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AHELP for CIAO 3.4

_reshape

Context: slangrtl

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Synopsis

Copy an array to a new shape

Syntax

Array_Type _reshape (Array_Type A, Array_Type I)

Description

The _reshape function creates a copy of an array A, reshapes it to the form specified by I and returns the result. The elements of I specify the new dimensions of the copy of A and must be consistent with the number of elements A.

Example

If A is a 100 element 1-d array, a new array 2-d array of size 20 by 5 may be created from the elements of A by

 $A = _{reshape} (A, [20, 5]);$

In this example, the original array was no longer needed. Hence, it is preferable to make use of the __tmp operator to avoid the creation of a new array, i.e.,

A = _reshape (__tmp(A), [20,5]);

The reshape function performs a similar function to _reshape. In fact, the _reshape function could have been implemented via:

```
define _reshape (a, i)
{
    a = @a; % Make a new copy
    reshape (a, i);
    return a;
}
```

See Also

slangrtl

typeof, array info, array map, get struct field, length, max, min, reshape, set struct field, sum, transpose, typeof, where

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