

# QSqlMonitor

*Author: Radu Fiser*  
*Subject: Open Source programming*  
*Faculty of Electrical Engineering*  
*Czech Technical University in Prague*

# Description of the project

**Name:** QsqlMonitor

**Description:** OpenSource Qt GUI tool for SQL server administration. Supports Firebird, MySQL, SQLite, PostgreSQL database servers

**Developer:** Ing. František Vacek

**Version:** 1.3

**Homepage:**

<http://sourceforge.net/projects/qsqlmon/>

# QSqlMon can do?

- Connect to database(MySQL, Sqlite, PostgreSQL, Firebird)
- Manage database tables
- Run SQL queries and scripts
- Visualize SQL queries results in datagrids
- Inline edition of the data form datagrids and saving of changes to database(delete, add rows)
- Exports data from datagrids to CVS, HTML, XML

qt-sql-monitor

Server Sql Help

Connections tree

Description

- information\_schema
- cdcol
- contactlist
- forum
- memory
- memorys
- person
- milop
- mshop
- msslunicka

id	firstname	lastname
1	D	Y
2	Ch	H
3	L	G
4	R	R
5	v	P

mysqlmon

help_keyword_id	name
1	0 MIN
2	1 JOIN
3	2 SERIALIZABLE
4	3 REPLACE
5	4 RETURNS
6	5 MASTER_SSL_C
7	6 NCHAR
8	7 COLUMNS
9	8 WORK
10	9 DATETIME
11	10 MODE
12	11 OPEN
13	12 INTEGER

SELECT \* FROM mysql.`help\_keyword` 125 rows

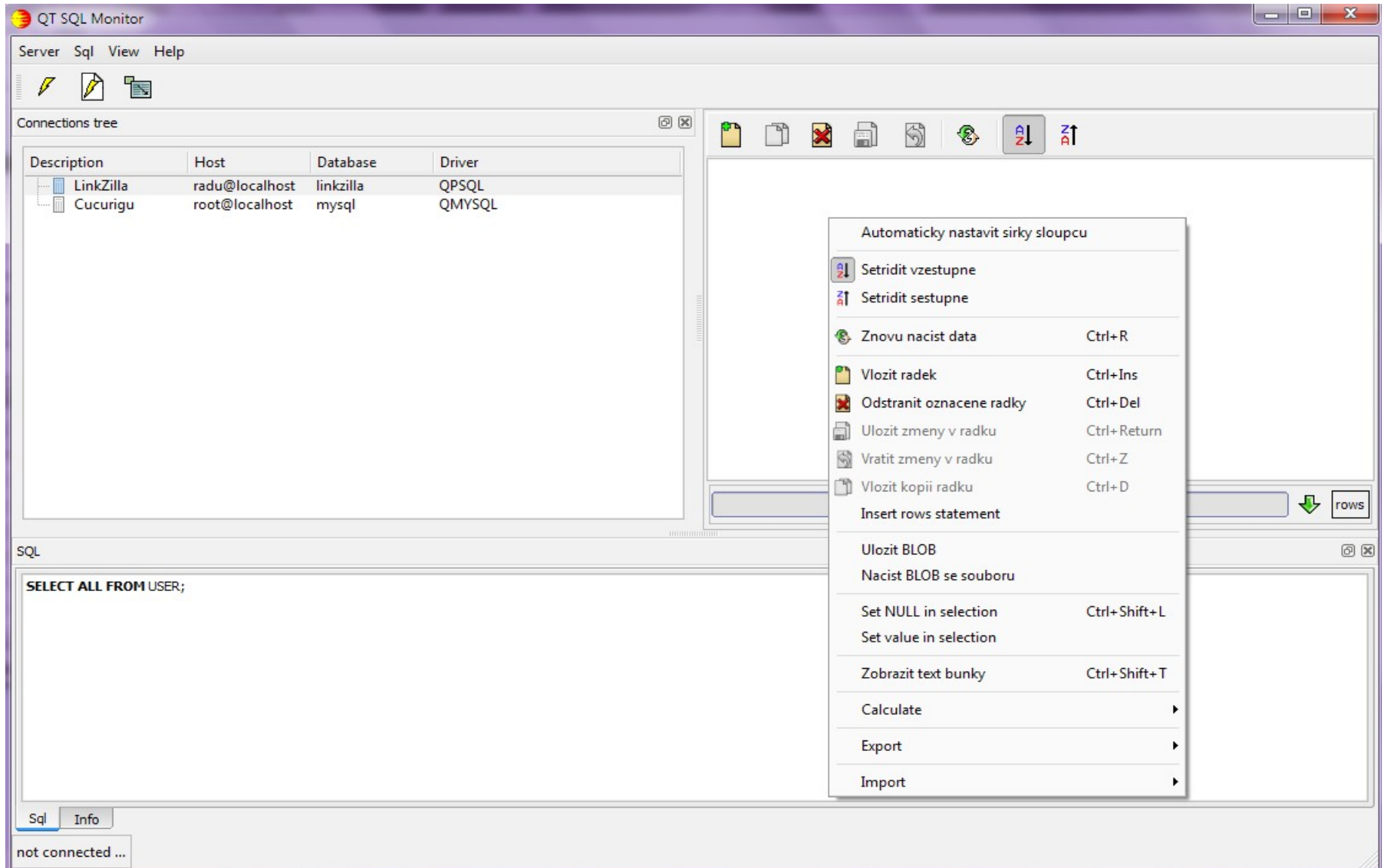
mysqlmon

help_topic_id	help_keyword_id
1	377 0
2	280 1
3	349 2
4	329 3
5	126 4
6	147 5
7	335 6
8	271 7
9	108 8
10	298 9
11	61 10
12	280 10
13	77 11

