Subject: Re: Using ASSOC function

Posted by davidf on Thu, 02 Jul 1998 07:00:00 GMT

View Forum Message <> Reply to Message

I wrote a little while ago:

> Bernard Puc (puc@gsfc.nasa.gov) writes:

>

- >> Using ASSOC, I can access an image array stored in a datafile. Is it
- >> possible to instead select a subimage of that array? I'm looking to
- >> optimize the file access speed by not having to read the entire file or
- >> array into a variable. Thanks in advance.

>

> If you are asking if you can do this:

>

- > file = FilePath(SubDir=['examples', 'data'], 'cereb.dat')
- > OpenR, lun, file, /Get_Lun
- > images = Assoc(lun, BytArr(512, 512))
- > thisPartImage = (images(0))[0:255,256:512]
- > Help, thisPartImage
- > TV, thisPartImage

>

> Then the answer, amazingly enough, is yes.

Ali Bahrami from RSI confirms what I suspected might be the case with this: the entire image is first read and then that temporary variable is subset to give the partial image. To make things a lot faster, you would need to use Point_Lun in conjunction with ReadU, you would need to keep track of a lot of information, and you would have to be aware of the way the information was actually stored in memory. All in all, it is probably easier to purchase a faster computer.

But even though it doesn't speed things up, I'm still impressed that works. Although knowing that the whole image is read certainly takes some of the mystery out of it. :-)

Cheers.

David

--

David Fanning, Ph.D.

Fanning Software Consulting E-Mail: davidf@dfanning.com

Phone: 970-221-0438

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Page 1 of 2 ---- Generated from

comp.lang.idl-pvwave archive

Subject: Re: Using ASSOC function Posted by davidf on Thu, 02 Jul 1998 07:00:00 GMT

View Forum Message <> Reply to Message

Bernard Puc (puc@gsfc.nasa.gov) writes:

- > Using ASSOC, I can access an image array stored in a datafile. Is it
- > possible to instead select a subimage of that array? I'm looking to
- > optimize the file access speed by not having to read the entire file or
- > array into a variable. Thanks in advance.

If you are asking if you can do this:

file = FilePath(SubDir=['examples', 'data'], 'cereb.dat')
OpenR, lun, file, /Get_Lun
images = Assoc(lun, BytArr(512, 512))
thisPartImage = (images(0))[0:255,256:512]
Help, thisPartImage
TV, thisPartImage

Then the answer, amazingly enough, is yes.

I can't quite believe this, because I would have thought it mattered how the data was laid out in the file (i.e, in row order) as to whether you get what you think you are going to get, but apparently it doesn't. I've tried all kinds of subscripts. They all work.

Don't you just LOVE IDL! :-)

Cheers.

David

P.S. As to whether this is faster or not, I can't tell. This is image is read so fast on my 400 MHz machine I can't separate the time meaningfully from zero.

--

David Fanning, Ph.D. Fanning Software Consulting E-Mail: davidf@dfanning.com

Phone: 970-221-0438

Coyote's Guide to IDL Programming: http://www.dfanning.com/