HOWTO:
Installing AVRStudio
in Ubuntu 8.04

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I guess the title of this (wannabe) HOWTO is self-explaining. But why would you install AVRStudio in Ubuntu?

- You don't like using Window$ and the only thing that kept you from switching to Linux was AVRStudio.
- Your main development platform is in Linux but you're missing a handy tool such as AVRStudio.
- You decided to build all your new projects in Linux but you need a way to access your previous (AVRStudio-created) ones without porting them.
- You think that avrdude and gdb are nice tools but you would prefer to use AVRStudio for MCU burning and debugging.

These are just a few reasons why someone would like to have AVRStudio available in a Linux platform. Well, wine is here and with a few tricks and tweaks it can host an almost flawless installation of AVRStudio.

This HOWTO is targeted in installing AVRStudio in Ubuntu 8.04, I haven't tried to install it in another platform, although I believe it's plausible using the same tools.
Finally, this HOWTO was based in various AVRFreaks members' suggestions through the forum as well as my personal experience. More info can be found in www.avrfreaks.net

Installing Wine

Wine is available through the Ubuntu repositories, but it's never up-to-date, so I use the repositories from WineHQ to install it.
The following info came from this page

- ➜ Open a terminal window
- ➜ Paste the following in order to add the repository's key to your system:
  `$wget -q http://wine.budgetdedicated.com/apt/387EE263.gpg -O- | sudo apt-key add -`
- ➜ Paste the following in order to add the repository to your system's sources:
  `$sudo wget http://wine.budgetdedicated.com/apt/sources.list.d/hardy.list -O /etc/apt/sources.list.d/winehq.list`
- ➜ Run the following in order to download and install the latest wine:
  `$sudo apt-get update`
  `$sudo apt-get install wine`

Hopefully after the steps above your wine installation is complete.

Installing Wine-Doors

Wine-Doors is a very promising tool which is used to download and install windows applications compatible with wine. Unfortunately, wine-doors is not available in an Ubuntu repository so we have to download and install it manually.
Wine-Doors is available in this page. Move to the Downloads section and download the latest package as a **Debian/Ubuntu deb package**.
Install it by double-clicking to the downloaded deb package or by using the following command:

- ➜ `$sudo dpkg --install <package name>`

NOTE: In the downloads page you will find the software dependencies for wine-doors, make sure these packages are installed before running it.

Winetricks

Winetricks is a script file written by Dan Kegel which, like wine-doors, is used to download and install some important Windows components not available in wine.
Winetricks is available here
Save the file in your home folder under the name winetricks.

Installing components using wine-doors

Run wine-doors found under the menu Applications->Wine->Wine-Doors. The first time it's executed you'll see the following window:

