RSB Performance Monitoring - Bug #2332

Differential processing may result in wrong time series data in case of diverging cycle times 06/29/2015 01:24 PM - J. Wienke

Status:	Resolved	Start date:	06/29/2015	
Priority:	Normal	Due date:		
Assignee:	J. Wienke	% Done:	100%	
Category:	integration	Estimated time:	0.00 hour	
Target version:				
Description				

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Assuming a monitored process periodically produces a CPU usage peak. This peak will get noticed by the dbadapter correctly for each produced measurement, but it might get lost in graphite in case the adapter is faster than the configured first retention policy. This can happen because due to timings, the adapter might report something like (0 100% 0 100% 0 100%...) at a higher frequency than the first retention setting and it seems that graphite only takes an arbitrary measurement (and not the average?) in case multiple readings arrive within the specified time frame.

Related issues:			
Related to RSB Performance Monitoring - Tasks # 2329: Make derivative calcula	Resolved	06/26/2015	

History

#1 - 06/29/2015 01:25 PM - J. Wienke

- Related to Tasks #2329: Make derivative calculation the default added

#2 - 06/29/2015 02:09 PM - J. Wienke

https://graphite.readthedocs.org/en/latest/whisper.html specifies:

Whisper requires that metric updates occur at the same interval as the finest resolution storage archive

This pushes the onus of aggregating values to fit into the finest precision archive to the user rather than the database. It also means that updates are written immediately into the finest precision archive rather than being staged first for aggregation and written later (during a subsequent write operation) as they are in RRD.

Therefore, only the user can ensure this by calling the monitoring programs appropriately. Added to the wiki page: [[Dashboard_Pipeline_Setup]].

#3 - 06/29/2015 02:09 PM - J. Wienke

- Status changed from New to Resolved

- % Done changed from 0 to 100

#4 - 06/29/2015 02:09 PM - J. Wienke

- Subject changed from Differential processing may result in wrong timer series data in case of diverging cycle times to Differential processing may result in wrong time series data in case of diverging cycle times