From: Malcolm Cohen

Subject: Issue 284 and some items from 00-301

Date: 11th December 2000

1. Introduction

Issue 284 points out some problems with component accessibility. A slight rewording is needed.

Also, Van notes some problems with accessibility in 00-301, with "suboptimal" edits. These are items 39:14-17, 39:42+, 41:19+, 72:20 and 98:35+.

2. Discussion

There is a section (14.1.2.5) which ties together the scoping rules for components, type parameters and bindings. Even in F95 this section was incomplete (some rules were in 4.4.1), but in the current draft some rules have just slipped through the cracks.

The best solution is to continue to specify what the accessibility is for these entities in 4.5.1.8, and to specify the concomitant semantics and requirements in 14.1.2.5. Note that this satisfies Van's desires for creeping constraintism (because the scoping rules have the force of constraints) without littering the syntax rules with lots of separate complicated constraints.

3. Edits to 00-007r3

[39:14-17] Delete constraint.

{This constraint is repulsively worded and partly redundant. We'll do the non-redundant parts properly below.}

[39:42+] Insert constraint

"Constraint: The PRIVATE statement is permitted only if the type definition is within the specification part of a module."

{Correctly worded constraint.}

[41:19+] Insert constraint

"Constraint: A <binding-private-stmt> is permitted only if the type definition is within the specification part of a module."

[49:8+] Add to end of paragraph:

"The accessibility of a component or procedure binding may be explicitly declared by an <access-spec>; otherwise its accessibility is the default for the type definition in which it is declared."

[49:9-10] Delete first sentence.

{Covered by previous edit.}

[49:12-30] Delete J3 note 284.

[49:31-33] Delete paragraph about parent component accessibility.

{This is totally redundant - 49:9-11 covers it already. We˝need not mention the syntax variation because 49:9-11 is syntax neutral w.r.t. this.}

[49:34-36] Replace paragraph with note

"Note 4.32b:

Type parameters are not components. They are effectively˝always public."

[49:37-38] Delete first sentence.

{Now covered above.}

[50:38] Change "not" to

"only accessible within the module containing the TYPE MIXED definition."

{"is not" seems unnecessarily terse.}

[351:35] Change "of the type" to "for that type".

{The structure constructor is for the type, not of it.}

[351:41-] Insert new sentence at beginning of paragraph.

"A component name or binding name may appear only in scoping˝units in which it is accessible."

{Prohibit use of inaccessible component/binding names. This˝is totally obvious, but I think we still need to state it somewhere.}

[351:41] Delete "type parameters,". Delete "," after˝components.

{Type parameters don't have accessibility, so it isn't˝described in 4.5.1.8.}

===END