



AHELP for CIAO 3.4

extract_element

Context: [slangrtl](#)

Jump to: [Description](#) [Example](#) [See Also](#)

Synopsis

Extract the nth element of a string with delimiters

Syntax

```
String_Type extract_element (String_Type list, Integer_Type nth,
Integer_Type delim);
```

Description

The extract_element function may be used to extract the nth element of the delim delimited list of strings list. The function will return the nth element of the list, unless nth specifies more elements than the list contains, in which case NULL will be returned. Elements in the list are numbered from 0.

Example

The expression

```
extract_element ("element 0, element 1, element 2", 1, ',')
```

returns the string " element 1", whereas

```
extract_element ("element 0, element 1, element 2", 1, ' ')
```

returns "0,".

The following function may be used to compute the number of elements in the list:

```
define num_elements (list, delim)
{
  variable nth = 0;
  while (NULL != extract_element (list, nth, delim))
    nth++;
  return nth;
}
```

Ahelp: extract_element – CIAO 3.4

Alternatively, the `strchop` function may be more useful. In fact, `extract_element` may be expressed in terms of the function `strchop` as

```
define extract_element (list, nth, delim)
{
  list = strchop(list, delim, 0);
  if (nth >= length (list))
    return NULL;
  else
    return list[nth];
}
```

and the `num_elements` function used above may be recoded more simply as:

```
define num_elements (list, delim)
{
  return length (strchop (length, delim, 0));
}
```

See Also

slangrtl

[create_delimited_string](#), [is_list_element](#), [is_substr](#), [strcat](#), [strchop](#), [strchopr](#), [strjoin](#), [streplace](#), [strsub](#), [strtok](#), [substr](#)

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URL:
http://cxc.harvard.edu/ciao3.4/extract_element.tm.html
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