Exiv2 - Bug #1150

Unable to build for Mac OSX 10.6

09 Jan 2016 16:32 - Max Pozdeev

Status:	Closed	**Start date:**	09 Jan 2016
Priority:	Normal	**Due date:**	
Assignee:	Robin Mills	**% Done:**	100%
Category:	build	**Estimated time:**	2.00 hours
Target version:	0.26		

Description

I can not build the library from latest revision for the Mac OSX 10.6.
I'm using a Mac with OSX 10.10 64bit, so I put the line "-stdlib=libstdc++ -mmacosx-version-min=10.6" into CPPFLAGS, LDFLAGS, etc.
The error:

```
actions.cpp:1973:26: error: no viable conversion from 'const std::string' (aka 'const basic_string
<char>')
      to 'const char *'
              fb.open (target,std::ios::out);
                       ^~~~~~
/Applications/Xcode.app/Contents/Developer/Platforms/MacOSX.platform/Developer/SDKs/MacOSX10.9.sdk
/usr/include/c++/4.2.1/fstream:286:24: note:
      passing argument to parameter '__s' here
      open(const char* __s, ios_base::openmode __mode);
                       ^
```

Related issues:

Related to Exiv2 - Feature #1149: Support for metadata in FLIR One thermal im...	**New**	**09 Jan 2016**

Associated revisions

Revision 4177 - 10 Jan 2016 10:33 - Robin Mills

#1150. Fixed build breaker on elderly Macs (10.6 and earlier).

History

#1 - 09 Jan 2016 22:28 - Robin Mills

- Category set to build

- Status changed from New to Assigned

- Assignee set to Robin Mills

- Target version set to 0.26

- % Done changed from 0 to 50

- Estimated time set to 2.00 h

Max. Thanks for letting me know about this. I was very surprised by this because I obtained that code from a very credible source:
http://www.cplusplus.com/reference/ostream/ostream/ostream/

The quick fix is to change:

```
fb.open (target,std::ios::out);
```

to:

```
fb.open (target.c_str(),std::ios::out);
```

However, I'm uneasy about that. c_str() is a legacy thing and should be avoided. I'll have a proper look at this on Sunday.

#2 - 10 Jan 2016 10:56 - Robin Mills

- Status changed from Assigned to Resolved

- % Done changed from 50 to 100

Fix submitted: [r4177](#)

Good News, this code was broken on the buildsever. I submitted the code and went to the movies. It had only been on the trunk for an hour when you raised this matter. So, I would have discovered this when I got home from the movies!

I've replaced the filebuf code in src/actions.cpp:

```
// http://www.cplusplus.com/reference/ostream/ostream/ostream/
std::filebuf fb;
fb.open (target.c_str(),std::ios::out);
std::ostream os(&fb);
sourceImage->printStructure(os,Exiv2::kpsXMP);
fb.close();
```

with:

```
// http://www.cplusplus.com/doc/tutorial/files/
std::ofstream os;
os.open(target.c_str());
sourceImage->printStructure(os,Exiv2::kpsXMP);
os.close();
```

Which is shorter and more obvious. I need the c_str() on Tiger and Cygwin. It may be possible to detect the version of STL and only include the c_str() when essential, however I'll investigate that possibility if a bug is reported which implicates this code. For the moment it builds and passes the test suite on our supported platforms. http://exiv2.dyndns.org:8080/job/Exiv2-trunk/2348/

#3 - 10 Jan 2016 19:22 - Max Pozdeev

Thank you, it works.

#4 - 01 Feb 2016 11:35 - Robin Mills

- Status changed from Resolved to Closed