

SeaScape - Bug #6537

Memory consumption

06/20/2014 01:26 PM - Markus Diefenthaler

Status:	Assigned	Start date:	06/20/2014
Priority:	Normal	Due date:	
Assignee:	Mariusz Witek	% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:			
Description			
There is a problem with the memory allocation by SeaScape that causes FireFox to crash on the online monitoring machine. Attached you can find an ELOG entry where the problem is explained (SeaScape-Memory.pdf). Is there a way to restrict the memory used for the caching of the queried data / plots?			

History

#1 - 07/21/2014 02:21 PM - Mariusz Witek

- Status changed from New to Assigned
- Assignee set to Mariusz Witek

I've started to look into this issue and have a few ideas in mind. I will begin working on this bug after the query builder is reconstructed.

#2 - 08/12/2014 11:13 AM - Markus Diefenthaler

Update from Paul: This is the first time in a relatively long time that I've seen the monitor machine freeze, so the situation is much better. I know seascape was running, but I don't know about the event display.

See also: <http://e906-gat3.fnal.gov:8080/SeaQuest/7109>

#3 - 09/22/2014 05:58 PM - Markus Diefenthaler

Some possible problems mentioned by Mariusz:

1. **Deferred jquery events are piling up:** I think this is most likely the issue, because it seems that the memory leak doesn't occur consistently. It could be that a slow spike could cause the deferred objects to pile up as they are constantly being created every set interval (5 seconds I believe). I would include a statement to check how many of those objects exist. I would be able to clear out those objects and reload the data. It's tricky, but I'm a little more familiar with ajax calls, and it would make sense that the page slows down if they're piling up.
1. The objects created relating to making a graph are causing memory to leak because every time new data is loaded, a new graph has to be created. Maybe because the garbage collector is being tricked into thinking that since some elements relating to the graph are still being used, then it shouldn't release the memory. I would try to create a solution involving reusing the objects (something I think I'm able to tackle now after some more time working with seascape).

#4 - 09/30/2014 02:03 PM - Markus Diefenthaler

Sylvester commented on the problem with the memory leak: *"I just looked at the redmine history, and it seems to me like Mariusz has everything under control - I fully agree with his assessment. The one thing I would like to add is to keep in the back of your mind that the problem could lie with the browser itself (e.g., a memory leak in the garbage collector), even if everything in SeaScape is programmed perfectly according to JS specs. That possibility would of course make the fix more complicated."*

Files

SeaScape-Memory.pdf	129 KB	06/20/2014	Markus Diefenthaler
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