

QSqlMonitor

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Subject: Open Source programming
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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

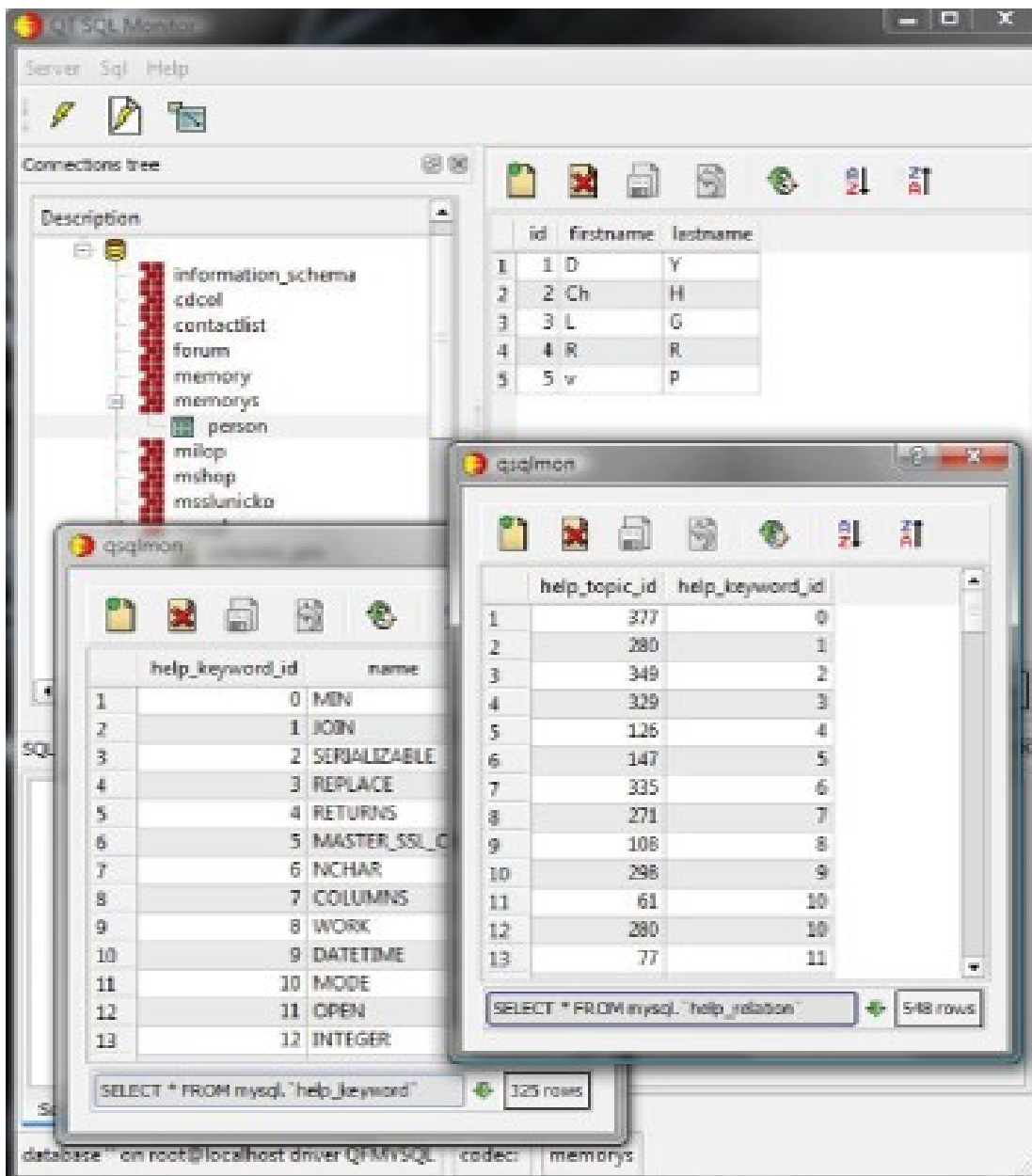
Version: 1.3

Homepage:

