

[RESOLVED] DBD::mysql unresolved symbol _intel_fast_memcpy & mysql-standard-5.0.22-linux-i686-icc-glibc23

Source: <http://coding.derkeiler.com/Archive/Perl/comp.lang.perl.modules/2006-08/msg00224.html>

- *From:* beagle197@xxxxxxxxxxxx
 - *Date:* 29 Aug 2006 15:33:17 -0700
-

Folks,

Some of you may have wanted to build and install the DBD::mysql (DBD-mysql-3.0006) and use it with MySQL's v 5 DB server for Linux (non RPM, Intel C/C++ compiled, glibc-2.3) downloads*, which is according to Mysql**, "...the MySQL Community Server compiled with the Intel CC compiler. Internal tests show that editions of the MySQL Community Server compiled with the Intel CC compiler exhibit faster performance on Intel hardware than those compiled with the standard gcc compiler...."

However, there is one small dreaded show stopping error*** that is reported when trying to run a perl script that uses the module (aka the intel_fast_memcpy unresolved symbol), and here I post the specific steps to resolve this. If you've searched around the web trying to find the solution, you may have found misleading articles saying that you needed to go out and buy the Intel® C++ Compiler 9.1 for Linux, which is just not true because you can build it with gcc. The reason is that the good folks at mysql provided a link for downloading the necessary Intel libraries from their website**** (e.g. in my case these was intel-icc9-libs-9.0-x86_64.tar.gz).

Also you may have felt that you needed to go out and buy MySQL Enterprise support, which is not needed either in this case. Note these steps were performed on an Intel dual Xeon server, Debian GNU/Linux Sarge (3.1) OS. The trick here is to link the libraries in a very special order, because this will make all the difference.

HTH,
BEA

* At time of writing the version I have is

mysql-standard-5.0.22-linux-i686-icc-glibc23

** See <http://dev.mysql.com/downloads/mysql/5.0.html>

*** "/usr/bin/perl: relocation error:

/usr/local/lib/perl/5.8.4/auto/DBD/mysql/mysql.so: undefined symbol:

[RESOLVED] DBD::mysql unresolved symbol _intel_fast_memcpy & mysql-standard-5.0.22-linux-i686-icc-glibc2

_intel_fast_memcpy"

**** <http://dev.mysql.com/downloads/os-linux.html>

```
frag:~# dpkg -l | grep gcc
```

```
ii gcc 3.3.5-3 The GNU C compiler
```

```
ii gcc-3.3 3.3.5-13 The GNU C compiler
```

```
ii gcc-3.3-base 3.3.5-13 The GNU Compiler Collection (base package)
```

```
ii gcc-3.3-doc 3.3.5-13 Documentation for the GNU compilers (gcc, go
```

```
ii gcc-doc 3.3.5-3 Documentation for the GNU C compilers (gcc,
```

```
ii libgcc1 3.4.3-13 GCC support library
```

```
frag:~# cc --version
```

```
cc (GCC) 3.3.5 (Debian 1:3.3.5-13)
```

```
Copyright (C) 2003 Free Software Foundation, Inc.
```

```
This is free software; see the source for copying conditions. There is NO
```

```
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
```

```
frag:~/cpan/build/DBD-mysql-3.0006# echo $PATH
```

```
/sbin:/bin:/usr/sbin:/usr/bin:/usr/bin/X11:/usr/local/sbin:/usr/local/bin
```

```
frag:~/cpan/build/DBD-mysql-3.0006# perl Makefile.PL
```

```
Can't exec "mysql_config": No such file or directory at Makefile.PL line 76.
```

```
Cannot find the file 'mysql_config'! Your execution PATH doesn't seem to contain the path to mysql_config. Resorting to guessed values!
```

```
Can't exec "mysql_config": No such file or directory at Makefile.PL line 450.
```

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Can't exec "mysql_config": No such file or directory at Makefile.PL line 450.
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[RESOLVED] DBD::mysql unresolved symbol _intel_fast_memcpy & mysql-standard-5.0.22-linux-i686-icc-glibc2

[RESOLVED] DBD::mysql unresolved symbol _intel_fast_memcpy & mysql-standard-5.0.22-linux-i686-icc-glibc2

line 450.