Type in your name and press the Proceed button. It will then execute the initial setup, downloading and installing various packages. After finishing, you'll see the standard package manager:
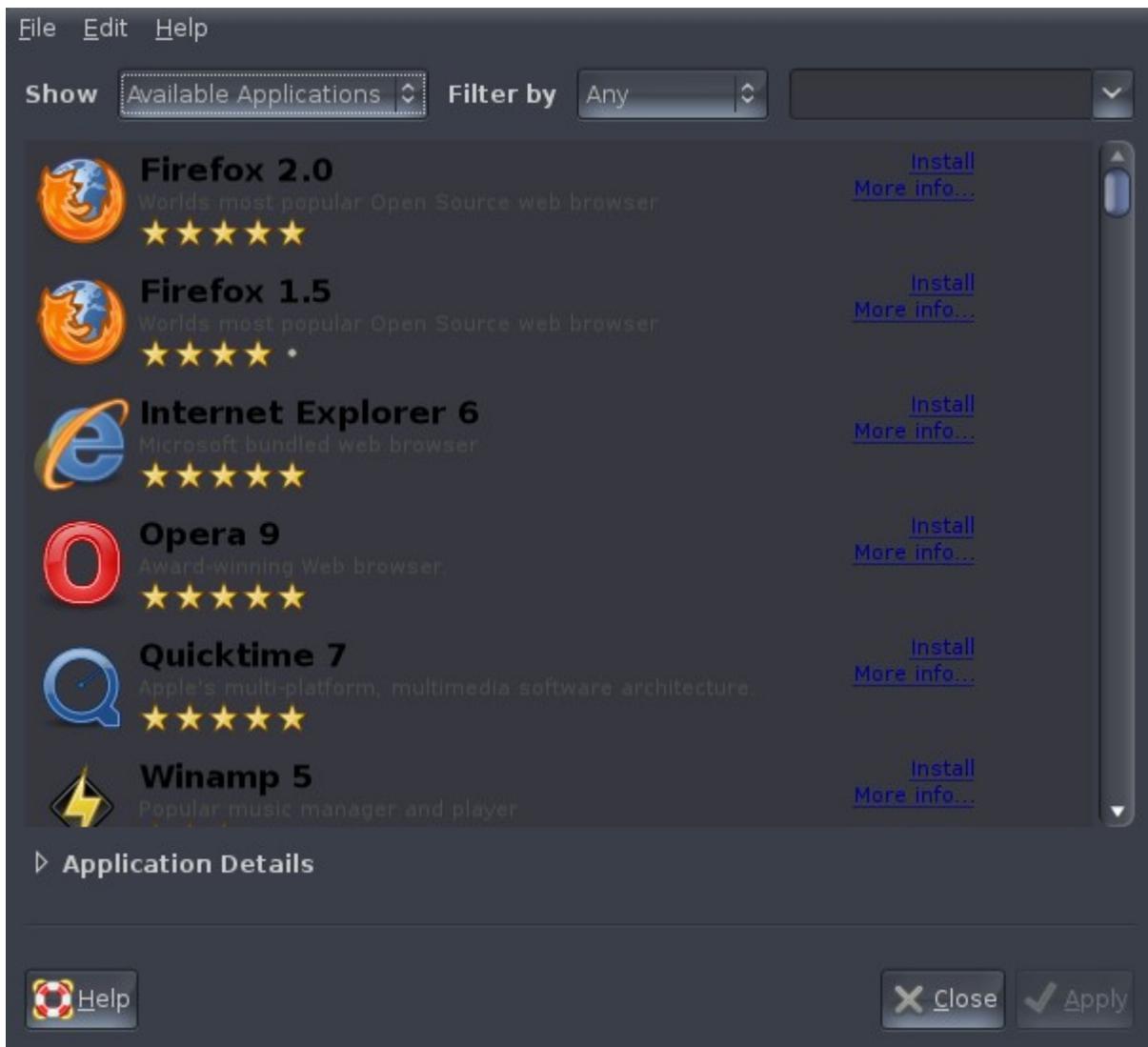
Using the package manager, we'll install some necessary components needed to install AVRStudio and other windows-based applications.

Select the following packages for installation:

- ➔ Internet Explorer 6
- ➔ Microsoft XML3
- ➔ Microsoft Data Access Components
- ➔ Microsoft GDIPlus

After selecting the above packages press the Apply button. Wine-doors will download and install them automatically.
**NOTE**: Probably the installation will end without errors, in case something went wrong wine-doors will prompt you accordingly. In that case, delete the .wine folder under your home folder and run again wine-doors installing one package a time, while you keep a copy of the .wine folder. If something goes wrong restore the previous .wine folder and try installing a different package, until all the above are installed correctly.

Installing components using winetricks

Open a terminal window and run the following command:

