

# 20190111

☑熟悉log4cpp的用法，动手敲代码

<http://blog.csdn.net/liuhong135541/article/category/1496383>

log4cpp配置及测试用例

```
Configurator.hh           RemoteSyslogAppender.hh
config-win32.h           RollingFileAppender.hh
convenience.h            SimpleConfigurator.hh
Export.hh                SimpleLayout.hh
FactoryParams.hh         StringQueueAppender.hh
FileAppender.hh          SyslogAppender.hh
Filter.hh                threading
FixedContextCategory.hh  Timestamp.hh
HierarchyMaintainer.hh   TriggeringEventEvaluatorFactory.hh
IdsaAppender.hh          TriggeringEventEvaluator.hh
LayoutAppender.hh        Win32DebugAppender.hh
Layout.hh

kyle@ubuntu:log4cpp$ cd ~/Documents/Cpractice/20190111
kyle@ubuntu:20190111$ ls
log4cpp  log4cpp_Homework
kyle@ubuntu:20190111$ cd log4cpp
kyle@ubuntu:log4cpp$ ls
log4cpptest  Log4cppTest.cc  program.log
kyle@ubuntu:log4cpp$ ./log4cpptest
1548051797 ERROR   : root error
1548051797 ERROR sub1 : sub1 error
1548051797 WARN sub1 : sub1 warn
1548051797 WARN   : 1 + 1 == two ?
1548051797 ERROR   : Streamed root error
1548051797 ERROR sub1 : Streamed sub1 error
1548051797 WARN sub1 : Streamed sub1 warn
1548051797 ERROR   : Another streamed error
kyle@ubuntu:log4cpp$
```

按级别输出测试

```
kyle@ubuntu:log4cpp_Homework$g++ log4cpp1.cc -llog4cpp -lpthread
kyle@ubuntu:log4cpp_Homework$./a.out
2019-01-21 21:07:00,546 maCat [FATAL] this is an emerg message
2019-01-21 21:07:00,547 maCat [FATAL] this is an fatal message
2019-01-21 21:07:00,547 maCat [ALERT] this is an alert message
2019-01-21 21:07:00,547 maCat [ERROR] this is an error message
2019-01-21 21:07:00,547 maCat [INFO] this is an info message
2019-01-21 21:07:00,547 maCat [CRIT] this is an crit message
2019-01-21 21:07:00,547 maCat [DEBUG] this is an debug message
kyle@ubuntu:log4cpp_Homework$exit
exit
```

```
kyle@ubuntu:log4cpp_Homework$g++ log4cpp1.cc -llog4cpp -lpthread
kyle@ubuntu:log4cpp_Homework$./a.out
2019-01-21 21:11:17,194 maCat [FATAL] this is an emerg message
2019-01-21 21:11:17,194 maCat [FATAL] this is an fatal message
2019-01-21 21:11:17,195 maCat [ALERT] this is an alert message
2019-01-21 21:11:17,195 maCat [ERROR] this is an error message
2019-01-21 21:11:17,195 maCat [CRIT] this is an crit message
kyle@ubuntu:log4cpp_Homework$
```

## rolling实现

```
1wd.log
1 2019-01-21 21:07:00,546 maCat [FATAL] this is an emerg message
2 2019-01-21 21:07:00,547 maCat [FATAL] this is an fatal message
3 2019-01-21 21:07:00,547 maCat [ALERT] this is an alert message
4 2019-01-21 21:07:00,547 maCat [ERROR] this is an error message
5 2019-01-21 21:07:00,547 maCat [INFO] this is an info message
6 2019-01-21 21:07:00,547 maCat [CRIT] this is an crit message
7 2019-01-21 21:07:00,547 maCat [DEBUG] this is an debug message
8 2019-01-21 21:11:17,194 maCat [FATAL] this is an emerg message
9 2019-01-21 21:11:17,194 maCat [FATAL] this is an fatal message
10 2019-01-21 21:11:17,195 maCat [ALERT] this is an alert message
11 2019-01-21 21:11:17,195 maCat [ERROR] this is an error message
12 2019-01-21 21:11:17,195 maCat [CRIT] this is an crit message
```

### log\_system rolling

```
kyle@ubuntu:log4cpp_Homework$cd rolling/
kyle@ubuntu:rolling$ls
a.out          rollingwd.log      rollingwd.log.2
log4cpp1.cc    rollingwd.log.1    rollingwd.log.3
kyle@ubuntu:rolling$
```

☑封装log4cpp,使用起来比较方便,如下所示。

输出的日志信息能同时输出到终端和文件

```
1  int main(void)
2  {
3      cout << "hello,world"<<endl;
4
5      logInfo("Message"); //或者
6      logError("Message");
7      logWarn("Message");
8      logDebug("Message");
9  }
```

加分项：输出的日志信息中最好能有文件的名字，函数的名字及其所在的行号 //使用单例模式 class Mylogger {  
public: void warn(const char \* msg); void error(const char \* msg); void debug(const char \* msg); void  
info(const char \* msg);

```
1      private:
2          Mylog();
3          ~Mylog();
4      private:
5          //.....
6  };
7
8      Mylog * log = Mylog::getInstance();
9      log->warn("hello");
```

```
kyle@ubuntu:log_system$g++ *.cc -llog4cpp -lpthread
kyle@ubuntu:log_system$./a.out
log()
2019-01-23 16:05:31,447 Category [WARN] [Testlogsystem.cc:test2:34] this is a error message!
2019-01-23 16:05:31,447 Category [INFO] [Testlogsystem.cc:test2:35] this is a error message!
2019-01-23 16:05:31,447 Category [DEBUG] [Testlogsystem.cc:test2:36] this is a error message!
kyle@ubuntu:log_system$exit
exit

[No write since last change]
kyle@ubuntu:log_system$g++ *.cc -llog4cpp -lpthread
kyle@ubuntu:log_system$./a.out
log()
2019-01-23 16:06:06,698 Category [ERROR] [Testlogsystem.cc:test0:16] this is an error messages
!
2019-01-23 16:06:06,699 Category [WARN] this is an warn messages!
2019-01-23 16:06:06,700 Category [INFO] this is an info messages!
2019-01-23 16:06:06,700 Category [DEBUG] this is an debug messages!
Logsystem::Priority::WARN = 301
Logsystem::Priority::ERROR= 300
Logsystem::Priority::INFO= 302
Logsystem::Priority::DEBUG= 303
kyle@ubuntu:log_system$exit
exit

[No write since last change]
kyle@ubuntu:log_system$g++ *.cc -llog4cpp -lpthread
kyle@ubuntu:log_system$./a.out
Testlogsystem.cc 29 test1
```

