# MARTe2-core - User story #113

# MARTe-EX-F-1.2.11: A framework developer shall be capable of putting the executing thread to sleep for a specified amount of time.

29.05.2015 14:18 - André Neto

Status: Start date: Closed **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**

Implement requirement MARTe-EX-F-1.2.11 based on the original MARTe implementation

Note: While waiting for a given event or resource to be available a framework developer might decide to wait and return the control to the operating system schedule.

# Source code files modified

- Source\Core\L0Portability\Architecture\x86\_cl\HighResolutionTimerA.h
- Source\Core\L0Portability\Architecture\x86 gcc\HighResolutionTimerA.h
- Source\Core\L0Portability\HighResolutionTimer.cpp
- Source\Core\L0Portability\HighResolutionTimer.h
- Source\Core\L0Portability\OperatingSystem\Linux\HighResolutionTimerCalibratorOS.h
- Source\Core\L0Portability\OperatingSystem\Linux\SleepOS.h
- Source\Core\L0Portability\OperatingSystem\Windows\HighResolutionTimerCalibratorOS.h
- Source\Core\L0Portability\OperatingSystem\Windows\SleepOS.h
- Source\Core\L0Portability\Sleep.cpp
- Source\Core\L0Portability\Sleep.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 implemented in 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: 17/06/2015

Person who did the review: Ivan Herrero

Result of review: SUCCESS

List of non-conformities: N/A

# Technical debt:

Manual review for Source\Core\L0Portability\Architecture\x86\_cl\HighResolutionTimerA.h

This file has not been reviewed, because it is pending further discussion.

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Manual review for Source\Core\L0Portability\Architecture\x86\_gcc\HighResolutionTimerA.h This file has not been reviewed, because it is pending further discussion.

Manual review for Source\Core\L0Portability\OperatingSystem\Linux\HighResolutionTimerCalibratorOS.h This file has not been reviewed, because it is pending further discussion.

Manual review for Source\Core\L0Portability\OperatingSystem\Windows\HighResolutionTimerCalibratorOS.h This file has not been reviewed, because it is pending further discussion.

# Unit test review

Date of the review: 15/07/2015

Person who did the review: Ivan Herrero

Result of coverage tests review: PASS

Result of functional tests review: PASS

Result of review: PASS

List of non-conformities: N/A

# **Associated revisions**

# Revision 2b6bf3ab - 12.06.2015 08:50 - Giuseppe Ferrò

Implemented sleep methods.

Implemented HighResolutionTimer counter using intrinsics in windows in order to support 64 bit compiler.

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#### 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 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

# Revision 88afe86d - 09.07.2015 15:37 - Llorenc Capella

#122 ProcessorTypeTest modifications & #113 HighREsolutionTimerTest and SleepTest

List of changes of #122: \* Test added in ProcessorTypeTest.cpp \* Documentation improvements in ProcessorTypeTest.h \* Format ProcessorTypeTest.cpp, ProcessorTypeTest.h, ProcessorTest.cpp

List of changes #113: \* Name of the sleep functions modified based on the Ivan comments. \* Small modifications in HighResolutionTimer::Counter32. \* TestCounter32 input parameter changed in order to avoid overfloat.

# Revision 29729b63 - 10.07.2015 11:21 - Llorenc Capella

US #113 HighResolutionTimerTest modifications

List of changes: \* Tolerance function added in TestPeriodFrequency() \* Define the tolerance as a function of the input parameter and lower limit defined for the tolerance. \* Files formated.

# Revision 674604be - 15.07.2015 17:26 - Ivan Herrero

#113 - Minor corrections after unit test review

Some corrections of format on SleepTest and HighResolutionTimerTest.

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- SleepTest::SleepTest() deleted because it had an empty implementation.
- SleepTest::TestSec(float32) and SleepGTest::TestSleepSecF deleted because target method Sleep::Sec(float32) had been deleted.
- HighResolutionTimerTest::TestPeriodFrequency() mantained but considered an extra test.

