

MARTe2-core - User story #368

CircularBufferThreadInputDataSource

16.12.2019 15:45 - André Neto

Status: Closed	Start date: 16.12.2019
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

Update the CircularBufferThreadInputDataSource to allow for not interleave a part of the frame.

Requirements review

Date of the review: 23/01/2020

Person who did the review: André Neto

Version of requirements: N/A

Result of review: N/A

List of non-conformities: N/A

Comments: No new requirements were added w.r.t. to v1.0.0.

Architecture & design review

Date of the review: 23/01/2020

Person who did the review: André Neto

Version of architecture & design document: N/A

Result of review: N/A

List of non-conformities: N/A

Comments: No updates related to the architecture.

Code and documentation review

Date of the review: 23/01/2020

Person who did the review: André Neto

Version of source code: 1.1.0

Result of review: PASS

List of non-conformities:

Note 974: Worst case function for stack usage: 'MARTe::ConfigurationDatabase::Copy' is recursive, loop contains call to 'MARTe::ConfigurationDatabase::Copy'. See +stack for a full report. [MISRA

List of warnings reported by Doxygen:

ReferenceContainer.cpp:2: warning: the name `ReferenceContainer.cpp' supplied as the second argument in the \file statement matches the following input files:

L2Objects/ReferenceContainer.cpp

L3Streams/ReferenceContainer.cpp

Please use a more specific name by including a (larger) part of the path!

Remark

The documentation of DataSourceel has to be revisited.

Remark

The SquareRoot template methods for float32 and float64 need to be provided.

```
template<typename Type>
inline Type SquareRoot(const Type x) {
    Type tmp = x;
    if (tmp < (Type) 0) {
        REPORT_ERROR_STATIC_0(ErrorManagement::Warning, "SquareRoot<Type> of negative number");
        tmp *= -1;
    }
    return sqrt(tmp);
}
```

It is only valid for Type being float64. In case of float32, there would be an implicit casting to satisfy the sqrt method. Two implementations shall be provided to call sqrt and sqrtf, as appropriate

Remark

The following classes have non-virtual destructors. As long they are not base classes of any derived class, it is safe, but they need to be monitored (flexlint will check and signal this as error code 1509).

Matrix, Vector, GlobalObjectsDatabase, LoadableLibrary, MemoryArea, StaticListHolder, CharBuffer, AnyTypeCreator, LexicalAnalyzer, Token, TokenInfo, Directory, MutexSem, ThreadInformation.

Unit test review

Date of the review: 23/01/2020

Person who did the review: André Neto

Version of unit tests: 1.1.0

Result of coverage tests review: PASS

Result of functional tests review: PASS

Result of review: PASS

List of non-conformities:

LCOV report (files containing functions not executed at all):

Note: execute with

```
lcov -l Build/MARTE2.coverage.info
```

and compare with the latest master release using tkdiff.

Files containing functions with coverage < 90% or which have changed w.r.t. to last master release. Exclamation marks inform of

