Subject: Re: idl speed question Posted by Michael Galloy on Sat, 14 Mar 2009 22:28:21 GMT View Forum Message <> Reply to Message

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oxfordenergyservices@googlemail.com wrote:
> I have the following strange result
>
> a=double(1.0)
> for i=0,10000 do begin
> for j=0,10000 do begin
  a = a + 1.0
> endfor
> endfor
 takes 13 seconds whereas
> a=double(1.0)
```

- > b=double(1.0)
- > c = double(1.0)
- > d=double(1.0)
- > e = double(1.0)
- > for i=0,10000 do begin
- > for j=0,10000 do begin
- a = a + 1.0
- b=b+1.0
- c = c + 1.0
- d = d + 1.0
- e = e + 1.0
- > endfor
- > endfor

- > takes 60 seconds? I thought the overhead with IDL was in the loops
- > rather than the computing?

The real killer for speed is number of statements (each one has to be be interpreted). Loops are bad only because they could execute a statement a possibly large number of times. So in your example, the first case has 10001 * 10001 statements while the second has 5 * 10001 * 10001 statements. So if the statements are doing the same amount of work, one would expect the second to take about 5 times more time.

The conclusion: try to do more work per statement.

Mike

www.michaelgalloy.com Associate Research Scientist **Tech-X Corporation**

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> Mike
> --www.michaelgalloy.com
> Associate Research Scientist
> Tech-X Corporation
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