Doc: WG21/N1036
X3J16/96-0218
Date: 13-Nov-96
Reply To: Chuck Allison
John Benito

Clause 16 Edits

NOTE: The term "shall" means something different in the C standard than in the C++ standard working paper. Clause 16 (Preprocessing Directives) was essentially pasted from the C standard. The following edits relax the "shall-ness" of items that were not constraints in the C standard. In most cases, failure to meet the indicated requirement results in undefined behavior.

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16 Preprocessing directives [cpp]

<text omitted>

16.2 Source file inclusion **[cpp.include]**

<text omitted>

Paragraph 4 - Sentence 4:

If the directive resulting after all replacements does not match one of the two previous forms, the result is undefined.

Paragraph 5

The mapping between the delimited sequence and the external source file name is implementation-defined. The implementation provides unique mappings for sequences consisting of one or more nondigits (2.10) followed by a period (.) and a single non-digit. <Third sentence unchanged>.

<text omitted>

16.4 Line control **[cpp.line]**

Paragraph 3 - Sentence 2:

If the digit sequence specifies zero or a number greater than 32767, the result is undefined.

Paragraph 5 - Sentence 3:

If the directive resulting after all replacements does not match one of the two previous forms, the result is undefined – otherwise the result is processed as appropriate.

<text omitted>

16.8 Predefined macro names **[cpp.predefined]**

<NOTE: This section was not a "constraint section" in the C standard>

Paragraph 1:

<text omitted>

__DATE__
The date of translation of the source file (a character string literal of the form **"Mmm dd yyyy"**, where the names of the months are the same as those generated by the **asctime** function, and the first character of **dd** is a space character if the value is less than 10). If the date of translation is not available, an implementation-defined valid date is supplied.

__TIME__
The time of translation of the source file (a character string literal of the form **hh:mm:ss"** as in the time generated by the **asctime** function). If the time of translation is not available, an implementation-defined valid time is supplied.

__STDC__
Whether **__STDC__** is predefined and if so, what its values is, are implementation-defined.

<text omitted>

Paragraph 3:

If any of the above pre-defined macro names, or the identifier **defined**, is the subject of a **#define** or a **#undef** preprocessing directive, the result is undefined. <omit sentence 2 – covered in 17.3.3.1.2>.