

GammaLib - Bug #3287

Make reading and writing of parameter file thread safe

07/29/2020 09:23 AM - Knödlseeder Jürgen

Status:	Closed	Start date:	07/29/2020
Priority:	Normal	Due date:	
Assigned To:	Knödlseeder Jürgen	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:	1.7.1		
Description			
When running gsrvy an exception occurs sometimes that states that no chatter parameter is found. When inspecting the application parameters they appear in fact empty. It may be that the reading of the parameter file is not thread safe.			

History

#1 - 07/29/2020 09:25 AM - Knödlseeder Jürgen

- % Done changed from 0 to 50

I put the reading and writing of the parameter file in GApplicationPars::read() and GApplicationPars::write() in an OpenMP critical zone.

#4 - 08/03/2020 08:54 PM - Knödlseeder Jürgen

- Status changed from New to In Progress

See also #3303.

#5 - 08/04/2020 11:29 PM - Knödlseeder Jürgen

- Status changed from In Progress to Feedback

- % Done changed from 50 to 90

Most of the diagnostic information can be found in issue #3303, the solution identified was to put the code in the GApplicationPars::read() and GApplicationPars::write() methods in the same named critical zone so that concurrent read and write operations of different threads are not permitted.

Hope that this fixes the issue now. I set the status of the issue to feedback to see whether the problem has finally stopped (the occurrence of the issue is very intermittent, hence a few days of gsrvy runs are needed to conclude with a high probability that the issue was fixed).

#6 - 08/07/2020 11:21 AM - Knödlseeder Jürgen

- Status changed from Feedback to Closed

- % Done changed from 90 to 100

I have not seen any problem anymore. Close the issue now.