Subject: How to read a file in zip or gz format using IDL? Posted by j.tan on Wed, 03 Aug 1994 15:17:42 GMT

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Wed, 03 Aug 94 16:18:25 BST X-Sender: tan@rcru1.te.rl.ac.uk

Mime-Version: 1.0

X-Mailer: <Windows Eudora Version 2.0.2>

Greetings,

I am asking for help to read a file in zip or gz format using IDL. At the moment, I have a huge data file in ASCII format about 10 Mbytes, it thus takes a long time to read in all the data. I wonder it may take less time if the data is compressed using either zip or gzip methods. But how can I read such compressed file? Any advice over there is highly appreciated.

All the best,

--

Jun Tan Rutherford Appleton Laboratory j.tan@rutherford.ac.uk

Subject: Re: How to read a file in zip or gz format using IDL? Posted by tai on Wed, 03 Aug 1994 21:03:42 GMT View Forum Message <> Reply to Message

Tan, Jun (j.tan@rutherford.ac.uk) wrote:

- : I am asking for help to read a file in zip or gz format using IDL. At the
- : moment, I have a huge data file in ASCII format about 10 Mbytes, it thus
- : takes a long time to read in all the data. I wonder it may take less time if
- : the data is compressed using either zip or gzip methods. But how can I read
- : such compressed file? Any advice over there is highly appreciated.

10 megs, yikes! I would recommend using restore (after an initial save); i.e. load your ASCII data into memory, then do a

save, bigdata, filename = 'bigdata.sav'

Then, whenever you need to load it in, use

restore, filename = 'bigdata.sav'

I've found this to be faster than any other method.

Subject: Re: How to read a file in zip or gz format using IDL? Posted by 8015 on Thu, 04 Aug 1994 15:34:26 GMT

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In article <31ocemINNbqu@maz4.sma.ch>, Tan, Jun <j.tan@rutherford.ac.uk> wrote:

>

- > I am asking for help to read a file in zip or gz format using IDL. At the
- > moment, I have a huge data file in ASCII format about 10 Mbytes, it thus
- > takes a long time to read in all the data. I wonder it may take less time if
- > the data is compressed using either zip or gzip methods. But how can I read
- > such compressed file? Any advice over there is highly appreciated.

>

I'll start by assuming we're referring to IDL in a unix environment. You can use the spawn command to manager this. Create a command string such as:

cmd = "uncompress -c comp_file" ; comp_file is the compressed file
spawn, cmd, uncomp_file ; uncomp_file will have the uncompressed data

The -c decompresses to stdout. Also the zcat command (linked to uncompress) will do the same thing. This way you won't have to 'rm' the file afterwards. I'm sure gzip has the same facility and could be used just as easily.

Mike Schienle Hughes Santa Barbara Research Center 8015@sbsun0010.sbrc.hac.com 75 Coromar Drive, M/S B28/87 Voice: (805)562-7466 Fax: (805)562-7881 Goleta, CA 93117

Subject: Re: How to read a file in zip or gz format usin Posted by oet on Fri, 05 Aug 1994 04:42:42 GMT

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>

- > I am asking for help to read a file in zip or gz format using IDL. At the
- > moment, I have a huge data file in ASCII format about 10 Mbytes, it thus
- > takes a long time to read in all the data. I wonder it may take less time if
- > the data is compressed using either zip or gzip methods. But how can I read
- > such compressed file? Any advice over there is highly appreciated.

>

>

No problem, I had a similar problem some time ago, here is the data read procedure I used,

Thomas Oettli

FUNCTION GET_RC, f

; Return reference coordinates

coords = { x_ref:fltarr(305,269), y_ref:fltarr(305,269) } spawn, ['gunzip','-c',f], UNIT=lun, /NOSHELL

readu, lun, coords free_lun, lun return, coords

END

Subject: Re: How to read a file in zip or gz format using IDL? Posted by j.tan on Fri, 05 Aug 1994 12:33:55 GMT View Forum Message <> Reply to Message

Hi, everyone,

I really appreciate all the advice I received since I posted my original question, either through private e-mails or appearing in here. What a friendly newsgroup!

However, the advice to use 'spawn' would not help me since I am using IDL for Windows, in which the keyword of "unit" in spawn command is forbidden. I know "spawn 'gzip -c' unit=lun" can be used in Unix as the manual tells me. In MS-DOS, the "spawn" is limited to the output of line number, not as the file unit in Unix.

Well, I will try to convert that ASCII file to binary format so IDL can read quick, at least for the time being.

All the best,

Jun Tan

--

Jun Tan

Subject: Re: How to read a file in zip or gz format usin Posted by chase on Fri, 05 Aug 1994 15:33:32 GMT

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>>>> "Thomas" == Thomas Oettli <oet@sma.ch> writes:

Thomas> No problem, I had a similiar problem some time ago, here is Thomas> the data read procedure I used,

Thomas> FUNCTION GET RC, f

Thomas>; Return reference coordinates

Thomas> coords = { $x_ref:fltarr(305,269), y_ref:fltarr(305,269)$ }

Thomas> spawn, ['gunzip','-c',f], UNIT=lun, /NOSHELL

Thomas> readu, lun, coords

Thomas> free_lun, lun return, coords

Thomas> END

I have tried this in the past but have experienced problems with the IDL prematurely losing the pipe. This seems to happen when I try to do other file I/O before I finish using pipe created by the spawn command.

Has anyone else experienced difficulties with using UNIX pipes created with spawn?

Chris

--

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