differences w.r.t. to the last master.:_

1		Lines	Functions	Branches	1
2	Filename	Rate	Num Rate	Num Rate	Num
3	Filename	Rate	Num Rate	Num Rate	Num
4	! [/home/aneto/Projects/MARTE2-dev-master/Source/Core/BareMetal/]				4 !
	[/home/aneto/Projects/MARTE2-dev/Source/Core/BareMetal/]				
	L0Types/DjbHashFunction.cpp	100%	19 100%	4 -	0 9 +
	L0Types/Fnv1aHashFunction.cpp	100%	18 100%	4 -	0 13 +
	L0Types/HashFunction.cpp	100%	4 66.7%	3 -	0 15 +
	L1Portability/BinaryTree.h	100%	66 88.5%	139 -	0 36 +
35	L1Portability/Environm...Linux/BasicConsole.cpp	79.9%	224 76.2%	42 -	0 39
	L1Portability/Environm...Linux/BasicConsole.cpp	79.9%	224 76.2%	42 -	0
51	L1Portability/FastResourceContainer.cpp	83.5%	97 71.4%	7 -	0 55
	L1Portability/FastResourceContainer.cpp	83.5%	97 71.4%	7 -	0
68	! L1Portability/StaticList.h	100%	29 100%	32 -	0 72 !
	L1Portability/StaticList.h	100%	29 100%	88 -	0
81	! L2Objects/ClassMethodCallerT.h	95.3%	215 81.0%	727 -	0 85 !
	L2Objects/ClassMethodCallerT.h	95.3%	212 81.0%	727 -	0
85	L2Objects/ClassRegistryDatabase.cpp	81.9%	127 100%	15 -	0 89
	L2Objects/ClassRegistryDatabase.cpp	81.9%	127 100%	15 -	0
88	L2Objects/Introspection.cpp	73.3%	15 85.7%	7 -	0 92
	L2Objects/Introspection.cpp	73.3%	15 85.7%	7 -	0
89	L2Objects/IntrospectionEntry.cpp	87.4%	103 93.3%	15 -	0 93
	L2Objects/IntrospectionEntry.cpp	87.4%	103 93.3%	15 -	0
92	L2Objects/Object.cpp	88.5%	253 96.8%	31 -	0 96
	L2Objects/Object.cpp	88.5%	253 96.8%	31 -	0
94	! L2Objects/ObjectBuilderT.h	100%	8 68.9%	708 -	0 98 !
	L2Objects/ObjectBuilderT.h	100%	8 68.7%	716 -	0
101	! L2Objects/ReferenceCon...erFilterObjectName.cpp	97.1%	103 100%	11 -	0 105 !
	L2Objects/ReferenceCon...erFilterObjectName.cpp	96.7%	121 100%	11 -	0
102	L2Objects/ReferenceCon...erFilterReferences.cpp	100%	13 100%	5 -	0 106
	L2Objects/ReferenceCon...erFilterReferences.cpp	100%	13 100%	5 -	0
107	L2Objects/StructuredDataI.h	100%	6 75.0%	4 -	0 111
	L2Objects/StructuredDataI.h	100%	6 75.0%	4 -	0
117	! L3Streams/DoubleBufferedStream.cpp	86.6%	119 84.0%	25 -	0 121 !
	L3Streams/DoubleBufferedStream.cpp	88.9%	117 84.0%	25 -	0
118	! L3Streams/IOBuffer.cpp	95.1%	920 97.7%	44 -	0 122 !
	L3Streams/IOBuffer.cpp	95.0%	920 97.7%	44 -	0
120	L3Streams/IOBufferFloatPrint.cpp	84.3%	460 100%	29 -	0 124
	L3Streams/IOBufferFloatPrint.cpp	84.3%	460 100%	29 -	0
121	! L3Streams/IOBufferIntegerPrint.cpp	85.1%	442 93.5%	93 -	0 125 !
	L3Streams/IOBufferIntegerPrint.cpp	85.5%	442 93.5%	93 -	0
127	L3Streams/PrinterI.cpp	100%	17 88.9%	9 -	0 131
	L3Streams/PrinterI.cpp	100%	17 88.9%	9 -	0
129	L3Streams/SingleBufferedStream.cpp	86.0%	186 83.3%	24 -	0 133
	L3Streams/SingleBufferedStream.cpp	86.0%	186 83.3%	24 -	0
143	! L4Configuration/ConfigurationDatabase.cpp	98.4%	249 97.1%	35 -	0 147 !
	L4Configuration/ConfigurationDatabase.cpp	98.2%	223 97.1%	35 -	0
	!				148 !
	L4Configuration/ConfigurationDatabaseNode.cpp	98.7%	153 95.2%	21 -	0
158	! L4Configuration/TypeConversion.cpp	96.4%	610 95.2%	21 -	0 163 !
	L4Configuration/TypeConversion.cpp	95.8%	615 95.2%	21 -	0
197	! L5GAMs/RealTimeApplica...nfigurationBuilder.cpp	97.1%	2638 100%	55 -	0 202 !
	L5GAMs/RealTimeApplica...nfigurationBuilder.cpp	96.6%	2260 90.0%	50 -	0
198	! L5GAMs/RealTimeApplica...ConfigurationBuilder.h	100%	1 100%	1 -	0 203 !
	L5GAMs/RealTimeApplica...ConfigurationBuilder.h	100%	1 50.0%	2 -	0
203	! L6App/Environment/Linux/Bootstrap.cpp	97.3%	75 100%	6 -	0 208 !
	L6App/Environment/Linux/Bootstrap.cpp	94.4%	90 100%	6 -	0

