

## MARTe2-core - User story #119

### MARTe-EX-D-1.3.3: The framework shall allow developers to protect shared resources using memory polling semaphores.

29.05.2015 14:19 - André Neto

<b>Status:</b>	Closed	<b>Start date:</b>	
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Ivan Herrero	<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	4.00 hours
<b>Target version:</b>	0.2	<b>Spent time:</b>	0.00 hour
<b>Git branch (link):</b>		<b>SVN commit (link/?p=rev):</b>	
<b>Git merge to develop (link):</b>			

#### Description

Implement requirement MARTe-EX-D-1.3.3 based on the original MARTe implementation

Note: "Semaphores" based on polling a given memory access location allow to synchronize threads with extremely low jitter, given that the operating system scheduler is not required. These type of semaphores can also be used during interrupts and allow to synchronize low-level drivers with system applications.

#### Source code files modified

See [#115](#)

#### Requirements review

N/A

#### Architecture & design review

N/A

#### Code and documentation review

**Date of the review:** 25/06/2015

**Person who did the review:** Ivan Herrero

**Result of review:** PASS

**List of non-conformities:** N/A

#### Unit test review

**Date of the review:** 14/07/2015

**Person who did the review:** Ivan Herrero

**Version of unit tests:** 0.2

**Result of coverage tests review:** PASS

**Result of functional tests review:** PASS

**Result of review:** PASS

List of non-conformities: N/A

## Integration test review

N/A

## Acceptance test review

N/A

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### Associated revisions

#### Revision 0eb7c1c6 - 18.06.2015 10:38 - Giuseppe Ferrò

Added FastPollingMutex implementation  
#115 #117 #119

#### Revision 16238ec2 - 22.06.2015 14:00 - Giuseppe Ferrò

Fixed semaphore files accordingly with revision.  
#115 #117 #119 #118 #114

#### Revision cd81fb26 - 22.06.2015 14:02 - Giuseppe Ferrò

- Fixed semaphore files accordingly with revision.  
#115 #117 #119 #118 #114

#### Revision 08f24f50 - 26.06.2015 12:05 - Giuseppe Ferrò

Added FastPollingMutexSem tests.  
Renamed previous tests as integration tests.  
#116 #115 #117 #119

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### History

#### #1 - 03.06.2015 11:12 - Riccardo Vitelli

- Target version changed from Backlog to 0.1
- Start date deleted (29.05.2015)
- Estimated time set to 4.00 h

#### #2 - 12.06.2015 10:31 - Riccardo Vitelli

- Status changed from New to Arch: Rev

#### #3 - 12.06.2015 11:16 - Riccardo Vitelli

- Assignee set to André Neto

#### #4 - 12.06.2015 18:30 - André Neto

- Description updated

#### #5 - 18.06.2015 09:37 - Ivan Herrero

- Status changed from Arch: Rev to Code: Impl

#### #6 - 18.06.2015 09:47 - Ivan Herrero

- Assignee changed from André Neto to Giuseppe Ferro

#### #7 - 18.06.2015 12:41 - Ivan Herrero

- Assignee changed from Giuseppe Ferro to Ivan Herrero

#### #8 - 18.06.2015 12:42 - Ivan Herrero

- Status changed from Code: Impl to Code: Rev

#### #9 - 18.06.2015 17:30 - Ivan Herrero

- Description updated

**#10 - 22.06.2015 15:17 - Ivan Herrero**

- Description updated

- Assignee deleted (Ivan Herrero)

Code and documentation review made. Code and documentation corrections pending.

**#11 - 22.06.2015 15:18 - Ivan Herrero**

- Status changed from Code: Rev to Code: Impl

**#12 - 22.06.2015 17:31 - Riccardo Vitelli**

- Assignee set to Giuseppe Ferro

**#13 - 22.06.2015 17:32 - Riccardo Vitelli**

- Status changed from Code: Impl to Code: Rev

**#14 - 22.06.2015 17:32 - Riccardo Vitelli**

- Assignee changed from Giuseppe Ferro to Ivan Herrero

**#15 - 23.06.2015 12:22 - Ivan Herrero**

Code and documentation review made on revision b99ba9f. Code and documentation corrections pending. See [#115](#).

**#16 - 23.06.2015 18:04 - André Neto**

- Status changed from Code: Rev to Code: Impl

**#17 - 23.06.2015 18:04 - André Neto**

- Assignee changed from Ivan Herrero to Giuseppe Ferro

**#18 - 25.06.2015 17:18 - Riccardo Vitelli**

- Status changed from Code: Impl to Code: Rev

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

- Assignee deleted (Giuseppe Ferro)

**#20 - 25.06.2015 19:28 - Ivan Herrero**

- Description updated

All corrections done.

**#21 - 25.06.2015 19:29 - Ivan Herrero**

- Status changed from Code: Rev to Code: Impl

**#22 - 25.06.2015 19:29 - Ivan Herrero**

- Status changed from Code: Impl to Unit: Impl

**#23 - 26.06.2015 11:44 - Giuseppe Ferro**

- Assignee set to Giuseppe Ferro

**#24 - 02.07.2015 18:06 - Riccardo Vitelli**

- Target version changed from 0.1 to 0.2

**#25 - 07.07.2015 11:25 - Riccardo Vitelli**

- Assignee deleted (Giuseppe Ferro)

**#26 - 07.07.2015 11:27 - Riccardo Vitelli**

- Status changed from Unit: Impl to Unit: Rev

**#27 - 08.07.2015 10:47 - Ivan Herrero**

- *Description updated*

**#28 - 08.07.2015 10:55 - Ivan Herrero**

- *Description updated*

**#29 - 08.07.2015 12:15 - Ivan Herrero**

- *Assignee set to Ivan Herrero*

**#30 - 14.07.2015 18:03 - Ivan Herrero**

- *Description updated*

**#31 - 14.07.2015 18:54 - Riccardo Vitelli**

- *Status changed from Unit: Rev to Closed*