

DCMTK - Bug #860

Incorrect conversion of numeric\_limits<double>::max by OFStandard::ftoa()

2018-11-30 15:40 - Marco Eichelberg

Status:	Closed	Start date:	2018-11-30
Priority:	Normal	Due date:	
Assignee:	Marco Eichelberg	% Done:	100%
Category:	Library	Estimated time:	30:00 hours
Target version:		Compiler:	
Module:	ofstd	Operating System:	
Description			
<p>While writing some unit tests, I've observed a potential issue with ofstd::ftoa(). When reading a value from a tag of VR: FD to OFstring, the value represented by the string is incorrect, if the value of the tag is the upper boundary of double (std::numeric_limits&lt;double&gt;::max). While the value in the tag is 1.7976931348623157e+308, the value of the string is 1.7976931348623167e+308. Now the string cannot be converted to double (e.g. using std::stod), because it exceeds the representable maximum of double. The conversion seems to be correct when using sprintf instead of ftoa.</p> <p>Reported by DCMTK forum user "FKupsch": <a href="https://forum.dcmkt.org/viewtopic.php?f=1&amp;t=4806">https://forum.dcmkt.org/viewtopic.php?f=1&amp;t=4806</a></p>			

History

#1 - 2020-05-25 13:29 - Michael Onken

- Target version deleted (3.6.6)

#2 - 2024-07-27 18:26 - Marco Eichelberg

- Status changed from New to Closed

- Assignee set to Marco Eichelberg

- % Done changed from 0 to 100

- Estimated time set to 30:00 h

Closed by commit #3a8e3bc8e.