

Exiv2 - Bug #634

Locking error on windows when updating a TIFF file with MemoryMapping enabled

17 May 2009 16:41 - Robin Mills

Status:	Closed	Start date:	17 May 2009
Priority:	Normal	Due date:	
Assignee:	Robin Mills	% Done:	100%
Category:	basicio	Estimated time:	0.00 hour
Target version:	0.19		
Description			
<pre>C:\gnu.old\exiv2\msvc\bin\Debug>exiv2 -a 1:00:00 ad \R.tiff Exiv2 exception in adjust action for file \R.tiff: \R.tiff: Failed to open file (w+b): Invalid argument (errno = 22)</pre>			
<p>The cause is in basicio.cpp where the FileIo::close() method does not call munmap() (it defers munmap() to the destructor). I've moved the call to unmap from the destructor to close() and everybody's happy.</p>			
<p>I don't believe MM creates a lock on unix, so this hasn't been seen until MM was added on Windows. Windows sets a lock on a MM file and causes tiffimage.cpp#180 ->transfer to fail when it tries to open a writable FILE* to the target file while holding a readonly lock.</p>			
<p>I also found a bug in mmap.cpp in the array indexing which I've fixed in the same commit (although the change to mmap.cpp was not responsible for this bug).</p>			
<p>The correct behavior (as before on Unix) is now:</p> <pre>C:\gnu\exiv2\msvc\bin\Debug>exiv2 -a 1:00:00 ad \R.tiff C:\gnu\exiv2\msvc\bin\Debug>exiv2 -pt \R.tiff grep -i date Exif.Image.DateTime Ascii 20 2009:04:26 11:38:18 Exif.Photo.DateTimeOriginal Ascii 20 2009:04:26 11:38:18 Exif.Photo.DateTimeDigitized Ascii 20 2009:04:26 11:38:18</pre>			
<pre>C:\gnu\exiv2\msvc\bin\Debug>exiv2 -a 1:00:00 ad \R.tiff C:\gnu\exiv2\msvc\bin\Debug>exiv2 -pt \R.tiff grep -i date Exif.Image.DateTime Ascii 20 2009:04:26 12:38:18 Exif.Photo.DateTimeOriginal Ascii 20 2009:04:26 12:38:18 Exif.Photo.DateTimeDigitized Ascii 20 2009:04:26 12:38:18 C:\gnu\exiv2\msvc\bin\Debug></pre>			
Related issues:			
Related to Exiv2 - Feature #579: Implement memory mapping for Windows platforms			Closed

Associated revisions

Revision 1799 - 17 May 2009 16:41 - Robin Mills

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Revision 1807 - 29 May 2009 22:29 - Andreas Huggel

Prevent switchMode() from calling itself (fixes an incompatibility of the changes for #634 with the code to write to memory-mapped files.)

Revision 1832 - 19 Jun 2009 21:26 - Andreas Huggel

Removed r1799, r1797 from trunk (#634, #579)

History

#1 - 27 Dec 2009 16:44 - Andreas Huggel

- Status changed from New to Resolved

- Target version changed from 1.0 to 0.19

- % Done changed from 0 to 100

#2 - 30 Dec 2009 07:50 - Andreas Huggel

- Status changed from Resolved to Closed