Subject: Re: Cyclic array interfaces
Posted by Mark Hadfield on Tue, 13 Jul 2004 22:29:23 GMT
View Forum Message <> Reply to Message

Cedric wrote:
> Furthermore, consider the next example:
>
> a = fltarr(5)
> ; Option 1: Create a new array
> a = [3, 4, 5, 6, 7]
> ; Option 2: Rewrite the array
> a[0] = [3, 4, 5, 6, 7]
>
> Option 1 and 2 are equivalent, code-wise, but I would argue (and of
> course, profile, were I not lazy) that option 2 is faster, because it
> doesn't have to deallocate the array that was already contained in a,
> and allocate a new one. Of course, there are many other optimizations
> that IDL could do that would make 1 faster than 2, but considering
> RSI's approach to compile-time optimizations, I'm confident in my
> analysis.

Analysis be dammed, I counted them! And got a result that disagrees with your analysis:

```
IDL> n = 10000000 & a = fltarr(n) & t0 = systime(1) & a = findgen(n) &
t1 = systime(1) & a[0] = findgen(n) & t2 = systime(1) & print, t1-t0, t2-t1
      0.14000010      0.25000000
IDL> print, !version
{ x86 Win32 Windows Microsoft Windows 6.0 Jun 27 2003      32      64}
```

--
Mark Hadfield "Ka puwaha te tai nei, Hoea tatou"
m.hadfield@niwa.co.nz
National Institute for Water and Atmospheric Research (NIWA)