Cygwin and SAL installation

Cygwin is a Unix-like environment that runs on Windows. If you want to use SAL (or Yices) in Windows, you must first install Cygwin. For Windows XP, this goes as follows (please add corrections for other versions of Windows):

1. Go to www.cygwin.com
2. Click on the **Install** or **update now!** button
   - This will request permission to **open** or **save** the file `setup.exe` -- select **open**
3. The next screens ask some questions. You want to `Install From The Internet` and may as well accept the default root directory `c:\cygwin` and `Install For All Users`. If you want to use Windows editors to prepare and edit SAL files, then change the `Default Text File Type` to DOS.
4. The next couple of screens ask how you connect to the internet, and then you are asked to choose a download site; pick one near you (from the USA, the University of Delaware site seems fast and reliable).
5. `setup.exe` will be downloaded and opened and the next screen will ask you to select packages. You can just click on the **next** button to install the default configuration, but
   - If you have no interest in Cygwin other than to run SAL, you can save download time and file space by deselecting XFree86,
   - If you want to prepare and edit SAL files with a Unix editor, select your favorite editor (e.g., ed, vi, or emacs) from the `Editors` entry.
6. The default installation takes about 15 minutes to download over a DSL connection, and another 5 minutes to build and install itself.
7. You should now be able to start Cygwin (it puts an icon on the desktop by default). You will see a tty-like window. Type `pwd` -- this will tell you the current directory in Cygwin terms. It should be something like `/home/foo` where `foo` is your Windows user name. This Cygwin directory will correspond to the Windows directory c:\cygwin\home\foo.
   - If your user name has spaces in it, you will need to create a directory without spaces. The easy way to do this is to create a link: e.g., `ln -s /home/foo\ with\ spaces foo_no_spaces`
8. From your Windows browser, download the [SAL for Cygwin](#) file into this directory.
9. In Cygwin, type `tar xzf sal-3.3-bin-i686-pc-cygwin.tar.gz` (the tab key provides completion, and the filename will change with different versions of SAL).
10. Then type `cd /home/foo/sal-3.3` (or whatever the current version is), where `foo` is the name without spaces, and then `./install.sh`
11. Using a Unix editor, edit the file `/home/foo/.bashrc`, or with a Windows editor, the file `c:\cygwin\home\foo\.bashrc`, and append the following lines (again, `foo` is the name without spaces)

- `PATH=/home/foo/sal-3.3/bin:$PATH`
- `export SALCONTEXTPATH=.:/$HOME/`

12. Finally, exit Cygwin and start it again and SAL should run nicely (try typing `sal-smc --help`).