205 ! L6App/RealTimeLoader.cpp	96.9%	64 66.7%	12	-	0	210 !
L6App/RealTimeLoader.cpp	95.3%	64 66.7%	12	-	0	
208 BasicFile.cpp	88.9%	280 93.9%	33	-	0	213
BasicFile.cpp	88.9%	280 93.9%	33	-	0	
211 BasicTCPSocket.cpp	88.7%	238 100%	25	-	0	216
BasicTCPSocket.cpp	88.7%	238 100%	25	-	0	
212 BasicUDPSocket.cpp	88.1%	118 95.7%	23	-	0	217
BasicUDPSocket.cpp	88.1%	118 95.7%	23	-	0	
213 ! Directory.cpp	88.8%	80 100%	15	-	0	218 !
Directory.cpp	87.5%	80 100%	15	-	0	
214 DirectoryScanner.cpp	89.1%	92 90.0%	10	-	0	219
DirectoryScanner.cpp	89.1%	92 90.0%	10	-	0	
220 File.cpp	85.7%	7 57.1%	7	-	0	225
File.cpp	85.7%	7 57.1%	7	-	0	
231 ! HttpProtocol.cpp	98.4%	547 96.3%	27	-	0	236 !
HttpProtocol.cpp	98.4%	550 96.3%	27	-	0	
241 EventSem.cpp	87.2%	141 100%	15	-	0	246
EventSem.cpp	87.2%	141 100%	15	-	0	
242 MutexSem.cpp	86.8%	121 100%	13	-	0	247
MutexSem.cpp	86.8%	121 100%	13	-	0	
249 ExceptionHandler.h	0.0%	2 0.0%	2	-	0	254
ExceptionHandler.h	0.0%	2 0.0%	2	-	0	
270 ! LoggerService.cpp	96.1%	76 100%	14	-	0	275 !
LoggerService.cpp	97.4%	76 100%	14	-	0	
278 ! StateMachine.cpp	95.3%	192 100%	16	-	0	283 !
StateMachine.cpp	95.9%	195 100%	16	-	0	
282 ! CircularBufferThreadInputDataSource.cpp	97.8%	510 94.7%	19	-	0	287 !
CircularBufferThreadInputDataSource.cpp	97.2%	534 94.7%	19	-	0	
285 ! MemoryMapAsyncTriggerOutputBroker.cpp	94.2%	257 100%	20	-	0	290 !
MemoryMapAsyncTriggerOutputBroker.cpp	94.9%	257 100%	20	-	0	
286 =====						291
=====						
287 !	Total: 96.0%	24072 87.7%	8k	-	0	292 !
	Total: 96.0%	23967 87.7%	8k	-	0	

GTest report

```
[-----] Global test environment tear-down
[=====] 4319 tests from 178 test cases ran. (292339 ms total)
[ PASSED ] 4319 tests.
```

Integration test review

Date of the review: 23/01/2020

Person who did the review: André Neto

Version of integration tests: 1.1.0

Result of review: N/A

List of non-conformities: N/A

Comments: Not performed.

Acceptance test review

Date of the review: 23/01/2020

Person who did the review: André Neto

Version of acceptance tests: 1.1.0

Result of review: N/A

List of non-conformities: N/A

Comments: Not performed.

History

#1 - 16.12.2019 15:48 - André Neto

- Assignee changed from André Neto to Luca Porzio

#2 - 23.01.2020 16:36 - André Neto

- Status changed from Code: Rev to Unit: Rev

#3 - 23.01.2020 18:32 - André Neto

- Description updated

- Assignee changed from Luca Porzio to André Neto

#4 - 28.02.2020 16:29 - André Neto

- Status changed from Unit: Rev to Closed

- Assignee deleted (André Neto)