Problem

How do I change the name GlobalLogger or StaticMethodLogger within C++ logs?

Solution

A: There is more than one way to do this but only one is recommended.

To answer this question completely, a little background on how the ACS logging system in C++ works is needed. Basically all the non-static context logging macros defined within *loggingACEMACROS.h* are dependent upon a single function or method being available:

```
Logging::LoggerSmartPtr
getLogger();
```

which ACS has implemented in the *logging* library already. The name of the *Logger* object returned by this ACS-implemented function is *GlobalLogger*. The macros themselves then just make calls to <code>getLogger()->log(...)</code> which of course is completely hidden.

A positive consequence of this is that:

- one can implement a member function within **their** own class named <code>getLogger</code> having a signature identical to the <code>getLogger()</code> function described above
- the ACS logging macros will then use the Logger object returned by your class's getLogger method instead of the globally available getLogg er () function
- a trivial implementation of getLogger which just changes the name of the SourceObject (i.e., "GlobalLogger") could be something like:

```
protected:
   Logging::Logger::LoggerSmartPtr
   getLogger()
   {
    return ::getNamedLogger("whatever name I choose");
   }
}
```

In this case, all we do is use another ACS-provided function to create a Logger with a name of our choice.

As for changing the name of the Logger used by static logging macros:

- implement a static method called getNamedLogger following the signature defined in loggingGetLogger.h
- within your getNamedLogger implementation, ignore the name parameter being passed in entirely. Instead, use whatever name you want.
- a sample implementation of getNamedLogger could be:

```
Logging::Logger::LoggerSmartPtr
getNamedLogger(const std::string& loggerName)
{
    return ::getNamedLogger("my name and not loggerName");
}
```

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