

DCMTK - Bug #1083

Issue with explicit selection of GNU iconv library

2023-08-16 13:44 - Marco Eichelberg

Status:	New	Start date:	2023-08-16
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:	Library and Apps	Estimated time:	0:00 hour
Target version:		Compiler:	
Module:	CMake		
Operating System:			

Description

DCMTK currently supports four alternative libraries for handling character set conversions:

- GNU iconv
- libc iconv, i.e. an iconv() function available in libc
- ICU
- DCMTK's built-in oficonv module, which was introduced with DCMTK 3.6.8, which is the new default

The desired library can be selected by passing a CMake variable:

```
cmake -DDCMTK_ENABLE_CHARSET_CONVERSION:STRING=DCMTK_CHARSET_CONVERSION_ICONV
```

It has been observed that on a Linux platform where the GNU iconv library is not installed, and cmake is called as shown above, DCMTK is compiled with stdlibc iconv support, but the unit tests for GNU libiconv are executed, causing test failures in three test cases.

Apparently, despite falling back to libc iconv, CMake retains some #defines indicating that GNU libiconv has been used.

This should be checked, and fixed. Manually selecting GNU libiconv should cause a CMake error if GNU libiconv is not found.