Software Setup

This page will contain links and instructions for installing the software used in the Timing Studies. Most of it is part of the ALCPG physics software suite, for more information and links see this page.

The ILC group has a great guide on setting up most of this software on Windows and Linux. Though it is a bit dated, it is still useful. The following notes will help clarify some steps or caveats.

Software to Install

- Java
- Java Analysis Suite 3 (JAS3)
- Netbeans
- org.lcsim and associated libraries
- Data files

Operating Systems

This guide will be primarily written for UNIX users, but everything should work on Windows as well. Most of the software already has guides for installation in both Linux and Windows environments. (OSX support?)

Java

Most versions of Java are supported, but using version 1.6 or 1.7 of either the closed or open source libraries will ensure best results.

Sun Java 1.6.29 can be downloaded for any OS here.

JAS3

Be sure to install the four plugins mentioned in the ILC instructions,

- org.lcsim
- HepRep Plugin
- WIRED 4
- WIRED 4 Base Library.

On Linux JAS3 is not installed as an application, simply extract it to a folder and run the jas3 script. If you have problems, make sure the jas3 script is executable.

In GNOME3, and perhaps other DE's, JAS3 may have buggy dropdown menus while the application window is maximized. You'll have to manually resize it to *almost* fullscreen.

Netbeans and org.lcsim

Installing Netbeans is not necessary and will not help you with running code, but it is very useful for version control with Maven/CVS and code completion.

As mentioned in the Tutorial page, the current version of Netbeans (7) has Maven/CVS support built right in. To get the org.lcsim packages, follow the instructions on this page. The Netbeans dialog is different from the Tortoise one shown, but the same fields apply.

Netbeans crashes when I try to use the CVS checkout, so I use the command line;

```
$ cvs -d :pserver:anonymous@cvs.freehep.org:/cvs/lcd co lcsim
```

and then open the lcsim project from the File -> Open Project menu in Netbeans.

Next, right click the project org.lcsim and select Build. The first time you run this will take forever as it will download a bunch of files, but will be super fast afterwards. Now you can add the org.lcsim library to any of your own projects, or work within it.

Then do the same with lcsim-contrib and GeomConverter.

Data files

In order to run analyses, we need event data and java programs.

A variety of simulated events can be found here. I used the electron dataset and the pion dataset for these studies.