

The New C Standard (Excerpted material)

An Economic and Cultural Commentary

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3.10

diagnostic message

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message belonging to an implementation-defined subset of the implementation's message output

Commentary

There is no requirement that the diagnostic message say anything of consequence. An implementation could choose to play a tune. Market forces usually dictate that the quality of most implementation diagnostic messages be more informative.

Common Implementations

Most implementations attempt to localize the construct being diagnosed. Localization usually occurs to the extent of giving a line number in the source code and an offset within that line. In some cases, for instance during macro expansion, the exact line number or character offset within a line may not be clear-cut.

All vendors like to think that their diagnostic messages are meaningful to developers. Diagnostic messages sometimes include a reference to what is considered to be the appropriate section of the C Standard.

Example

```

1 void f(int valu)
2 {
3 int log;
4
5 /* ... */
6 if (valu == 99)
7 {
8 int loc;
9 /* ... */
10 }
11
12 valu = loc;
13 /*
14 * What diagnostic is applicable to the previous statement:
15 *
16 * o loc not declared,
17 * o statement valu=loc should occur before prior closing brace,
18 * o Previous closing brace should appear after this statement,
19 * o Identifier log misspelled as loc.
20 */
21 }
```

macro replacement

References