify Output directory and click Next



7. On Queue TAB click Next and click Finish on Execute TAB



8. Wait when the HTML report is generated. It may take several minutes, depending on the source file size.

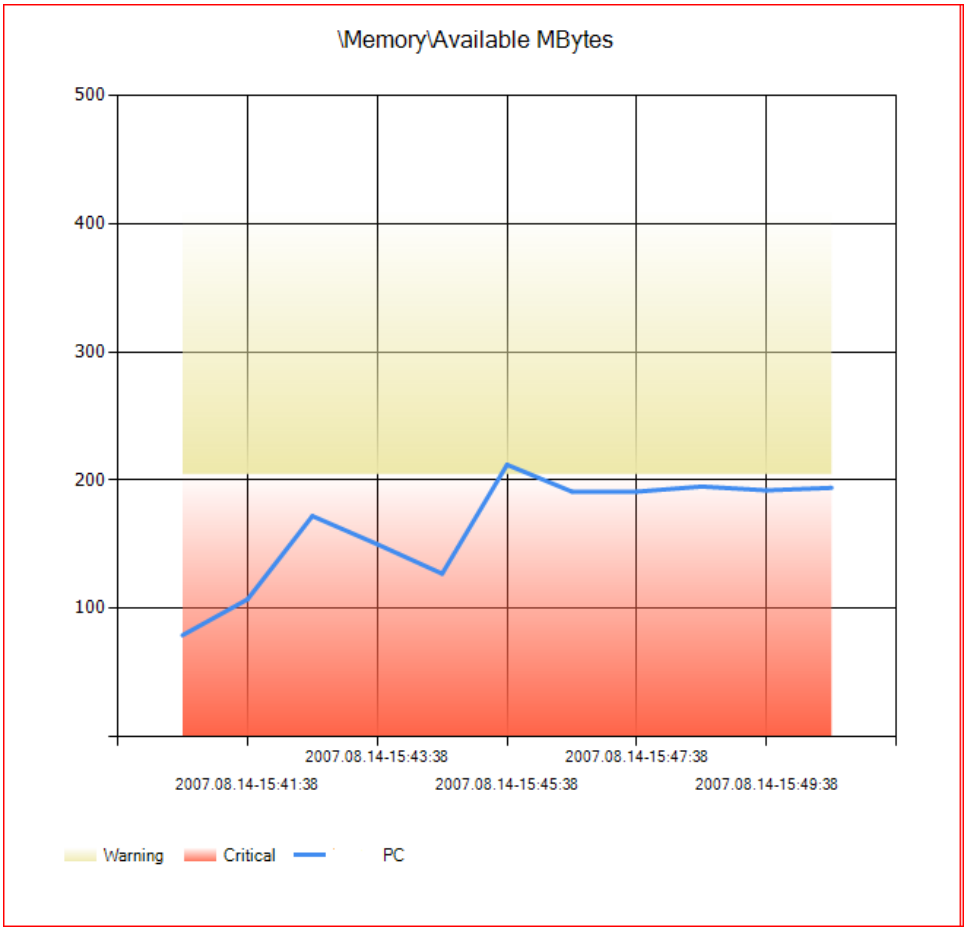
9. The report is self-explaining, you will see counters description, graphs . For example,

Memory Available MBytes
Description: Available MBytes is the amount of physical RAM, in megabytes, immediately available for

allocation to a process or for system use. It is equal to the sum of memory assigned to the standby (cached), free and zero page lists. If this counter is low, then the computer is running low on physical memory (RAM). This analysis will alert a Warning if this counter's value is less than 10% of the physical memory installed and will alert a critical if this counter's value is less than 100 MB.

References:

- PerfGuide: Low Available RAM
- Chapter 8: Physical Memory of the Windows Performance Analysis Field Guide by Clint Huffman



Overall Counter Instance Statistics

Condition	\Memory\Available MBytes	Min	Avg	Max	Hourly Trend	Std Deviation	10% of Outliers Removed	20% of Outliers Removed	30% of Outliers Removed
Less than 5 percent of RAM is available or less than 64 MB of RAM is available	PC	79	165	212	2,260	43	160	156	151

Alerts

Time Range						
2007.08.14-15:40:38 - 2007.08.14-15:41:38	Condition	Counter	Min	Avg	Max	Hourly Trend
	Less than 5 percent of RAM is available or less than 64 MB of RAM is available	PC\Memory\Available MBytes	79	79	79	0
2007.08.14-15:41:38 - 2007.08.14-15:42:38	Condition	Counter	Min	Avg	Max	Hourly Trend
	Less than 5 percent of RAM is available or less than 64 MB of RAM is available	PC\Memory\Available MBytes	107	107	107	5,040
2007.08.14-15:42:38 - 2007.08.14-15:43:38	Condition	Counter	Min	Avg	Max	Hourly Trend
	Less than 5 percent of RAM is available or less than 64 MB of RAM is available	PC\Memory\Available MBytes	172	172	172	8,370
2007.08.14-15:43:38 - 2007.08.14-15:44:38	Condition	Counter	Min	Avg	Max	Hourly Trend
	Less than 5 percent of RAM is available or less than 64 MB of RAM is available	PC\Memory\Available MBytes	150	150	150	4,260
2007.08.14-15:44:38 - 2007.08.14-15:45:38	Condition	Counter	Min	Avg	Max	Hourly Trend
	Less than 5 percent of RAM is available or less than 64 MB of RAM is available	PC\Memory\Available MBytes	127	127	127	2,160
2007.08.14-15:45:38 - 2007.08.14-15:46:38	Condition	Counter	Min	Avg	Max	Hourly Trend
	Less than 10 percent of RAM is available	PC\Memory\Available MBytes	212	212	212	4,788
2007.08.14-15:46:38 - 2007.08.14-15:47:38	Condition	Counter	Min	Avg	Max	Hourly Trend
	Less than 5 percent of RAM is available or less than 64 MB of RAM is available	PC\Memory\Available MBytes	191	191	191	3,360
2007.08.14-15:47:38 - 2007.08.14-15:48:38	Condition	Counter	Min	Avg	Max	Hourly Trend
	Less than 5 percent of RAM is available or less than 64 MB of RAM is available	PC\Memory\Available MBytes	191	191	191	2,880
2007.08.14-15:48:38 - 2007.08.14-15:49:38	Condition	Counter	Min	Avg	Max	Hourly Trend
	Less than 5 percent of RAM is available or less than 64 MB of RAM is available	PC\Memory\Available MBytes	195	195	195	2,610
2007.08.14-15:49:38 - 2007.08.14-15:49:58	Condition	Counter	Min	Avg	Max	Hourly Trend
	Less than 5 percent of RAM is available or less than 64 MB of RAM is available	PC\Memory\Available MBytes	192	192	192	2,260

How good have you found this content?