➜ *$bash winetricks*
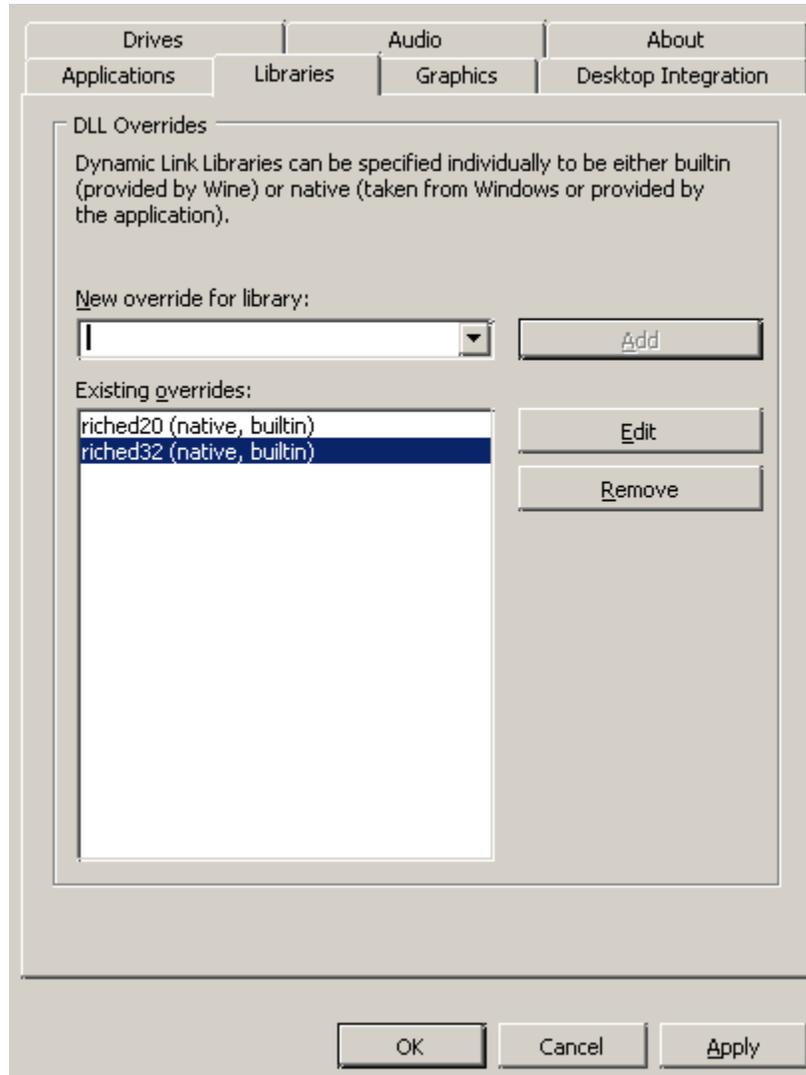
A pop-up window will appear:
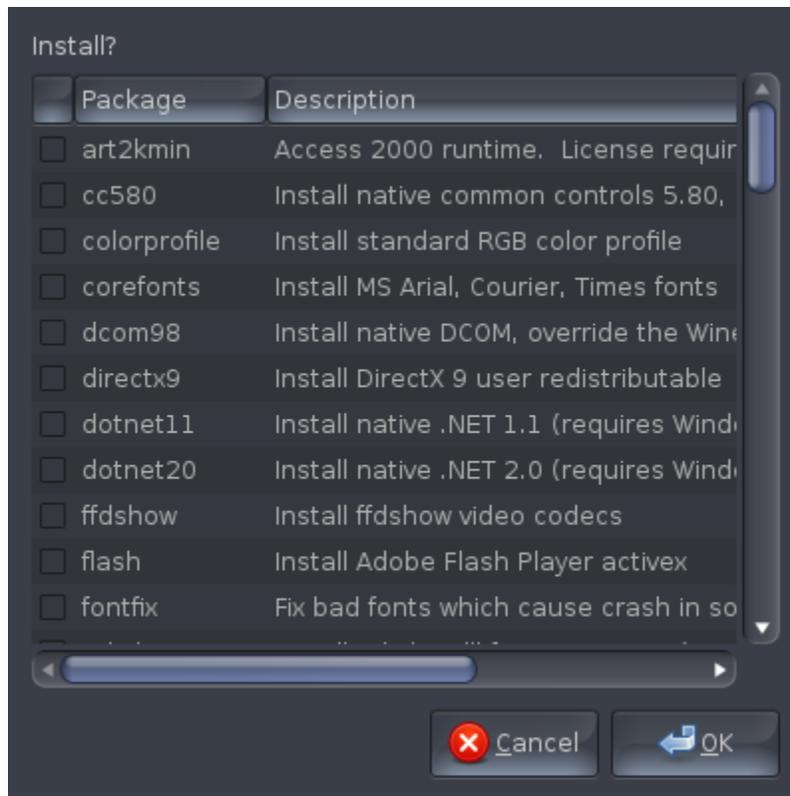
Scroll down and select the following packages:

➜ mdac28
➜ vcrun2005

and press the OK button. The above packages will be downloaded and installed using the standard "OK->Next" procedure.
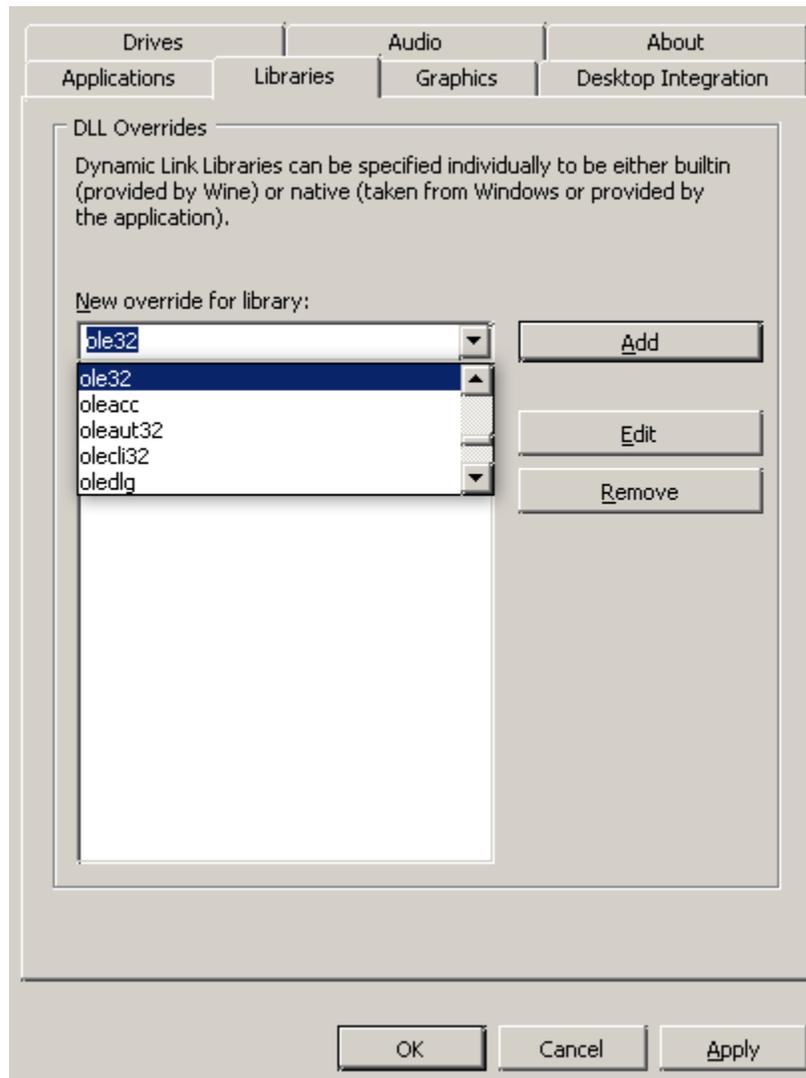
Tweaking the Wine configuration

Start the wine configuration manager under Applications->Wine->Configure Wine and select the 'Libraries' tab:

We need to set to 'native only' the following libraries:

- ➜ msxml3
- ➜ ole32
- ➜ oleaut32
- ➜ rpcrt4

Find each of the above libraries from the drop-down menu and press the add button:

Then select each library and press the edit button to switch it to the 'native only' setting. After finishing with all four libraries press the apply button and exit the configuration.

Installing AVRStudio4

Download the latest AVRStudio from Atmel and save it in your home folder. Open a terminal window and type the following:

➔ *$wineboot –r*
➔ *$wine aStudioxxxxx.exe*

The AVRStudio installation will start, proceed without changing the installation path.
Now AVRStudio is installed!

