
Subject: Re: (NOT SO) Dumb problem with STRPOS
Posted by [lkramer](#) on Sun, 16 Jul 1995 07:00:00 GMT
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> From: steele@aragorn.phys.ucalgary.ca (Dave Steele)
> Newsgroups: comp.lang.idl-pwwave
> Subject: Dumb problem with STRPOS
> Date: 14 Jul 1995 19:22:47 GMT
> Organization: Institute for Space Research

> Can someone explain the following behaviour to me?

```
> IDL> help,/st,!version          ; Here's the situation.
> ** Structure !VERSION, 3 tags, length=24:
> ARCH      STRING  'mipseb'
> OS        STRING  'RISC/os'
> RELEASE    STRING  '3.1.0'
> IDL> test='c000.'              ; define a string
> IDL> help,test                  ; check it is a string
> TEST      STRING   = 'c000.'
> IDL> print,strpos(test,'000')    ; search for a substring
>      1
> IDL> print,strpos(test,'000.')    ; and a slightly different one
>      1
> IDL> test='c0000.'              ; add a '0'
> IDL> help,test
> TEST      STRING   = 'c0000.'
> IDL> print,strpos(test,'000')     ; search again
>      1
> IDL> print,strpos(test,'000.')    ; Why isn't this substring found???
>     -1
```

> I checked the manual for this version and it says nothing that would
> explain this. BTW, it's nothing to do with octal constants.
> All suggestions gratefully received!

Dave:

This is a definite Bug. I am using Window 3.6.1. Get identical response.
You have probably already found out that:

```
IDL> print,test
c0000.
IDL> print,strpos(test,'0000.') ; a longer search string.
      1
IDL> print,strpos(test,'000.') ; your search string.
     -1
IDL> print,strpos(test,'00.')   ; a shorter search string.
```

and also

```
IDL> print,test
c0000X
IDL> print,strpos(test,'000X') ; different terminal character.
-1
```

This is a very scary bug. I can't find the source for strpos.pro in the library so it must be part of the dynamic run executable.

I re-wrote strpos calling it strpos1. It performs as follows:

```
IDL> print,test
c0000.
IDL> print,strpos1(test,'0000.')
1
IDL> print,strpos1(test,'000.')
2
IDL> print,strpos1(test,'00.')
3
IDL> print,strpos1(test,'0.')
4
```

and here is the text of the routine.

```
-----cut here-----
function strpos1,targ,srch,pos
  targ=string(targ)
  srch=string(srch)
  if (n_elements(pos) eq 0) then pos = 0
  t=byte(targ)
  n=n_elements(t)
  m=strlen(srch)
  p=lindgen(m)
  i=pos
  for i=pos,n do begin
    if (srch eq string(t(p+i)))then return,i
  endfor
  return ,-1
end
-----end of routine -----
```

I do not have time to properly document this. RSI really should fix it.

E-mail me if you have questions. I tried to reply directly but the mail was returned (?).

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