

DCMTK - Bug #1131

Definition of `ssize_t` on Windows is incorrect

2024-07-22 12:25 - Marco Eichelberg

Status: Closed	Start date: 2024-07-22
Priority: Normal	Due date:
Assignee: Marco Eichelberg	% Done: 100%
Category:	Estimated time: 0:00 hour
Target version:	Compiler:
Module:	
Operating System:	

Description

Currently, DCMTK defines `ssize_t` on platforms that do not define it themselves, such as Windows, like this:

```
/* Define `ssize_t' to `long' if <sys/types.h> does not define. */
#define HAVE_NO_TYPEDEF_SSIZE_T
#ifdef HAVE_NO_TYPEDEF_SSIZE_T
#define ssize_t long
#endif
```

On 64-Bit Windows, however, `size_t` is a 64 bit integer, so `ssize_t` should also be 64 bit. Windows actually has a typedef for `SSIZE_T` (in uppercase), which is defined as:

```
#if defined(_WIN64)
    typedef __int64 ssize_t;
#else
    typedef long ssize_t;
#endif
```

A more comprehensive solution might be desirable to cover possible other 64-bit platforms where no `ssize_t` is defined. This may follow the definition of `Sint64` in `dcmtd/ofstd/oftypes.h`, which however is also rather complex.

Reported 2024-07-15 by Helmut Steiner <helmut@shl.at>.

History

#1 - 2024-08-09 18:09 - Marco Eichelberg

- Status changed from New to Closed
- Assignee set to Marco Eichelberg
- % Done changed from 0 to 100

Closed by commit #5ca58cb6e.