#### Revision 43614e73 - 15.07.2015 17:28 - Ivan Herrero

Merge branch 'develop' into #113-UT-review

# History

#### #1 - 29.05.2015 15:16 - André Neto

- Subject changed from MARTe-EX-F-1.2.11: A framework developer shall be putting a thread to sleep for a specified amount of time. to MARTe-EX-F-1.2.11: A framework developer shall be capable of putting a thread to sleep for a specified amount of time.

# #2 - 03.06.2015 10:56 - Riccardo Vitelli

- Subject changed from MARTe-EX-F-1.2.11: A framework developer shall be capable of putting a thread to sleep for a specified amount of time. to MARTe-EX-F-1.2.11: A framework developer shall be capable of putting the executing thread to sleep for a specified amount of time.
- Target version changed from Backlog to 0.1
- Start date deleted (29.05.2015)
- Estimated time set to 2.00 h

#### #3 - 08.06.2015 09:26 - Riccardo Vitelli

- Status changed from New to Arch: Rev

#### #4 - 08.06.2015 09:27 - Riccardo Vitelli

- Assignee set to André Neto

#### #5 - 08.06.2015 13:16 - André Neto

- Description updated

#### #6 - 08.06.2015 17:54 - 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 11:40 - Ivan Herrero

- Description updated

# #11 - 17.06.2015 17:05 - Ivan Herrero

- Description updated

# #12 - 18.06.2015 09:48 - Ivan Herrero

- Assignee changed from Ivan Herrero to Giuseppe Ferro

# #13 - 18.06.2015 16:36 - Ivan Herrero

- Description updated

# #14 - 22.06.2015 12:45 - Ivan Herrero

- Status changed from Code: Rev to Code: Impl

## #15 - 22.06.2015 17:31 - Riccardo Vitelli

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- Status changed from Code: Impl to Code: Rev

#### #16 - 22.06.2015 17:31 - Riccardo Vitelli

- Assignee changed from Giuseppe Ferro to Ivan Herrero

#### #17 - 23.06.2015 11:41 - Ivan Herrero

- Description updated
- Assignee deleted (Ivan Herrero)

Code and documentation review passed on revision f7b2aa2. Unit testing implementation pending.

# #18 - 23.06.2015 18:03 - André Neto

- Status changed from Code: Rev to Unit: Impl

#### #19 - 25.06.2015 17:22 - Riccardo Vitelli

- Status changed from Unit: Impl to Unit: Rev

# #20 - 01.07.2015 11:27 - Ivan Herrero

- Assignee set to Ivan Herrero

#### #21 - 01.07.2015 15:51 - Ivan Herrero

- Description updated

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

#### #22 - 01.07.2015 16:28 - Ivan Herrero

- Description updated

# #23 - 01.07.2015 17:57 - Riccardo Vitelli

- Assignee deleted (Ivan Herrero)

# #24 - 01.07.2015 17:59 - Riccardo Vitelli

- Status changed from Unit: Rev to Unit: Impl

# #25 - 02.07.2015 18:06 - Riccardo Vitelli

- Target version changed from 0.1 to 0.2

# #26 - 09.07.2015 10:04 - Llorenc Capella

- Assignee set to Llorenc Capella

# #27 - 14.07.2015 16:48 - Llorenc Capella

- Status changed from Unit: Impl to Unit: Rev

# #28 - 14.07.2015 16:52 - Llorenc Capella

- Assignee deleted (Llorenc Capella)

The functions HighResolutionTimerCalibratorOs::GetInitialTicks & HighResolutionTimerCalibratorOs::GetInitialTime() are not included in the HighResolutionTimer.h.

# #29 - 15.07.2015 17:42 - Ivan Herrero

- Description updated
- Assignee set to Ivan Herrero

A unit test review has been done on revision 6072de0 with a result of "PASS".

Some minor corrections after unit test review committed on revision 674604b.

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# #30 - 15.07.2015 17:51 - Riccardo Vitelli

- Status changed from Unit: Rev to Closed

# #31 - 15.07.2015 17:52 - Riccardo Vitelli

- Assignee deleted (Ivan Herrero)

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