Chandra X-ray Center

AHELP for CIAO 3.4   **__pop_args**   Context: slangrtl

Jump to: Description Example See Also

Synopsis

Remove n function arguments from the stack

Syntax

```
variable args = __pop_args(Integer_Type n);
```

Description

This function together with the companion function __push_args is useful for passing the arguments of a function to another function. __pop_args returns an array of n structures with a single structure field called value, which represents the value of the argument.

Example

Consider the following print function. It prints all its arguments to stdout separated by spaces:

```
define print ()
{
   variable i;
   variable args = __pop_args (_NARGS);

   for (i = 0; i < _NARGS; i++)
     {
        () = fputs (string (args[i].value), stdout);
        () = fputs (" ", stdout);
     }
   () = fputs ("\n", stdout);
   () = fflush (stdout);
}
```

Now consider the problem of defining a function called ones that returns a multi−dimensional array with all the elements set to 1. For example, ones(10) should return a 1−d array of ones, whereas ones(10,20) should return a 10x20 array.

```
   define ones ()
   {
     !if (_NARGS) return 1;
     variable a;

     a = __pop_args (_NARGS);
     return @Array_Type (Integer_Type, [__push_args (a)]) + 1;
   }
```

Here, __push_args was used to push on the arguments passed to the ones function onto the stack to be used when dereferencing Array_Type.

See Also

slangrtl

   __class_id, __class_type, __eqs, __get_reference, __is_initialized, __push_args, _nargs, _pop_n, _stk_roll, _typeof, array_info, dup, is_defined, is_struct_type, length, pop, typecast, typeof

See Also