After finishing the installation make a wine reboot:

- ➔ `$wineboot -r`

Probably you'll find the AVRStudio menu shortcuts under Applications->Wine->Programs but it would be better to run AVRStudio using a terminal for the first time for debugging purposes. Open a terminal window and enter the following:

- ➔ `$cd .wine/drive_c/Program\ Files/Atmel/AVR\ Tools/AvrStudio4`
- ➔ `$wine AVRStudio.exe`

Voila! AVRStudio is up and running! In case it fails to run for the first time make another wine reboot and try again.
Happy debugging!
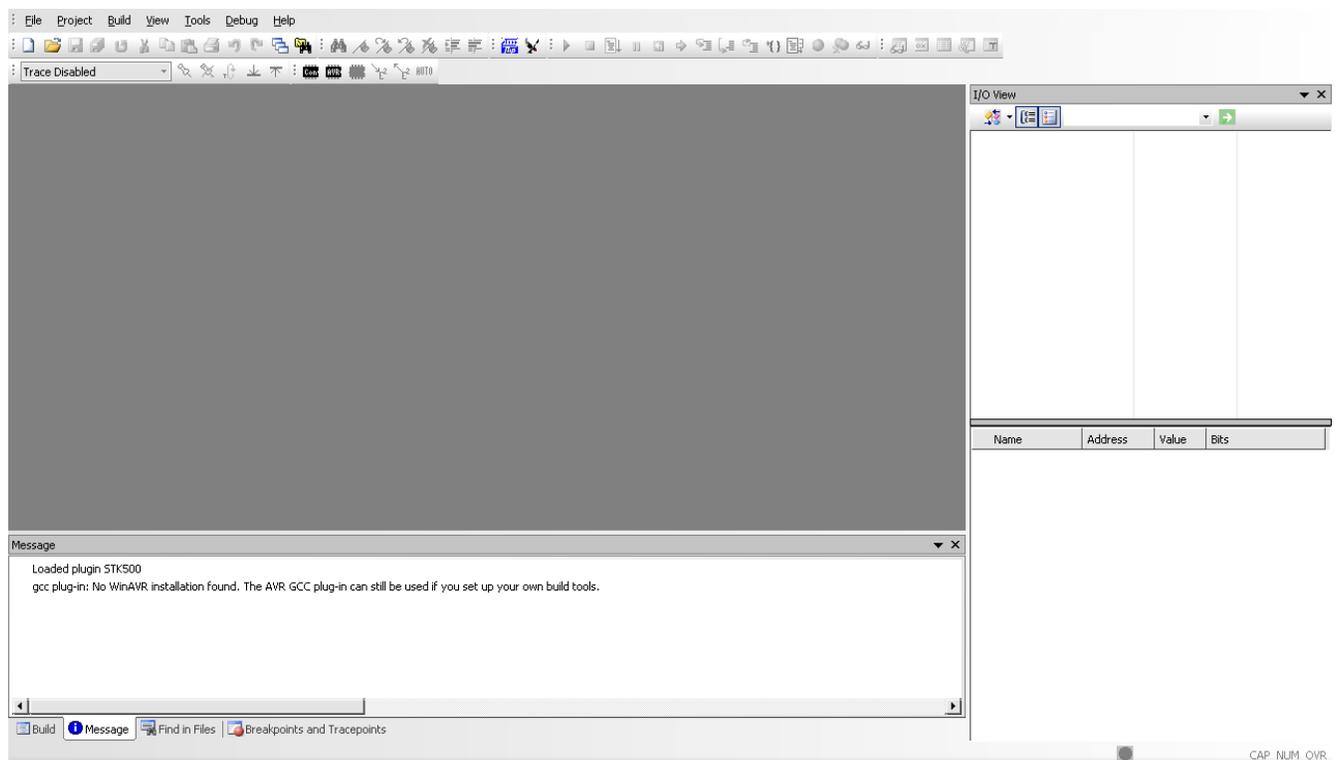
NOTE: The above steps were tested using:

- • wine-1.0-rc4
- • wine-doors 0.1.2
- • AVRStudio 4.14 b589
- • Ubuntu 8.04 64-bit