MARTe2-components - User story #779

RealTimeThreadSyncDataSource WaitForNext

26.03.2021 15:04 - André Neto

Status:	Closed		**Start date:**	26.03.2021
Priority:	Normal		**Due date:**	
Assignee:			**% Done:**	0%
Category:			**Estimated time:**	0.00 hour
Target version:			**Spent time:**	0.00 hour
Git branch (link):			**SVN commit (link/?p=rev):**	
Git merge to develop (link):				

Description

See #627

Changes are focused on the WaitForNext parameter introduction. This parameter influences the usage of the synchronisation primitives by introducing the case where .Post() calls are lost by a a consuming thread unable to keep the pace. Instead of finding an already "posted" semaphore, this causes the reset of it before waiting.
The introduction impacts both the DataSource and the related Broker.

Aside from this, referring to commit 39f85b22[54378967ccb69f4329d9739c45d5f49c], things were found which should be brought to attention:
- The "trigger" variable, assigned on line 123 by means of "GetFunctionSignalTrigger" is immediately overwritten by the consecutive assignment on line 125 with the value from numberOfSamples. The whole 122:127 block should be examined;
- Even if the "trigger" and "numberOfSamples" variable should match, they are handled as if they were different in lines 181-186;
- Semaphore is not thread safe, Post()/Wait()/ResetWait() on lines 182-198-202-204 should be handled in critical sections;

History

#1 - 12.04.2021 17:07 - André Neto

- Status changed from New to Closed

See #791