Installation Instructions

Requirements

The Virtual Leaf is written with the QT Cross platform application and UI framework, and can run on Linux, Apple Macintosh and Windows machines. To compile the Virtual Leaf you will need to install the QT software development kit (SDK) which you can download from the QT download site. Whether installed globally by a system administrator our locally in your own user space, make sure the QT bin directory containing qmake is in your execution path.

All Platforms

Compilation is effected with make, either the native `make` on UNIX and MAC systems or the `mingw32-make` distributed with the windows version of QT. In the Virtual Leaf `src` directory you will find a `Makefile`, the root of a hierarchy of makefiles, that will guide the compilation and installation of the VirtualLeaf executable, its default plugins and the tutorial examples. To facilitate cross platform compatibility, the makefiles expect an environment variable named `MAKE` to name the make utility to use. The fallback default is 'make.' Platform specific instructions follow.

Linux

Prepend the QT bin directory to your path, for example:

```
> PATH=/opt/QT/qt/bin:$PATH
```

If you wish to use some other make utility than make, instantiate an environment variable named `MAKE`, for example:

```
> export MAKE=gmake.
```

Go to the `src` directory and invoke make, for example:

```
> cd /home/michael/VirtualLeaf/v1.0/src
> make
```

When complete, you will find the `VirtualLeaf` binary in `v1.0/bin` and the plugins in `v1.0/bin/models`.

Windows

For convenience sake the libiconv, libxml2 and libz header files and libraries are distributed with the Virtual Leaf code, and Virtual Leaf will compile correctly with them. If, however, you wish to compile with other versions of these libraries, you will need to reassign the `LIBZML2DIR`, `LIBICONVDIR` and `LIBZDIR` variables in all the project files.

After installing QT you should be able to invoke a QT command window from the start menu. This shell automatically includes the necessary QT folder in your execution PATH. Within this command window, go to the Virtual Leaf's src directory,

In the start menu, right click on My Computer and choose properties from the drop down list. In the advanced tab click on environment variables. Append the QT

MacOS