

MARTe2-components - User story #590

SimulinkGAM

06.07.2020 09:18 - André Neto

Status: Closed	Start date: 06.07.2020
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

DESCRIBE CHANGES TODO

General

Information

The following files were detected as changed between branches develop and master

```
Lint/marte_components_flint_files.lnt
Source/Components/GAMs/Makefile.cov
Source/Components/GAMs/Makefile.inc
Source/Components/GAMs/SimulinkWrapperGAM/Makefile.cov
Source/Components/GAMs/SimulinkWrapperGAM/Makefile.gcc
Source/Components/GAMs/SimulinkWrapperGAM/Makefile.inc
Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.cpp
Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h
Source/Components/GAMs/SimulinkWrapperGAM/SimulinkWrapperGAM.cpp
Source/Components/GAMs/SimulinkWrapperGAM/SimulinkWrapperGAM.h
Test/Components/GAMs/Makefile.cov
Test/Components/GAMs/Makefile.inc
Test/Components/GAMs/SimulinkWrapperGAM/.gitignore
Test/Components/GAMs/SimulinkWrapperGAM/Makefile.cov
Test/Components/GAMs/SimulinkWrapperGAM/Makefile.gcc
Test/Components/GAMs/SimulinkWrapperGAM/Makefile.inc
Test/Components/GAMs/SimulinkWrapperGAM/SimulinkWrapperGAMTest.cpp
Test/Components/GAMs/SimulinkWrapperGAM/SimulinkWrapperGAMTest.cpp
Test/Components/GAMs/SimulinkWrapperGAM/SimulinkWrapperGAMTest.h
Test/Components/GAMs/SimulinkWrapperGAM/createTestModel.m
Test/GTest/Makefile.cov
Test/GTest/Makefile.gcc
```

OK: no errors found.

Requirements review

Date of the review: 08/11/2020

Person who did the review: TODO

Version of requirements: TODO

Result of review: TODO

List of non-conformities: TODO

Comments: TODO

Architecture & design review

Date of the review: 08/11/2020

Person who did the review: TODO

Version of architecture & design document: TODO

Result of review: TODO

List of non-conformities: TODO

Comments: TODO

Code and documentation review

Date of the review: 08/11/2020

Person who did the review: TODO

Version of source code: c459378586cc141d6d7dbc277acf23501b4030e8

Result of review: TODO

List of non-conformities:

Run flexelint and report TODO

Headers

ERR: Invalid @brief in file Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.cpp
ERR: Invalid @author in file Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.cpp
ERR: Invalid @brief in file Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h
ERR: Invalid @author in file Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h
ERR: Invalid #includes sorted in file Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h
ERR: Invalid @author in file Source/Components/GAMs/SimulinkWrapperGAM/SimulinkWrapperGAM.cpp
ERR: Invalid #includes sorted in file Source/Components/GAMs/SimulinkWrapperGAM/SimulinkWrapperGAM.cpp
ERR: Invalid @author in file Source/Components/GAMs/SimulinkWrapperGAM/SimulinkWrapperGAM.h
ERR: Invalid @author in file Test/Components/GAMs/SimulinkWrapperGAM/SimulinkWrapperGAMTest.cpp
ERR: Invalid @author in file Test/Components/GAMs/SimulinkWrapperGAM/SimulinkWrapperGAMTest.cpp
ERR: Invalid #includes sorted in file Test/Components/GAMs/SimulinkWrapperGAM/SimulinkWrapperGAMTest.cpp
ERR: Invalid @author in file Test/Components/GAMs/SimulinkWrapperGAM/SimulinkWrapperGAMTest.h

Lint includes

OK: All files are being included for linting
OK: no errors found.

Linter

ERR: /home/aneto/MARTE2-dev/MakeDefaults/Lint/marte_flint_exceptions.lnt 15
ERR: ./Source/Components/DataSources/EPICSPVA/EPICSPVAOutput.cpp:216:1: Info 766: Header file
'/home/aneto/MARTE2-dev/Source/Core/Scheduler/L5GAMs/MemoryMapAsyncOutputBroker.h' not used in module
'EPICSPVAOutput.cpp'
ERR: Note 974: Worst case function for stack usage: 'MARTE::MDSStructuredData!::Copy' is recursive, loop contains call to
'MARTE::MDSStructuredData!::Copy'. See [stack for a full report](#). [MISRA C++ Rule 7-5-4]

