Things to be done in order to have the Teal and Truss environment ready

1) Use csh shell in CentOS 4.5 (type in the shell you are currently using "csh")

2) Make the following hierarchy of directories:

   /home/$USER/verification/examples
   /home/$USER/verification/teal
   /home/$USER/verification/truss

3) Unzip **teal_1_40b.tar.gz** and put the content in the **teal** sub-directory above and **truss_1_40b.tar.gz** into **truss** sub-directory. Unzip **examples_1_40a.tar.gz** and put the content into **examples** sub-directory.

4) Make a file that will be sourced before running anything (even compilation of Teal and Truss). The name can be env_teal_truss and will contain:

   setenv ARCH Linux
   setenv SIM ivl
   setenv SIMULATOR_HOME /usr/bin/iverilog

   setenv BOOK_HOME /home/$USER/verification
   setenv EXAMPLES_HOME $BOOK_HOME/examples
   setenv TRUSS_HOME $BOOK_HOME/truss
   setenv TEAL_HOME $BOOK_HOME/teal

5) Source the environment file under csh shell:
   source env_teal_truss
   Now test the fact that the variables are correct by doing echo $TEAL_HOME

6) At this point you should compile Teal and Truss. In order to do that, for CentOS distribution chosen you should comment into /home/$USER/verification/teal/Makefile

the line

ROOT_INCL = -I$(SIMULATOR_HOME)/include -I$(SIMULATOR_HOME)/pli_incs -I$(SIMULATOR_HOME)/pli/interface
After commenting it, the line will look like:
#ROOT_INCL = -I$(SIMULATOR_HOME)/include -I$(SIMULATOR_HOME)/pli_incs -I$(SIMULATOR_HOME)/pli/interface

7) Compile Teal by typing **make** into /home/$USER/verification/teal directory. This will produce

8) In order to see that the compilation succeeded, go into test subdirectory and type
   ./run -c -clean -ivl -t memory_test
   It will run memory_test test. Take some time to examine the output of the test

   Now you are prepared to write your DUT and the test that injects signals into it and extract signals from it. Therefore, your DUT is controllable and observable from C++ code.

9) In order to run an example involving Truss you need to source the setup file in

   /home/$USER/verification/examples/alu/verification/bin like that:

   source setup

The setup file is for the test alu (please note the path) and for this test it contains:

setenv TRUSS_HOME $BOOK_HOME/truss
setenv TEAL_HOME $BOOK_HOME/teal
setenv PROJECT_HOME $BOOK_HOME/examples/alu

You may need to modify every setup file (for each test) since they do not look originally like that. I do not post directly the files because of copyright.

10) To run alu test go into /home/$USER/verification/truss/bin and run the following command:

./truss --test alu_test

The test will begin to run after compiling the truss environment and the verification_top file. Please note that it is pretty slow, but if it starts running than you have successfully configured the environment. If the test fails, please try to dig in and understand the cause of the failure. It may be the first task for you as a verification engineer.