

Title: Tag Compatibility
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Abstract:

Currently, two structure, union, and enumeration types declared in separate translation units ignore the tag name when determining if the two types are compatible. The language is better specified if the tag names are considered for all type compatibility (except if no tag name is specified).

Proposal: Change the following words in the current C Standard:

6.1.2.6 Compatible Type and composite type

From:

Moreover, two structure, union, or enumeration types declared in separate translation units are compatible if they have the same number of members, the same member names, and compatible member types; for two structures, the members shall be in the same order; for two structures or unions, the bit-fields shall have the same widths; for two enumerations, the members shall have the same values.

To:

Moreover, two structure, union, or enumeration types declared in separate translation units are compatible if their tags and members satisfy the following requirements. If both are declared with tags, the tags shall be declared with the same identifier. There shall be a one-to-one correspondence between their members such that each pair of corresponding members are declared with compatible types, and such that if one member of a corresponding pair is declared with a name, the other member is declared either without a name, or with the same name. For two structures, corresponding members shall be declared in the same order. For two structures or unions, corresponding bit-fields shall have the same widths. For two enumerations, corresponding members shall have the same values.

Comments:

The above proposal permits an unnamed struct, union or enum to be compatible with a named one. It appears the committee favors this approach.