Can't exec "mysql_config": No such file or directory at Makefile.PL

line 450.

I will use the following settings for compiling and testing:

```
cflags (guessed) = -I/usr/local/mysql/include
embedded (guessed) =
libs (guessed) = -L/usr/local/mysql/lib -lmysqlclient -lz
-lm -lcrypt -lnsl
mysql_config (guessed) = mysql_config
nocatchstderr (default) = 0
nofoundrows (default) = 0
ssl (guessed) = 0
testdb (default) = test
testhost (default) =
testpassword (default) =
testsocket (default) =
testuser (default) =
```

To change these settings, see 'perl Makefile.PL --help' and 'perldoc INSTALL'.

Checking if your kit is complete...

Looks good

Using DBI 1.52 (for perl 5.008004 on i386-linux-thread-multi) installed
in /usr/local/lib/perl/5.8.4/auto/DBI/

Writing Makefile for DBD::mysql

frag:~/cpan/build/DBD-mysql-3.0006# ls

/usr/local/mysql/bin/mysql_config

/usr/local/mysql/bin/mysql_config

frag:~/cpan/build/DBD-mysql-3.0006# export

PATH=/usr/local/mysql/bin:\$PATH

frag:~/cpan/build/DBD-mysql-3.0006# perl Makefile.PL

I will use the following settings for compiling and testing:

```
cflags (mysql_config) = -I/usr/local/mysql/include -unroll2
-ip -mp -restrict
embedded (mysql_config) =
libs (mysql_config) = -static-libcxa -i-static
-L/usr/local/mysql/lib -lmysqlclient -lz -lcrypt -lnsl -lm
mysql_config (guessed) = mysql_config
nocatchstderr (default) = 0
nofoundrows (default) = 0
ssl (guessed) = 0
testdb (default) = test
testhost (default) =
testpassword (default) =
testsocket (default) =
testuser (default) =
```

To change these settings, see 'perl Makefile.PL --help' and

[RESOLVED] DBD::mysql unresolved symbol _intel_fast_memcpy & mysql-standard-5.0.22-linux-i686-icc-glibc2

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'perldoc INSTALL'.

Unrecognized argument in LIBS ignored: '-static-libcxa'

Unrecognized argument in LIBS ignored: '-i-static'

Using DBI 1.52 (for perl 5.008004 on i386-linux-thread-multi) installed
in /usr/local/lib/perl/5.8.4/auto/DBI/

Writing Makefile for DBD::mysql

frag:~/cpan/build/DBD-mysql-3.0006# perl Makefile.PL

--cflags='-I/usr/local/mysql/include' --libs='-L/usr/local/mysql/lib
-lmysqlclient -lz -lcrypt -lnsl -lm'

I will use the following settings for compiling and testing:

cflags (User's choice) = -I/usr/local/mysql/include
embedded (mysql_config) =
libs (User's choice) = -L/usr/local/mysql/lib -lmysqlclient
-lz -lcrypt -lnsl -lm
mysql_config (guessed) = mysql_config
nocatchstderr (default) = 0
nofoundrows (default) = 0
ssl (guessed) = 0
testdb (default) = test
testhost (default) =
testpassword (default) =
testsocket (default) =
testuser (default) =

To change these settings, see 'perl Makefile.PL --help' and
'perldoc INSTALL'.