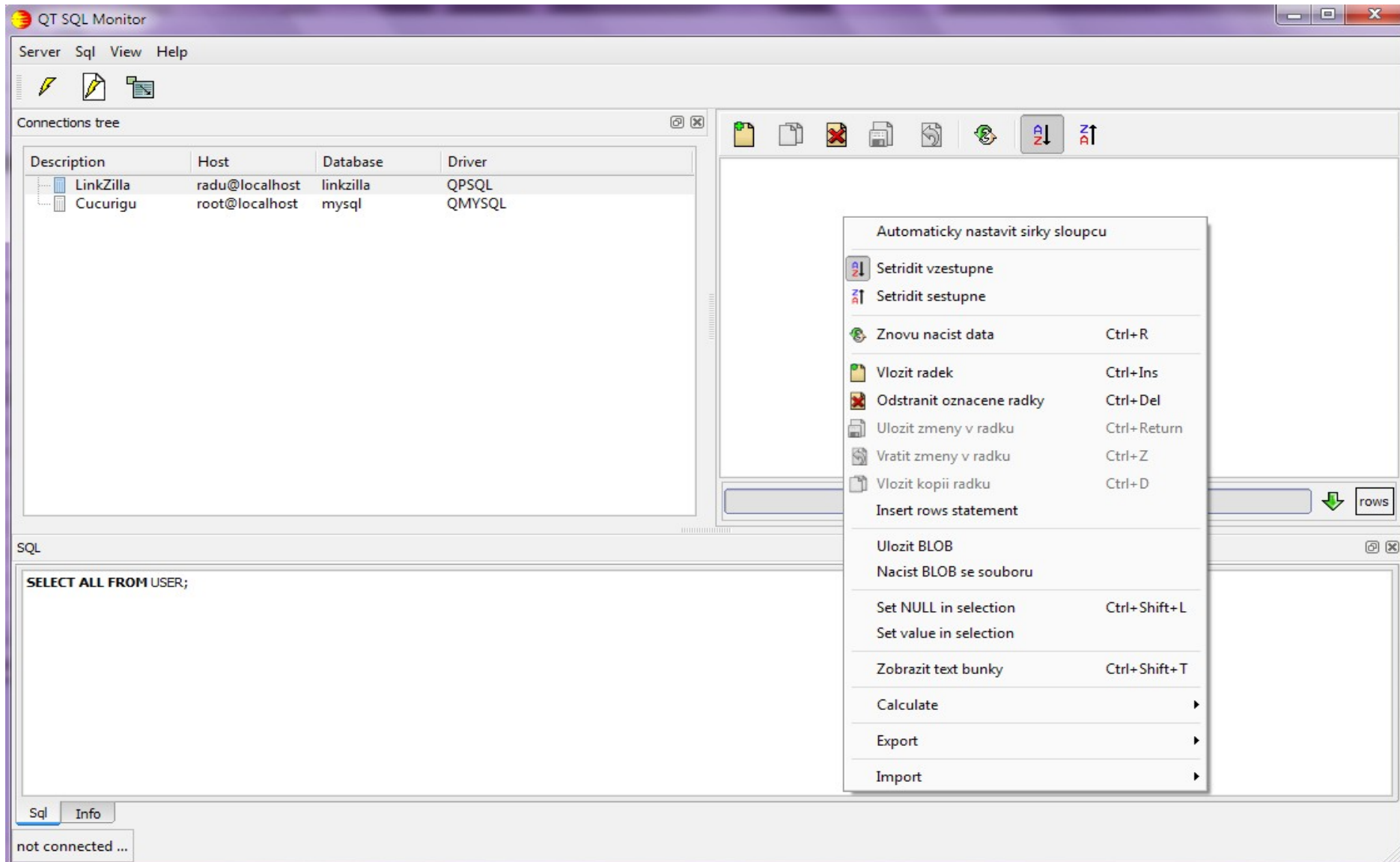
<http://sourceforge.net/projects/qsqlmon/>

What QSqlMon can do?

- Connect to database(MySQL, Sqlite, PostgreSQL, Firebird)
- Manage database tables(delete, create)
- Run SQL queries and SQL scripts
- Visualize SQL queries results into 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



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Task description

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

Problems encountered during task fulfillment

- project had compile errors
- project contain absolute paths to dependencies it needs to run or compile
- design errors that eventually brought to build errors(a custom QSqliteDriver was extended from the class `<QtSql/private/qsqlcachedresult_p.h>` which is not part of Qt API)
 - -lmysqlpp / -lmysqlclient

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
```

Results evaluation

- Created single *qsqmon.spec* file that gives the 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

Experience gained

Broaden my knowledge regarding Qt and Linux distributions and Linux in general.

Work still to be done

- Creation of *.deb install packages