Doxygen

ERR: warning: Tag `XML_SCHEMA' at line 1788 of file `Doxyfile' has become obsolete.
ERR: warning: Tag `XML_DTD' at line 1794 of file `Doxyfile' has become obsolete.
ERR: warning: source ./Docs/Assets/Snippets/Parsing/MathGrammar.Il is not a readable file or directory... skipping.
ERR: /home/aneto/Projects/MARTE2-components/Source/Components/Interfaces/OPCUA/OPCUATypes.h:45: warning: Compound
OPCUA::NodeProperties is not documented.
ERR: /home/aneto/Projects/MARTE2-components/Source/Components/Interfaces/OPCUA/OPCUATypes.h:60: warning: Compound

OPCUA::ObjectProperties is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/Interfaces/EPICSPVA/EPICSPVAStructureData.h:354: warning: Member EPICSPVAStructureData::ReadArray< std::string >(epics::pvData::PVScalarArrayPtr scalarArrayPtr, AnyType &storedType, const AnyType &value) (function) of namespace MARTE is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/Interfaces/EPICSPVA/EPICSPVAStructureData.h:417: warning: Member EPICSPVAStructureData::WriteArray< std::string >(epics::pvData::PVScalarArrayPtr scalarArrayPtr, AnyType &storedType, const AnyType &value, const uint32 &size) (function) of namespace MARTE is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/Interfaces/OPCUA/OPCUATypes.h:54: warning: Member OPCUANodeSettings (typedef) of namespace OPCUA is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/Interfaces/OPCUA/OPCUATypes.h:68: warning: Member OPCUAObjectSettings (typedef) of namespace OPCUA is not documented.

ERR:
/home/aneto/Projects/MARTE2-components/Source/Components/DataSources/OPCUADataSource/OPCUAClientMethod.h:90: warning: argument 'nodePaths' of command @param is not found in the argument list of MARTE::OPCUAClientMethod::SetMethodRequest(const uint16 methodNamespaceIndex, StreamString methodPath)

ERR:
/home/aneto/Projects/MARTE2-components/Source/Components/DataSources/OPCUADataSource/OPCUAClientMethod.h:95: warning: The following parameters of MARTE::OPCUAClientMethod::SetMethodRequest(const uint16 methodNamespaceIndex, StreamString methodPath) are not documented:

ERR:
/home/aneto/Projects/MARTE2-components/Source/Components/DataSources/OPCUADataSource/OPCUAClientMethod.h:79: warning: argument 'nodePaths' of command @param is not found in the argument list of MARTE::OPCUAClientMethod::SetObjectRequest(const uint16 methodNamespaceIndex, StreamString methodPath)

ERR:
/home/aneto/Projects/MARTE2-components/Source/Components/DataSources/OPCUADataSource/OPCUAClientMethod.h:84: warning: The following parameters of MARTE::OPCUAClientMethod::SetObjectRequest(const uint16 methodNamespaceIndex, StreamString methodPath) are not documented:

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:127: warning: The following parameters of MARTE::SimulinkData::PrintData(const uint64 maxLength=0u, StreamString additionalText="") are not documented:

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:270: warning: Member runningOffset (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:271: warning: Member typeBasedSize (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:272: warning: Member offsetBasedSize (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:273: warning: Member CAPISize (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:275: warning: Member baseAddress (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:276: warning: Member lastSignalAddress (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:270: warning: Member runningOffset (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:271: warning: Member typeBasedSize (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:272: warning: Member offsetBasedSize (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:273: warning: Member CAPISize (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:275: warning: Member baseAddress (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:276: warning: Member lastSignalAddress (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:270: warning: Member runningOffset (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:271: warning: Member typeBasedSize (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:272: warning: Member offsetBasedSize (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:273: warning: Member CAPISize (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:275: warning: Member baseAddress (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:276: warning: Member lastSignalAddress (variable) of class MARTE::SimulinkPort is not documented.

ERR: /home/aneto/Projects/MARTE2-components/Source/Components/GAMs/SimulinkWrapperGAM/SimulinkClasses.h:292:

warning: explicit link request to 'offsetBasedSize' could not be resolved

ERR: /home/aneto/Projects/MARTe2-components/Source/Components/Interfaces/OPCUA/OPCUATypes.h:46: warning: Member attr (variable) of class OPCUA::NodeProperties is not documented.

ERR: /home/aneto/Projects/MARTe2-components/Source/Components/Interfaces/OPCUA/OPCUATypes.h:47: warning: Member value (variable) of class OPCUA::NodeProperties is not documented.

ERR: /home/aneto/Projects/MARTe2-components/Source/Components/Interfaces/OPCUA/OPCUATypes.h:48: warning: Member nodeId (variable) of class OPCUA::NodeProperties is not documented.