Using DBI 1.52 (for perl 5.008004 on i386-linux-thread-multi) installed
in /usr/local/lib/perl/5.8.4/auto/DBI/

Writing Makefile for DBD::mysql

frag:~/cpan/build/DBD-mysql-3.0006# make

cp lib/DBD/mysql.pm blib/lib/DBD/mysql.pm

cp lib/DBD/mysql/GetInfo.pm blib/lib/DBD/mysql/GetInfo.pm

cp lib/Mysql.pm blib/lib/Mysql.pm

cp lib/DBD/mysql/INSTALL.pod blib/lib/DBD/mysql/INSTALL.pod

cp lib/Mysql/Statement.pm blib/lib/Mysql/Statement.pm

cp lib/Bundle/DBD/mysql.pm blib/lib/Bundle/DBD/mysql.pm

cc -c -I/usr/local/lib/perl/5.8.4/auto/DBI -I/usr/local/mysql/include

-DDBD_MYSQL_INSERT_ID_IS_GOOD -g -D_REENTRANT -D_GNU_SOURCE

-DTHREADS_HAVE_PIDS -DDEBIAN -fno-strict-aliasing -I/usr/local/include

-D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64 -O2 -DVERSION=\"3.0006\"

-DXS_VERSION=\"3.0006\" -fPIC -I/usr/lib/perl/5.8/CORE" dbdimp.c

/usr/bin/perl -p -e "s/~DRIVER~/mysql/g"

/usr/local/lib/perl/5.8.4/auto/DBI/Driver.xst > mysql.xsi

/usr/bin/perl /usr/share/perl/5.8/ExtUtils/xsubpp -typemap

/usr/share/perl/5.8/ExtUtils/typemap mysql.xs > mysql.xsc && mv

mysql.xsc mysql.c

Warning: duplicate function definition 'do' detected in mysql.xs, line

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[RESOLVED] DBD::mysql unresolved symbol _intel_fast_memcpy & mysql-standard-5.0.22-linux-i686-icc-glibc2

Warning: duplicate function definition 'rows' detected in mysql.xs,
line 567

```
cc -c -I/usr/local/lib/perl/5.8.4/auto/DBI -I/usr/local/mysql/include  
-DDBD_MYSQL_INSERT_ID_IS_GOOD -g -D_REENTRANT -D_GNU_SOURCE  
-DTHREADS_HAVE_PIDS -DDEBIAN -fno-strict-aliasing -I/usr/local/include  
-D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64 -O2 -DVERSION=\"3.0006\"  
-DXS_VERSION=\"3.0006\" -fPIC "-I/usr/lib/perl/5.8/CORE" mysql.c
```

Running Mkbootstrap for DBD::mysql ()

```
chmod 644 mysql.bs
```

```
rm -f blib/arch/auto/DBD/mysql/mysql.so
```

```
LD_RUN_PATH="" /usr/bin/perl myld cc -shared -L/usr/local/lib dbdimp.o
```

```
mysql.o -o blib/arch/auto/DBD/mysql/mysql.so -L/usr/local/mysql/lib
```

```
-lmysqlclient -lz -lcrypt -lnsl -lm
```

```
chmod 755 blib/arch/auto/DBD/mysql/mysql.so
```

```
cp mysql.bs blib/arch/auto/DBD/mysql/mysql.bs
```

```
chmod 644 blib/arch/auto/DBD/mysql/mysql.bs
```

```
Manifying blib/man3/DBD::mysql.3pm
```

```
Manifying blib/man3/DBD::mysql::INSTALL.3pm
```

```
Manifying blib/man3/Mysql.3pm
```

```
Manifying blib/man3/Bundle::DBD::mysql.3pm
```

```
frag:~/cpan/build/DBD-mysql-3.0006# make install
```

```
Installing /usr/local/lib/perl/5.8.4/auto/DBD/mysql/mysql.so
```

```
Files found in blib/arch: installing files in blib/lib into  
architecture dependent library tree
```

```
Writing /usr/local/lib/perl/5.8.4/auto/DBD/mysql/.packlist
```

```
Appending installation info to /usr/local/lib/perl/5.8.4/perllocal.pod
```

```
frag:~/cpan/build/DBD-mysql-3.0006# cat ~/test_db.pl
```

```
#!/usr/bin/perl
```

```
use DBI();
```

```
my ($dbh, $sth, $ref, $query);
```

```
$dbh =
```

```
DBI->connect("DBI:mysql:database=test;host=localhost;mysql_socket=/var/run/mysqld/mysqld.sock",  
"bea", "bea");
```

```
$dbh->disconnect();
```

```
frag:~/cpan/build/DBD-mysql-3.0006# ~/test_db.pl
```

```
/usr/bin/perl: relocation error:
```

```
/usr/local/lib/perl/5.8.4/auto/DBD/mysql/mysql.so: undefined symbol:
```

```
_intel_fast_memcpy
```

```
frag:~/cpan/build/DBD-mysql-3.0006# cd
```

```
frag:~# curl
```

```
http://mysql.osuosl.org/Downloads/Linux/intel-icc9-libs-9.0-x86\_64.tar.gz
```

```
-o intel-icc9-libs-9.0-x86_64.tar.gz
```

```
frag:/usr/local/lib# tar xzvf ~/intel-icc9-libs-9.0-i386.tar.gz
```

```
intel-icc9-libs-9.0-i386/
```

```
intel-icc9-libs-9.0-i386/crtxi.o
```

```
intel-icc9-libs-9.0-i386/crtxn.o
```

```
intel-icc9-libs-9.0-i386/icrt.internal.map
```

