Subject: KIND arguments whose values are used for generic resolution
From: Van Snyder
Reference: 03-258r1, section 2.4.6

Number

TBD

Title

KIND arguments whose values are used for generic resolution.

Submitted By

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Status

For consideration.

Basic Functionality

Allow KIND arguments whose values are used for generic resolution.

Rationale

It is not possible to write user-defined procedures for which the values of kind arguments are used for generic resolution, as is done for several intrinsic procedures.

For parameterized derived types, the values of their kind parameters, not the kind parameters of the kind parameters, are used to determine the kinds of objects of the type. This can be done because the kind parameters have the KIND attribute.

If it were allowed for dummy arguments to have the KIND attribute, as is allowed for derived type parameters, and if a restriction were put on the corresponding actual arguments that they must be initialization expressions, again as is required for derived type parameters, it would be possible to use the values of these arguments for generic resolution.

Estimated Impact

Minor.

Detailed Specification

Allow the KIND attribute for dummy arguments of integer type, which means that the value of the corresponding actual argument shall be an initialization expression, and can be used for generic resolution. The KIND attribute for a dummy argument implies the VALUE attribute.

History