Subject: Re: Reading tab delimited string data
Posted by Ivan Zimine on Fri, 13 Oct 2000 07:00:00 GMT
View Forum Message <> Reply to Message

Andy Loughe wrote:
>
> Hello,
>
> I have some output from a MySQL dump that looks like this...
>
> id   date   height coverage   yy   yn   ny   nn
> 1388   2000-07-01   all   all   114   404   240   28452
> 1388   2000-07-01   all   low   114   404   240   28452
> 1388   2000-07-01   high   all   114   404   240   28452
> 1388   2000-07-01   all   all   114   404   240   28452
>
> I get the data into IDL via this command...
>
> spawn, 'mysql < sql_script.sql', data
> IDL> help, data
> DATA   STRING = Array[5] ; 5 rows of string data (tabs inserted).
>
> Basically, I am working with tab delimited data with a varying number
> of columns and a varying number of rows, depending upon the sql query.
>
> I am able to store the data from each column into a separate IDL vector,
> id=[ ] date=[ ] height=[ ] , etc. but the approach is to LOOP
> through all rows, do a str_sep(row, string(9B)), and then direct the
> result into the proper index of the IDL vector.
>
> Looping through all the rows and manipulating each line of string data
> can't be the fastest approach. Can someone suggest a faster method?
>
> I thought of ASSOC, and also wondered about str_sep on arrays,
> or maybe some of the new str routines. Any thoughts?
>
> Your kind suggestions are appreciated.
>

Just a thought...
If you have many rows and not so many cols make MySQL do the work
IDL> spawn, 'mysql < get_id.sql', id
IDL> spawn, 'mysql < get_date.sql', date
...

--
Ivan Zimine | ivan.zimine@physics.unige.ch
Dpt. of Radiology | (+41 22) 372 70 70

Subject: Re: Reading tab delimited string data
Posted by Martin Schultz on Fri, 13 Oct 2000 07:00:00 GMT
View Forum Message <> Reply to Message

Andy Loughe wrote:

>
> Hello,
>
> I have some output from a MySQL dump that looks like this...
>
> id   date   height coverage   yy   yn   ny   nn
> 1388   2000-07-01   all   all   114   404   240   28452
> 1388   2000-07-01   all   low   114   404   240   28452
> 1388   2000-07-01   high   all   114   404   240   28452
> 1388   2000-07-01   all   all   114   404   240   28452
>
> I get the data into IDL via this command...
>
> spawn, 'mysql < sql_script.sql', data
> IDL> help, data
> DATA   STRING = Array ; 5 rows of string data (tabs inserted).
>
> Basically, I am working with tab delimited data with a varying number
> of columns and a varying number of rows, depending upon the sql query.
>
> I am able to store the data from each column into a separate IDL vector,
> id=[ ] date=[ ] height=[ ] , etc. but the approach is to LOOP
> through all rows, do a str_sep(row, string(9B)), and then direct the
> result into the proper index of the IDL vector.
>
> Looping through all the rows and manipulating each line of string data
> can't be the fastest approach. Can someone suggest a faster method?
>
> I thought of ASSOC, and also wondered about str_sep on arrays,
> or maybe some of the new str routines. Any thoughts?
>
> Your kind suggestions are appreciated.
>
> --
> Andrew Loughe ==
> NOAA/OAR/FSL/AD   R/FS5 | email: loughe@fsl.noaa.gov
> 325 Broadway | wwweb: www-ad.fsl.noaa.gov/users/loughe
> Boulder, CO 80305-3328 | phone: 303-497-6211   fax: 303-497-6301

off the top of my head I can only think of using structures. You can dynamically create a template structure (just as you set up your column vectors) with Create_Struct, e.g. template = Create_Struct(id:0L, 'date','', 'height','', 'coverage','', $
        'yy',0L, 'yn',0L, 'ny',0L, 'nn',0L)

Then you have two options:
(1) if you don't know the number of rows coming out of your query (well, this applies more to results stored in a file), you can either use a linecount program and use approach 2 afterwards, or you still loop line by line and use a "block data" technique to enlarge your structure array by e.g. 100 elements at a time.

(2) if you know how many lines to expect, you should be able to "read" your data as
   result = replicate(template, 5)
   reads, data, result

Hope this helps,
Martin

--
 [[[[[[[[[[
[[Dr. Martin Schultz   Max-Planck-Institut fuer Meteorologie   [[
[[Bundesstr. 55, 20146 Hamburg   [[
[[phone: +49 40 41173-308   [[
[[fax: +49 40 41173-298   [[
[[martin.schultz@dkrz.de   [[
 [[[[[[[[[[