

URL: http://cxc.harvard.edu/ciao3.4/ reshape.tm.html Last modified: December 2006

AHELP for CIAO 3.4

\_reshape

Context: slangrtl

Jump to: Description Example See Also

### **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

The Chandra X–Ray Center (CXC) is operated for NASA by the Smithsonian Astrophysical Observatory. 60 Garden Street, Cambridge, MA 02138 USA. Smithsonian Institution, Copyright © 1998–2006. All rights reserved.

URL: http://cxc.harvard.edu/ciao3.4/ reshape.tm.html Last modified: December 2006