[RESOLVED] DBD::mysql unresolved symbol _intel_fast_memcpy & mysql-standard-5.0.22-linux-i686-icc-glibc2

[RESOLVED] DBD::mysql unresolved symbol _intel_fast_memcpy & mysql-standard-5.0.22-linux-i686-icc-glibc2

```
intel-icc9-libs-9.0-i386/icrt.link
intel-icc9-libs-9.0-i386/libcprts.a
intel-icc9-libs-9.0-i386/libcprts.so
intel-icc9-libs-9.0-i386/libcprts.so.5
intel-icc9-libs-9.0-i386/libcxa.a
intel-icc9-libs-9.0-i386/libcxa.so
intel-icc9-libs-9.0-i386/libcxa.so.5
intel-icc9-libs-9.0-i386/libcxaguard.a
intel-icc9-libs-9.0-i386/libcxaguard.so
intel-icc9-libs-9.0-i386/libcxaguard.so.5
intel-icc9-libs-9.0-i386/libguide.a
intel-icc9-libs-9.0-i386/libguide.so
intel-icc9-libs-9.0-i386/libguide_stats.a
intel-icc9-libs-9.0-i386/libguide_stats.so
intel-icc9-libs-9.0-i386/libimf.a
intel-icc9-libs-9.0-i386/libimf.so
intel-icc9-libs-9.0-i386/libirc.a
intel-icc9-libs-9.0-i386/libirc_pic.a
intel-icc9-libs-9.0-i386/libirc_s.a
intel-icc9-libs-9.0-i386/libirc_s_pic.a
intel-icc9-libs-9.0-i386/libompstub.a
intel-icc9-libs-9.0-i386/libsvml.a
intel-icc9-libs-9.0-i386/libsvml.so
intel-icc9-libs-9.0-i386/libunwind.a
intel-icc9-libs-9.0-i386/libunwind.so
intel-icc9-libs-9.0-i386/libunwind.so.5
intel-icc9-libs-9.0-i386/clicense
intel-icc9-libs-9.0-i386/credist.txt
intel-icc9-libs-9.0-i386/list
frag:/usr/local/lib# ln -s intel-icc9-libs-9.0-i386 icc
frag:/usr/local/lib# ls
icc intel-icc9-libs-9.0-i386 perl
frag:/usr/local/lib# cd ~/.cpan/build/DBD-mysql-3.0006/
frag:~/.cpan/build/DBD-mysql-3.0006# perl Makefile.PL
--cflags=-I/usr/local/mysql/include' --libs=-L/usr/local/mysql/lib
-lmysqlclient -lz -lcrypt -lnsl -lm -L/usr/local/lib/icc -lirc'
I will use the following settings for compiling and testing:
```

```
cflags (User's choice) = -I/usr/local/mysql/include
embedded (mysql_config ) =
libs (User's choice) = -L/usr/local/mysql/lib -lmysqlclient
-lz -lcrypt -lnsl -lm -L/usr/local/lib/icc -lirc
mysql_config (guessed ) = mysql_config
nocatchstderr (default ) = 0
nofoundrows (default ) = 0
ssl (guessed ) = 0
testdb (default ) = test
testhost (default ) =
testpassword (default ) =
testsocket (default ) =
testuser (default ) =
```

