
Subject: Re: Read Zipped files

Posted by [mchinand](#) on Tue, 29 Aug 2006 20:52:52 GMT

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In article <1156870907.629435.73050@i3g2000cwc.googlegroups.com>, loknath <ladhikari@gmail.com> wrote:

> Hi,

> I have huge satellite data stored in zipped files and unzipping would
> be costly for my hard drive. Is there a way IDL can unzip these files
> and read or read these files without unzipping in the hard drive.

> Thanks

>

I'm not sure if this is the best way to do this, but on Linux (and other Unix flavors?) you could use named pipes:

from the shell prompt (only has to be done once):

> mkfifo pipe_filename

then in IDL for each file you want to unzip and read (filename is a string variable with containing the filename of zipped file you want to read):

```
spawn,'unzip -p '+filename+' >pipe_filename&'
```

<insert read commands here, using pipe_filename as if it were a regular file containing your unzipped data>

If your files used gzip compression instead, you could just use the /COMPRESS option for OPENR.

I don't think any of this would work in Windows but probably in OS X. Didn't someone have a Windows DLM that supported zipped files?

Good luck,

--Mike

--

Michael Chinander, PhD
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Department of Radiology
University of Chicago

Subject: Re: Read Zipped files

Posted by [Mike Wallace](#) on Wed, 30 Aug 2006 04:05:00 GMT

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> I don't think any of this would work in Windows but probably in OS X. Didn't
> someone have a Windows DLM that supported zipped files?

You're right. Windows doesn't have the same concept of named pipes that *nix does, and due to OS X being rooted in BSD, it should support named pipes.

As for the original question, if you're using gzip to compress the files, IDL can read them by using the /COMPRESS flag to the OPENR, OPENU or OPENW commands.

If your files are zip files, the only option I know of is to unzip the file before you use it. If you are using *nix, you can use the named pipe approach as the file would be unzipped into memory rather than to the hard drive. If you're using Windows, the only option I can think of is to write a small program in another language that could handle the unzip and stream the results out to shared memory. You'd then have to make your IDL program read from shared memory instead of the file. It's not the easiest thing in the world if you've never worked with shared memory before.

When you said that it would "be costly for my hard drive," what do you mean? Are you referring to all the files that would have to be written back out to disk all the time or are you concerned with running out of disk space?

-Mike

Subject: Re: Read Zipped files

Posted by [Haje Korth](#) on Wed, 30 Aug 2006 11:51:28 GMT

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Hi,
Randall Franks DLM is available at
<http://kilvarock.com/freesoftware/dlms/randallfrank.htm>. It has
built-in gzip compression.

Cheers,
Haje

loknath wrote:

> Hi,
> I have huge satellite data stored in zipped files and unzipping would
> be costly for my hard drive. Is there a way IDL can unzip these files
> and read or read these files without unzipping in the hard drive.
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Subject: Re: Read Zipped files
Posted by [lokmath](#) on Wed, 30 Aug 2006 21:36:39 GMT
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I am running out of hard drive space and didnt want to unzip the files
but now I feel it is easier if I unzip the files in my hard drive.
Thanks everyone
Lokmath

Mike Wallace wrote:

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>> someone have a Windows DLM that supported zipped files?
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> -Mike

Subject: Re: Read Zipped files

Posted by [Haje Korth](#) on Thu, 31 Aug 2006 12:13:23 GMT

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Use a temp directory than you clear out after processing each file.
this is essentially what you would do with unzipping to RAM as well.

Of course you are free to look beyond the IDL prompt usage to join the group of DLM programmers. :-)

loknath wrote:

> I am running out of hard drive space and didnt want to unzip the files

> but now I feel it is easier if I unzip the files in my hard drive.

> Thanks everyone

> Loknath

>

> Mike Wallace wrote:

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