To: J3
Subject: Issue 333
From: Van Snyder

1 Introduction

Unresolved issue note 333 remarks on several problems in the exposition of user-defined derived type input/output:

> The material defining whether or not dtio happens for a particular effective io item is scattered all over the document in a way that makes it hard to find and understand. This is not entirely new to paper 01-250. Section 9.5.2 is the main place where the issue of expanding the i/o list to obtain effective items is discussed. This expansion depends, among other things, on whether dtio processing is done for an item. The section has several xrefs on that question, all pointing to 9.5.4.4.3. But 9.5.4.4.3 no longer has any material defining whether or not dtio processing happens. It xrefs 14.1.2.4.4, which is where the materialr eally is.
>
> A section on resolving procedure references (14.1.2.4.4) seems a strange place for the material about whether dtio is permitted (list item 1). Further, the wording of that list item (in particular, the "that is") implies that it is summarizing material from elsewhere. This appears to be the only place where this is actually said, making the "that is" inappropriate.

This paper proposes to move that material into Section 9. Ideally, it should go into 9.5.4.4.3, but this would give it a six-level subclause number. To avoid that problem, this paper proposes to move 9.5.4.4.3 out of subclause 9.5.4.4, putting it instead at 9.5.4.7.

The uses of "that is" indicate that following material elaborates immediately previous material, not that it summarizes distantly previous material. This paper does not change that wording. Unresolved issue note 333 continues:

> The 3rd para of 9.5.4.4.3 then contradicts itself in multiple ways. After citing 14.1.2.4.4, it refers to "other requirements" in 10.6.5 and 12.3.2. As best as I can see, this is irrelevant and misleading. If a dtio procedure is selected as described in 14.1.2.4.4, then dtio is done. Period. If there are other requirements that are not met, then the program is illegal. There are no valid cases in which a procedure is selected as described in 14, but is not used . Perhaps this para is a remnant of some former draft in which some of the material was not in 14.1.2.4.4.

This paper removes the "other requirements" phrase. Unresolved issue note 333 continues:

> Finally, the 3rd para of 9.5.4.4.3 says that if a dtiop is used, the list items are not processed as described in 9.5.2. However, 9.5.2 specifically mentions the exceptions for dtio . So this statement is self-contradictory, in essense saying that if dtio processing is done, then dtio processing is not done.

It appears that 9.5.2 in fact *does not* specify the requirements for dtio to occur – only how things are treated if it does not occur. The wording that references subclause 9.5.2 is not changed by this paper.

2 Edits

Edits refer to 01-007r2. 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 (before) the indicated line. Remarks are noted in the margin, or appear between [and] in the text.

[Editor: Move subclauses 9.5.4.5 and 9.5.4.6 [192:31-38] to here, retaining their numbers and levels.]	187:31+
[Editor: Raise the level of 9.5.4.4.3, so that it becomes 9.5.4.7. Delete "procedures".]	187:32
[Editor: Delete unresolved issue note 333.]	188:1-23
[Editor: "16.1.2.4.4" ⇒ "9.5.4.7.3".]	188:26
[Editor: Delete "If ... occurs." because it is covered in 9.5.4.7.3.]	188:26-27
9.5.4.7.1 Executing user-defined derived-type input/output data transfers	188:27+
[Editor: "the ... 12.3.2)" ⇒ "9.5.4.7.3".]	188:28-29
[Editor: "corresponding" ⇒ "selected".]	188:30
9.5.4.7.2 User-defined derived-type input/output procedures	189:13+
[Editor: Insert "(12.4)" after "references".]	371:38
[Editor: "The" ⇒ "This" at [371:44]; Delete "a deferred binding," at [371:44]; De-note-ify note 16.10 and combine it with the paragraph at [371:41-42].]	371:43-45
[Editor: Move 16.1.2.4.4 [371:18-45] to here, making it 9.5.4.7.3.]	192:30+