Paravel Systems
APPLICATION NOTE 004
Building Rivendell on SuSE Linux from CVS

SCOPE
This application note details the procedures for building Rivendell on SuSE Linux from a Concurrent Versioning System (CVS) version. This is sometimes necessary in order to get access to the very latest features and bugfixes that are not yet available in the official "released" versions.

OVERVIEW
Building Rivendell from CVS on SuSE involves the following steps:

1) Installing development software on the target system
2) Downloading (also referred to as "checking out") the sources from CVS
3) Compiling and installing the sources.

INSTALLING DEVELOPMENT SOFTWARE
In addition to the usual Rivendell prerequisites, the target system will need the GNU C++ compiler and `make(1)` software installed. This can be done with YaST in 'Software Management' by setting the **Filter** control to **Selections** and then checking the **C/C++ Compiler and Tools** checkbox. The following "devel" packages will also be required:

> qt3-devel
> alsa-devel
> jack-devel
> libogg-devel
> libvorbis-devel
> id3lib-devel
> libflac-devel
> libsamplerate-devel
> hpklinux-devel

The last-mentioned package is not included with SuSE, but is available from the Rivendell Download Page at http://www.rivendellaudio.org/rivendell/download.shtml.

Also verify that the 'cvs' package is installed. Some versions of SuSE include this in the **C/C++ Compiler and Tools** group, while others do not.

It is necessary to create a couple of environmental variables in order for Qt to work correctly. In your home directory, use a text editor to add the following lines to the file '.bashrc':

> export QTDIR=/usr/lib/qt3
> export PATH=$PATH:$QTDIR/bin

Close any open shells (xterms, konsoles, etc) and start a new one to pick up the changes.

CHECKING OUT THE SOURCES FROM CVS

Downloading the sources is a matter of setting up a login to the CVS server, then checking out the various packages needed. To set up a login to the cvs server, do the following from a shell prompt:

cvs -d :pserver:cvs@cvs.rivendellaudio.org:/home/cvs/cvsroot login

The shell should now prompt for a password. Enter `cvs` and then press the **Enter** key. The login is now set up.

Next, check out the 'libradio', 'librhpi' and 'rivendell' packages with the following commands:

cvs -d :pserver:cvs@cvs.rivendellaudio.org/home/cvs/cvsroot co libradio
cvs -d :pserver:cvs@cvs.rivendellaudio.org/home/cvs/cvsroot co librhpi
cvs -d :pserver:cvs@cvs.rivendellaudio.org/home/cvs/cvsroot co rivendell

You should now have three new directories, called 'libradio/', 'librhpi/' and 'rivendell/', which we will now build and install in that order. To build 'libradio', do the following:

cd libradio
./autogen.sh
./configure
make
su   [enter root password]
make install
ldconfig
exit
cd ..

Then, 'librhpi', in the same manner:

cd librhpi
./autogen.sh
./configure
make
su   [enter root password]
make install
ldconfig
exit
cd ..

Finally, the main Rivendell package:

cd rivendell
./autogen.sh
./configure
make
su   [enter root password]
make install
ldconfig
exit
cd ..

The Rivendell code is now installed on the system, and can be configured and used in the usual manner.

REVISION HISTORY
Wed 12 April 2006 – Fred Gleason <fredg@salemradiolabs.com>
Initial document creation.

Mon 5 March 2007 – Fred Gleason <fredg@paravelsystems.com>
Updated CVS checkout instructions for new CVS host site.

Mon 12 March 2007 – Fred Gleason <fredg@paravelsystems.com>
Corrected broken download link.