

MARTe2-core - User story #104

MARTe-EX-F-1.2.2: A framework developer shall be capable of specifying the affinity of any thread.

29.05.2015 14:18 - André Neto

Status: Closed	Start date:
Priority: Normal	Due date:
Assignee:	% Done: 0%
Category:	Estimated time: 2.00 hours
Target version: 0.2	Spent time: 0.00 hour
Git branch (link):	SVN commit (link/?p=rev):
Git merge to develop (link):	

Description

See [#160](#)

Implement requirement MARTe-EX-F-1.2.2 based on the original MARTe implementation

Note: In order to properly support multi-core CPU architectures it is crucial to be able to specify the thread affinity so that a thread can be constrained by the operating system to run on a given subset of CPU cores.

Source code files modified

- Source/Core/L0Portability/ThreadsDatabase.h
- Source/Core/L0Portability/ThreadsDatabase.cpp
- Source/Core/L0Portability/Threads.h
- Source/Core/L0Portability/Threads.cpp
- Source/Core/L0Portability/OperatingSystem/Linux/ThreadsOS.h
- Source/Core/L0Portability/OperatingSystem/Windows/ThreadsOS.h

Architecture & design review

Date of the review: 08/06/2015

Person who did the review: André Neto

Version of architecture & design document: N/A. As per the original MARTe implementation, this is a function of a support class and does not require formal design in UML.

Result of review: N/A

List of non-conformities: N/A

Code and documentation review

Date of the review: 18/06/2015

Person who did the review: Ivan Herrero

Result of review: PASS

List of non-conformities: N/A

Unit test review

Date of the review: 01/07/2015

Person who did the review: Ivan Herrero

Result of coverage tests review: FAIL

Result of functional tests review: FAIL

Result of review: FAIL

List of non-conformities:

Unit tests reviewed on [#109](#)

Associated revisions

Revision 67764feb - 11.06.2015 07:56 - Giuseppe Ferrò

Implemented threads functionalities described in redmine #103 #104 #112 #107 #108 #111 #105 #106 #110 #109

Revision f048da13 - 17.06.2015 12:10 - Giuseppe Ferrò

Moved THREADS_DEFAULT_STACKSIZE in GeneralDefinitionsOS.h.

Formatted code with new templates.

Fixed errors accordingly with the revision.

#109 #110 #106 #105 #111 #108 #107 #112 #113 #104 #103

Revision 5d7c7a45 - 18.06.2015 08:09 - Giuseppe Ferrò

Fixed errors accordingly with revision.

#103 #104 #112 #107 #108 #111 #105 #106

Revision 56f896af - 23.06.2015 16:59 - Giuseppe Ferrò

Added Threads and ThreadsDatabase tests.

#110 #123 #103 #104 #112 #107 #108 #111 #106 #105 #109 #113

Revision a1ee0477 - 25.06.2015 13:37 - Giuseppe Ferrò

Added Threads unit tests.

Renamed previous tests because they are integration tests.

#110 #123 #103 #104 #112 #107 #108 #111 #106 #105 #109 #113

History

#1 - 03.06.2015 10:19 - Riccardo Vitelli

- Start date deleted (29.05.2015)

- Estimated time set to 2.00 h

#2 - 03.06.2015 10:19 - Riccardo Vitelli

- Target version changed from Backlog to 0.1

#3 - 08.06.2015 09:25 - Riccardo Vitelli

- Status changed from New to Arch: Rev

#4 - 08.06.2015 09:26 - Riccardo Vitelli

- Assignee set to André Neto

#5 - 08.06.2015 13:13 - André Neto

- Description updated

#6 - 08.06.2015 17:53 - Riccardo Vitelli

- Status changed from Arch: Rev to Code: Impl

#7 - 08.06.2015 17:54 - Riccardo Vitelli

- Assignee changed from André Neto to Giuseppe Ferro

#8 - 12.06.2015 10:29 - Riccardo Vitelli

- Status changed from Code: Impl to Code: Rev

#9 - 12.06.2015 11:16 - Riccardo Vitelli

- Assignee changed from Giuseppe Ferro to Ivan Herrero

#10 - 17.06.2015 09:45 - Ivan Herrero

- Description updated

#11 - 17.06.2015 09:53 - Ivan Herrero

- Description updated

#12 - 18.06.2015 09:48 - Ivan Herrero

- Assignee changed from Ivan Herrero to Giuseppe Ferro

#13 - 18.06.2015 17:12 - Ivan Herrero

- Description updated

- Assignee deleted (Giuseppe Ferro)

#14 - 18.06.2015 17:12 - Ivan Herrero

- Status changed from Code: Rev to Unit: Impl

#15 - 18.06.2015 18:18 - Ivan Herrero

Code and documentation review passed. Unit testing implementation pending.

#16 - 25.06.2015 17:22 - Riccardo Vitelli

- Status changed from Unit: Impl to Unit: Rev

#17 - 01.07.2015 17:00 - Ivan Herrero

- Description updated

- Assignee set to Ivan Herrero

Unit test review made on revision 8b64124 [FAIL].

Note: It is currently being refactored.

#18 - 01.07.2015 17:57 - Riccardo Vitelli

- Assignee deleted (Ivan Herrero)

#19 - 01.07.2015 17:59 - Riccardo Vitelli

- Status changed from Unit: Rev to Unit: Impl

#20 - 02.07.2015 18:06 - Riccardo Vitelli

- Target version changed from 0.1 to 0.2

#21 - 16.07.2015 09:28 - Riccardo Vitelli

- Status changed from Unit: Impl to Code: Impl

#22 - 29.07.2015 15:14 - Riccardo Vitelli

- Description updated

#23 - 29.07.2015 15:14 - Riccardo Vitelli

- Status changed from Code: Impl to Closed