Subject: Re: IDL/Dataminer/mySQL is working!!
Posted by Olaf Stetzer on Mon, 03 Sep 2001 07:34:56 GMT
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Olaf Stetzer schrieb:
>
> For those of you who want to give this combination a try
> some hints:
>
> You have to install the myODBC-driver on the machine where
> you run IDL. I had problems with the recent version 2.50.38
> however the older version 2.50.37 is working for me.
> The maintainers of myODBC are aware of the problem, maybe
> there will be a workaround or bugfix in one of the next versions.

Update: There now is a bugfix available!!! The bug was confirmed
by the developers after I sent them a log of myODBC. Now there
is a bugfix introduced in the binary-packages (still ending .38).

I _love_ open source software!!! :-)

Someone asked me to show a bit of code I used to connect to
the database, so here it is (very dirty, maybe I convert it to
a nice reusable function soon):

```
----------------------------------------
pro database_test
oDB = obj_new('IDLDBDatabase')
oDB->Connect, DataSource = 'PSC6', user='aida', password=''

strSQL='SELECT Zeitpunkt, Pabs, Tgk FROM aida_meï¿½daten WHERE Zeitpunkt
BETWEEN "2001-07-06 14:45:00" AND "2001-07-06 15:05:00";'

oRS = obj_new('IDLDBRecordset',oDB,SQL=strSQL)

status = oRS->MoveCursor(/FIRST)

zeitfirst=oRS->GetField(0)
Zeit=replicate(zeitfirst,900)
Pabs=DBlarr(900)
Tgk=dblarr(900)

for i=0,899 do begin
 IF(status NE 1) THEN BEGIN
 PRINT, 'Error moving database cursor'
 RETURN
 ENDIF
```

```
 Zeit(i)=oRS->GetField(0)
 Pabs(i)=oRS->GetField(1)
 Tgk(i)=oRS->GetField(2)
status = oRS->MoveCursor(/NEXT)
endfor

plot, Tgk, Pabs

OBJ_DESTROY, oRS
OBJ_DESTROY, oDB

end
-----------------------------------------------
```

So the Dataminer are mainly the two objects IDLDBDatabase and IDLDBRecordset. The first is used to establish a connection via ODBC, the second is used to access the data either of a complete table within the DB or to a subset which is returned after submitting a SQL-query (like I did in my example).

I still have to think of an elegant way to convert the struct SQL-Timestamp into a variable which ca be used to be plotted against....

Greetings,

Olaf

--
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Subject: Re: IDL/Dataminer/mySQL is working!!
Posted by Randall Skelton on Mon, 03 Sep 2001 08:01:46 GMT
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On Mon, 3 Sep 2001, Olaf Stetzer wrote:

[snip]
> I _love_ open source software!!! :-)
[snip]

Here, here!

[snip]
> I still have to think of an elegant way to convert the struct
> SQL-Timestamp into a variable which ca be used to be plotted against....

I have the same trouble working with time stamps from Postgres.
Depending on the code I'm working with, I either use a nifty 'time object'
or a simple date/time string and/or Julian seconds. I'd suggest looking
at the Johns Hopkins University-Applied Physics Laboratory Pages for their
notes on working with time series:

http://fermi.jhuapl.edu/s1r/idl/s1rlib/local_idl.html

http://fermi.jhuapl.edu/s1r/idl/s1rlib/time/time.html

Cheers,
Randall

Subject: Re: IDL/Dataminer/mySQL is working!!
Posted by Olaf Stetzer on Tue, 04 Sep 2001 08:31:09 GMT
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Randall Skelton schrieb:
>
> On Mon, 3 Sep 2001, Olaf Stetzer wrote:
>
> [snip]
>> I _love_ open source software!!! :-)
> [snip]
>
> Here, here!
>

I am a Linux-addict since Kernel 0.94pl16!!!!! :-)

> [snip]
>> I still have to think of an elegant way to convert the struct
>> SQL-Timestamp into a variable which ca be used to be plotted against....

I just mixed together some code of different time-conversion functions I
found
in the icg-library. The result is:

function sqlts2js, sqlts

s =
sqlts.second+(sqlts.minute*60)+(sqlts.hour*3600d0)+sqlts.fra ction/1000d0

```
jd = 367*sqlts.year-7*(sqlts.year+(sqlts.month+9)/12)/4 $
 -3*((sqlts.year+(sqlts.month-9)/7)/100+1)/4 $
 +275*sqlts.month/9+sqlts.day+1721029

RETURN,  s + (jd-2451545)*86400d0
end
```

What do you think of this one?

Olaf

--
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