
Subject: Bug in STRMID system routine

Posted by [Heinz Stege](#) on Thu, 13 Dec 2012 19:26:30 GMT

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Hi all,

strmid needs a bug fix. When I start with a very long string
a=string(byte(randomu(seed,1024^2*10)*(127.-32.))+32b)
and then extract a short substring
b=strmid(a,1,2)
the result b needs 10 MB of memory. As much as the original string a.

This overhead of memory can be released by a statement like b=b[0] or
b=b+"". However this is only a workaround and should be fixed in the
system routine itself.

A demo is attached below.

!version={x86 Win32 Windows Microsoft Windows 8.0.1 Oct 5 2010 32 64}

Cheers, Heinz

pro strmid_demo

compile_opt defint32,strictarr,logical_predicate

print,form='(%'\nStarting with:='')'
help,/mem

a=string(byte(randomu(seed,1024^2*10)*(127.-32.))+32b)
print,form='(%'\nThe string needs about %d bytes:='')',\$
strtrim(strlen(a),2)
help,/mem

print,form='(%'\nA small substring needs the same amount of memory '+\$
'as the original string:='')'
b=strmid(a,1,2)
help,/mem

print,form='(%'\nThe memory can be released by a simple operation:='')'
b+=""
help,/mem

print,form='(%'\nThe following is slow, but works:='')'
p=ptrarr(1000,/alloc)
for i=0,n_elements(p)-1 do *p[i]=strmid(a,i,2)+"
help,/mem

```
print,form='(%"\\n... and this probably runs into a memory '+$  
  'allocation error (if you don't have tons of RAM):.\\n')'  
for i=0,n_elements(p)-1 do *p[i]=strmid(a,i,2)  
help,/mem  
  
end
```