[RESOLVED] DBD::mysql unresolved symbol _intel_fast_memcpy & mysql-standard-5.0.22-linux-i686-icc-glibc2

[RESOLVED] DBD::mysql unresolved symbol _intel_fast_memcpy & mysql-standard-5.0.22-linux-i686-icc-glibc2

To change these settings, see 'perl Makefile.PL --help' and 'perldoc INSTALL'.

```
Using DBI 1.52 (for perl 5.008004 on i386-linux-thread-multi) installed
in /usr/local/lib/perl/5.8.4/auto/DBI/
Writing Makefile for DBD::mysql
frag:~/cpan/build/DBD-mysql-3.0006# make
cc -c -I/usr/local/lib/perl/5.8.4/auto/DBI -I/usr/local/mysql/include
-DDBD_MYSQL_INSERT_ID_IS_GOOD -g -D_REENTRANT -D_GNU_SOURCE
-DTHREADS_HAVE_PIDS -DDEBIAN -fno-strict-aliasing -I/usr/local/include
-D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64 -O2 -DVERSION=\"3.0006\"
-DXS_VERSION=\"3.0006\" -fPIC "-I/usr/lib/perl/5.8/CORE" dbdimp.c
cc -c -I/usr/local/lib/perl/5.8.4/auto/DBI -I/usr/local/mysql/include
-DDBD_MYSQL_INSERT_ID_IS_GOOD -g -D_REENTRANT -D_GNU_SOURCE
-DTHREADS_HAVE_PIDS -DDEBIAN -fno-strict-aliasing -I/usr/local/include
-D_LARGEFILE_SOURCE -D_FILE_OFFSET_BITS=64 -O2 -DVERSION=\"3.0006\"
-DXS_VERSION=\"3.0006\" -fPIC "-I/usr/lib/perl/5.8/CORE" mysql.c
Running Mkbootstrap for DBD::mysql ()
chmod 644 mysql.bs
rm -f blib/arch/auto/DBD/mysql/mysql.so
LD_RUN_PATH="" /usr/bin/perl myld cc -shared -L/usr/local/lib dbdimp.o
mysql.o -o blib/arch/auto/DBD/mysql/mysql.so -L/usr/local/mysql/lib
-lmysqlclient -lz -lcrypt -lnsl -lm -L/usr/local/lib/icc -lirc
chmod 755 blib/arch/auto/DBD/mysql/mysql.so
cp mysql.bs blib/arch/auto/DBD/mysql/mysql.bs
chmod 644 blib/arch/auto/DBD/mysql/mysql.bs
Manifying blib/man3/DBD::mysql.3pm
Manifying blib/man3/DBD::mysql::INSTALL.3pm
Manifying blib/man3/Mysql.3pm
Manifying blib/man3/Bundle::DBD::mysql.3pm
frag:~/cpan/build/DBD-mysql-3.0006# make install
Installing /usr/local/lib/perl/5.8.4/auto/DBD/mysql/mysql.so
Files found in blib/arch: installing files in blib/lib into
architecture dependent library tree
Writing /usr/local/lib/perl/5.8.4/auto/DBD/mysql/.packlist
Appending installation info to /usr/local/lib/perl/5.8.4/perllocal.pod
frag:~/cpan/build/DBD-mysql-3.0006# ~/test_db.pl
frag:~/cpan/build/DBD-mysql-3.0006#
```

[RESOLVED] DBD::mysql unresolved symbol _intel_fast_memcpy & mysql-standard-5.0.22-linux-i686-icc-glibc2