

MARTe2-core - User story #1523

LoggerService in MARTeApp

12.07.2023 15:41 - André Neto

Status: Closed	Start date: 12.07.2023
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 Make the MARTeApp use a LoggerService-like interface to allow setting the error formatting fields. <ul style="list-style-type: none">Expose LoggerConsumerI::PrintToStream as a public (static?) function<ul style="list-style-type: none">Modify from LoggerPage * const logPage to ErrorManagement::ErrorInformation errorInfoModify the MARTeApp MainErrorProcessFunction to use the method above.Modify the MARTe Loader to read the logging Format, to decide if it should print raw or encoded and to select if it should include the keys (in the case of encoded).	

History

#1 - 27.06.2024 15:19 - André Neto

- Assignee changed from André Neto to Giuseppe Avon

#2 - 01.07.2024 12:07 - Giuseppe Avon

The implementation deviated from the user story description:

- A new PlainLoggerService class was implemented. It retraces the LoggerService class but without the asynchronous service feature. The PlainLoggerService catches the SetErrorProcessFunction and using a binder singleton class (PlainLoggerBinderSingleton) takes all the logging functions into it. The prints are served synchronously. The PlainLoggerService bypasses the Logger to prepare itself a LoggerPage and send it to the subscribed LoggerConsumers.

- To inject a platform specific string (mainly for the Aggregator Board use-case) the errorInfo class was decorated with an additional field (platformSpecificString) which is taken directly from the platform using an hook (const char* GetPlatformSpecificString()).

- Another format specifier was added to the LoggerConsumerI (P with key |P=) to add the platform specific string to the logger output.

Initial commit code is * 1523-plain-loggerservice a9da6df4

At this stage it is missing proper QA proc

#3 - 02.07.2024 19:53 - Giuseppe Avon

The singleton uses a MARTe StaticList to hold PlainLoggerService instances and also tracks whenever the number of instances is above or below 1 (one). When the first PlainLoggerService is registered into the singleton, the ErrorProcessFunction is redirected to the singleton mechanism, conversely when the last PlainLoggerService is unregistered, the previous ErrorProcessFunction is reinstated.

The term previous indicates the function that was registered before any PlainLoggerService and related mechanisms are created. Actually this definition can be found in the MARTeApp.

Current commit code * 1523-plain-loggerservice 8ae87f213

Linting gives 0 related errors (run on entire MARTe2)

Coverage hits 98.2% on PlainLoggerService.cpp and 100% on its header.

Will follow a final update with the QA results after last validation round.

#4 - 03.07.2024 10:17 - Giuseppe Avon

- Assignee changed from Giuseppe Avon to André Neto

- Status changed from Code: Impl to Code: Rev

Final commit, created some duplicated test-cases, adhering to QA schemes, fix some minor header issues and removed dead comments.

- 1523-plain-loggerservice dc3796ff0

Relevant coverage report

LoggerService.cpp

96.4%96.4%

96.4 % 81 / 84 100.0 % 14 / 14

PlainLoggerService.cpp

98.2%98.2%

98.2 % 108 / 110 100.0 % 18 / 18

Lint report

FlexeLint for C/C++ (Unix) Vers. 9.00L, Copyright Gimpel Software 1985-2014

```
./MakeDefaults/Lint/marte_flint_exceptions.lnt 15 Warning 686: Option  
'-elib(*)' is suspicious because of 'the likelihood of causing meaningless  
output'; receiving a syntax error in a library file most likely means  
something is wrong with your Lint configuration
```

```
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 C++ Rule 7-5-4]
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#5 - 03.07.2024 11:21 - Giuseppe Avon

- File *TestPlainLoggerService.cfg* added

#6 - 03.07.2024 17:16 - André Neto

- Assignee deleted (*André Neto*)

- Status changed from Code: Rev to Closed

Merged into develop in 8156f8f7

#7 - 06.08.2024 10:01 - André Neto

Merged again c6d64d9e48576983c300015363a61e2ae85679f5

Files

TestPlainLoggerService.cfg	2.38 KB	03.07.2024	Giuseppe Avon
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