

Subject: More work on extensible derived type definitions  
 From: Van Snyder  
 References: 00-175 00-180

## 1 Introduction

Malcolm says this paper is entirely unnecessary – it’s covered by the scoping rules of section 14.1.2, which have constraint status, at least if the parent subobject material is sorted out, as 00-180 attempts to do.

This paper depends on some re-arrangement of text resulting from paper 00-175.

There is no constraint that a component name cannot appear more than once within a single derived type definition. Maybe the constraint at [64:16] covers that. Nonetheless, we need constraints against duplicating the parent type name, against duplicating the names of any components inherited from the parent type, against duplicating a type parameter name, and against duplicating a procedure binding.

## 2 Edits

Edits refer to 00-007r1. Page and line numbers are displayed in the margin. Absent other instructions, a page and line number or line number range implies all of the indicated text is to be replaced by immediately following text, while a page and line number followed by + indicates that immediately following text is to be inserted after the indicated line. Remarks for the editor are noted in the margin, or appear between [ and ] in the text.

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Constraint: No *type-param-name* shall appear more than once in the *type-param-name-list*. 42:10+

Constraint: No *type-param-name* shall be the same as the parent type name, or any component name, type parameter name, or procedure binding name inherited (4.5.3.1) from the parent type.

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[Editor: The next two constraints apply to the syntax rule for *component-decl*, which will be moved to be above this point by 00-175.] 42:44-

Constraint: No *component-name* shall appear more than once in all of the *component-decl-lists* within a single derived type.

Constraint: No *component-name* shall be the same as the parent type name, or any *type-param-name*, or any component name, type parameter name, or procedure binding name inherited (4.5.3.1) from the parent type.

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Constraint: No *proc-binding-name* shall appear more than once in all of the *proc-bindings* within a single derived type definition. 44:18+

Constraint: No *proc-binding* shall be the same as the parent type name, or any *type-param-name*, or any component name or type parameter name inherited (4.5.3.1) from the parent type.