SELECT \* FROM mysql.`help\_relacon` 548 rows

database: on root@localhost driver: QJMYSQL codec: memorys

4/29/10



4/29/10

# Technical details

- Qt toolkit <http://qt.nokia.com/>
- C++
- Mingw for win32
- Multiplatform(Windows, Linux)

# Task description

- Design \*.rpm (Red Hat, Centos, Fedora, openSUSE) install packages
- Design \*.deb install packages (Debian, Ubuntu, Kubuntu)

# Building manually application

Problems encountered:

- project had compile errors
- project contains absolute path to dependencies it needs
- design errors (a custom QSqliteDriver was extended from the class `<QtSql/private/qsqlcachedresult_p.h>` which is not part of Qt API)



# Building rpm install packs (1)



BUILD



RPMS



SOURCES



SPECS



SRPMS

# Building rpm install packs (2)

```
%define projdir /home/radu/Documents/qsqmon_rpm/SOURCES/qsqmon
%define name qsqmon

Summary: qsqmon
Name: %{name}
Version: 1.3.0
Release: 1%{?dist}
License: GPLv3

%if 0%{?suse_version}
Group:      Productivity/Security
%endif
%if 0%{?fedora_version} || 0%{?centos_version} || 0%{?rhel_version}
Group:      User interface/Desktops
BuildRoot: /var/tmp/%{name}-root

%if 0%{?suse_version}
BuildRequires: libqt4-devel ,libqt4-devel ,libQtWebKit-devel ,mysql-devel
Requires:      libqt4 , libqt4-x11
%endif
%if 0%{?fedora}
BuildRequires: qt4-devel, qt-postgresql, qt-mysql, qt-sqlite,mysql++-devel
Requires:      qt4, qt4-x11
%endif
%if 0%{?centos_version} || 0%{?rhel_version}
BuildRequires: qt4-devel, qt-postgresql, qt-mysql, qt-sqlite,mysql++-devel
Requires:      qt4, qt4-x11
%endif
```

# Building rpm install packs (3)

**Packager:** Radu Fiser <radu.fiser@gmail.com>

**URL:** <http://qsqlmon.sourceforge.net/>

**Vendor:** Radu Fiser

**%description**

OpenSource Qt GUI tool for SQL server administration. Supports Fireb.

**%prep**

**%build**

cd %{projdir}

```
%if 0%{?centos_version} || 0%{?rhel_version}
export PATH=/usr/lib64/qt4/bin:/usr/lib/qt4/bin:$PATH
%endif
```

```
%if 0%{?fedora}
CFLAGS="%{optflags}" CXXFLAGS="%{optflags}" \
qmake-qt4 PREFIX=%{_prefix} NOSTRIP=1
%else
CFLAGS="%{optflags}" CXXFLAGS="%{optflags}" \
qmake PREFIX=%{_prefix} NOSTRIP=1
%endif
make
lupdate-qt4 -verbose qsqlmon.pro
lrelease-qt4 -verbose qsqlmon.pro
```

# Building rpm install packs (4)

```
%install
[ "$RPM_BUILD_ROOT" != "/" ] && rm -rf $RPM_BUILD_ROOT

mkdir -p $RPM_BUILD_ROOT/usr/bin
mkdir -p $RPM_BUILD_ROOT/$_libdir
mkdir -p $RPM_BUILD_ROOT/usr/share/applications
mkdir -p $RPM_BUILD_ROOT/usr/share/icons/hicolor/32x32/apps
mkdir -p $RPM_BUILD_ROOT/usr/share/icons/hicolor/48x48/apps
mkdir -p $RPM_BUILD_ROOT/usr/share/icons/hicolor/96x96/apps

cp %{projdir}/_build/bin/*          -r      $RPM_BUILD_ROOT/usr/bin/
cp %{projdir}/_build/lib/*          -r      $RPM_BUILD_ROOT/$_libdir/

cp %{projdir}/qsqlmon/qsqlmon.desktop      $RPM_BUILD_ROOT/usr/share/ap
cp %{projdir}/qsqlmon/images/sun.png      $RPM_BUILD_ROOT/usr/share/ic
cp %{projdir}/qsqlmon/images/sun.png      $RPM_BUILD_ROOT/usr/share/ic
cp %{projdir}/qsqlmon/images/sun.png      $RPM_BUILD_ROOT/usr/share/ic

%clean
[ "$RPM_BUILD_ROOT" != "/" ] && rm -rf $RPM_BUILD_ROOT
cd %{projdir}
make clean

%post

%preun

%files
%defattr(-,root,root)
/usr/bin/*
$_libdir/*
/usr/share/applications/qsqlmon.desktop
/usr/share/icons/hicolor/32x32/apps/sun.png
/usr/share/icons/hicolor/48x48/apps/sun.png
/usr/share/icons/hicolor/96x96/apps/sun.png
```

# Evaluation results

- Created unique *qsqmon.spec* file that give possibility to create \*.rpm install packages for Fedora, Red Hat, CentOS, openSUSE.
- Created and installed successfully rpms on Fedora 12(32bit and 64 bit)and openSUSE 11.2

# Future work

- Creation of \*.deb install packaged
- Change of qsqlmon.pro according to new task