

DCMTK - Bug #427

JPEG Decoder does not report an error with malformed pixel data

2012-06-27 10:12 - Jörg Riesmeier

Status:	Closed	Start date:	2012-06-27
Priority:	High	Due date:	
Assignee:	Michael Onken	% Done:	100%
Category:	Library	Estimated time:	0:00 hour
Target version:	3.6.2	Compiler:	
Module:	dcmjpeg und andere?		
Operating System:			
Description			
see: http://forum.dcmkt.org/viewtopic.php?f=1&t=3475			
Extract from the dump:			
<pre>(0002,0010) UI =JPEGLossless:Non-hierarchical-1stOrderPrediction # 22, 1 TransferSyntaxUID ... (7fe0,0010) OW fffe\xe000\0000\0000\fffe\xe000\b39a\0003\d8ff\xc3ff\0b00\0210\0200... # 242610, 1 PixelData</pre>			
Pixel data on the main dataset level is not encapsulated as Pixel Items. You won't get any warnings or errors from using dcmjpeg on such a file, but the pixel data is not decompressed, since the decoder assumes that it is already decompressed (for instance in Icon Image Sequence).			
The same problem will probably show up in other supported compression types in DCMTK.			

History

#1 - 2013-04-28 23:59 - Andrew Chiw

- Subject changed from *JPEG-Decoder meldet keinen Fehler bei fehlerhafter Kodierung der Pixel-Daten* to *JPEG Decoder does not report an error with malformed pixel data*

#2 - 2013-10-24 10:05 - Jörg Riesmeier

Also see this posting: <http://forum.dcmkt.org/viewtopic.php?f=1&t=3842&p=15299#p15299>

#3 - 2014-08-04 11:56 - OFFIS DICOM Team

- Assignee set to Michael Onken

If the transfer syntax is "encapsulated" and pixel data on main dataset level is "uncompressed" (e.g. length other than undefined), then the decoder should bail out with an error.

Note that uncompressed pixel data within a compressed dataset is permitted in the Icon Image Sequence, so this error should only be triggered on the main dataset level.

#4 - 2017-01-10 18:41 - Jörg Riesmeier

- Description updated

#5 - 2017-02-02 10:45 - Michael Onken

The forum posting denoted under bullet 2 (<http://forum.dcmkt.org/viewtopic.php?f=1&t=3842&p=15299#p15299>) refers to a different problem, which was handled in Bug #571.

#6 - 2017-02-03 13:08 - Michael Onken

- Status changed from New to Closed

- % Done changed from 0 to 100

Closed with commit 1677f2.

Test files are found in OFFIS' (private) image collection under the related issue number.