ERR: /home/aneto/Projects/MARTe2-components/Source/Components/Interfaces/OPCUA/OPCUATypes.h:49: warning: Member nodeName (variable) of class OPCUA::NodeProperties is not documented.

ERR: /home/aneto/Projects/MARTe2-components/Source/Components/Interfaces/OPCUA/OPCUATypes.h:50: warning: Member parentNodeId (variable) of class OPCUA::NodeProperties is not documented.

ERR: /home/aneto/Projects/MARTe2-components/Source/Components/Interfaces/OPCUA/OPCUATypes.h:51: warning: Member parentReferenceNodeId (variable) of class OPCUA::NodeProperties is not documented.

ERR: /home/aneto/Projects/MARTe2-components/Source/Components/Interfaces/OPCUA/OPCUATypes.h:61: warning: Member attr (variable) of class OPCUA::ObjectProperties is not documented.

ERR: /home/aneto/Projects/MARTe2-components/Source/Components/Interfaces/OPCUA/OPCUATypes.h:62: warning: Member nodeId (variable) of class OPCUA::ObjectProperties is not documented.

ERR: /home/aneto/Projects/MARTe2-components/Source/Components/Interfaces/OPCUA/OPCUATypes.h:63: warning: Member nodeName (variable) of class OPCUA::ObjectProperties is not documented.

ERR: /home/aneto/Projects/MARTe2-components/Source/Components/Interfaces/OPCUA/OPCUATypes.h:64: warning: Member parentNodeId (variable) of class OPCUA::ObjectProperties is not documented.

ERR: /home/aneto/Projects/MARTe2-components/Source/Components/Interfaces/OPCUA/OPCUATypes.h:65: warning: Member parentReferenceNodeId (variable) of class OPCUA::ObjectProperties is not documented.

Unit test review

Date of the review: 08/11/2020

Person who did the review: TODO

Version of source code: c459378586cc141d6d7dbc277acf23501b4030e8

Result of coverage tests review: TODO

Result of functional tests review: TODO

Result of review: TODO

Comments: TODO

List of non-conformities:

Functional tests

ERR: SimulinkClasses:Actualise is not tested

ERR: SimulinkClasses:AddSignal is not tested

ERR: SimulinkClasses:CopyData is not tested

ERR: SimulinkClasses:IsContiguous is not tested

ERR: SimulinkClasses:PrintData is not tested

ERR: SimulinkClasses:PrintPort is not tested

ERR: SimulinkClasses:PrintSignal is not tested

ERR: SimulinkClasses:SimulinkData1 is not tested

ERR: SimulinkClasses:SimulinkInputPort is not tested

ERR: SimulinkClasses:SimulinkOutputPort is not tested

ERR: SimulinkClasses:SimulinkPort is not tested

ERR: SimulinkClasses:SimulinkSignal is not tested

ERR: Test file not found: Test/Components/GAMs/SimulinkWrapperGAM/SimulinkClassesGTest.cpp

GTest

ERR: Number of errors has increased. Number of tests: 1709. Current branch: 6. Reference branch: 5

OK: Number of tests unchanged. Current branch: 1709. Reference branch: 1709

Coverage

OK: No coverage errors found

OK: no errors found.

Integration test review

Date of the review: 08/11/2020

Person who did the review: TODO

Version of source code: c459378586cc141d6d7dbc277acf23501b4030e8

Result of review: N/A

List of non-conformities: N/A

Comments: N/A

Acceptance test review

Date of the review: 08/11/2020

Person who did the review: TODO

Version of source code: c459378586cc141d6d7dbc277acf23501b4030e8

Result of review: N/A

List of non-conformities: N/A

Comments: N/A

History

#1 - 07.10.2020 09:46 - André Neto

- Status changed from Code: Impl to Unit: Rev

#2 - 07.10.2020 09:46 - André Neto

- Assignee changed from Nicolo Ferron to Giuseppe Avon

#3 - 20.10.2020 07:25 - Giuseppe Avon

The scenario where structured signals must be seen as a byte array was extended. Using the already existing detection scheme and structure, which imaged Simulink model structure, a scenario where signals are treated one-by-one is added. Handling is achieved by filling structure with already available addresses and a search function cycles over the GAM signals to do a name matching The approach was further extended, to allow signal skipping (Simulink model ports > GAM ports) and to eventually enforce matching (Simulink model ports == GAM ports).

#4 - 04.11.2020 08:03 - André Neto

- Assignee changed from Giuseppe Avon to André Neto

#5 - 08.11.2020 11:37 - André Neto

- Description updated

#6 - 08.11.2020 11:51 - André Neto

- Status changed from Unit: Rev to Closed

- Assignee deleted (André Neto)