
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

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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

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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.

Alan

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 <31ocemlNNbqu@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.

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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 similiar 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

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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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