

Proposed edits to N1266 by John Reid

#### 4.10.4 Segments

In bullet 1, change “atomic” to “integer of kind `atomic_int_kind` or logical of kind `atomic_logical_kind`”.

#### 4.10.5 Atomic variables

In title change “variables” to “actions”.

In final sentence change “Atomic” to “Such”.

#### 6.61.1 Applicability to language

In para 2 change “All changes of values of atomic variables” to “All atomic changes of values of variables”.

#### 6.61.2 Avoidance mechanisms for language users

Delete comment. This is one of the mechanisms (a rather poor one) and does not deserve special attention.

#### 6.62.1 Applicability to language

Replace “(processes)” by “(clause 4.10.9)”, delete “See clause 4.8 for ... image halt or a continuation” and delete the comment – the concept of the failed image was added to Fortran explicitly for the sake of massively parallel systems.

#### 6.62.2 Avoidance mechanisms for language users

Add bullet

- If a procedure needs to abort, do not execute a `stop` statement – instead return with an error flag set.

In bullet 2, delete “, stopped\_images,” and “and stopped”.

#### 6 63.1 Applicability to language

At the end of the first sentence add “if each image is regarded as a thread” and replace “4.10” by “6.61.1”. Delete comment.

#### 6.64.1 Applicability to language

In the first line change “do” to “does”.

#### 6.65.1 Applicability to language

Delete comment.

### 7.1 Source form

Delete comment.

#### 7.1.1 Applicability to language

In line 1 change “permits a” to “has an obsolescent”.

In line 5 change “is” to “being”.

## **7.2 TBD**

Replace by

## **7.2 Unformatted files**

### **7.2.1 Applicability to language**

In Fortran unformatted output of a variable or expression, the internal representation of its value is written exactly as it stands to the storage medium and can be read back directly with neither roundoff nor conversion overhead into a variable of the same type, type parameters, and shape. If the variable is a pointer, it must be associated with a target and the target is transferred; when read back the target must have the shape of the target that was written. If the variable is allocatable, it must be allocated; when read back it must be allocated and have the shape of the variable that was written. The variable is not permitted to be of a type with an ultimate component that is allocable or a pointer.

If the file is read within a program execution other than the one in which it was written, there is a danger that incorrect values will be obtained.

### **7.2.2 Avoidance mechanisms for language users**

When using an unformatted file:

- Ensure that the properties of each variable read exactly match those of the variable or expression that was written.
- Limit access to the same computer system, the same compiler, and the same compiler options unless it is certain that the same internal representations are in use.