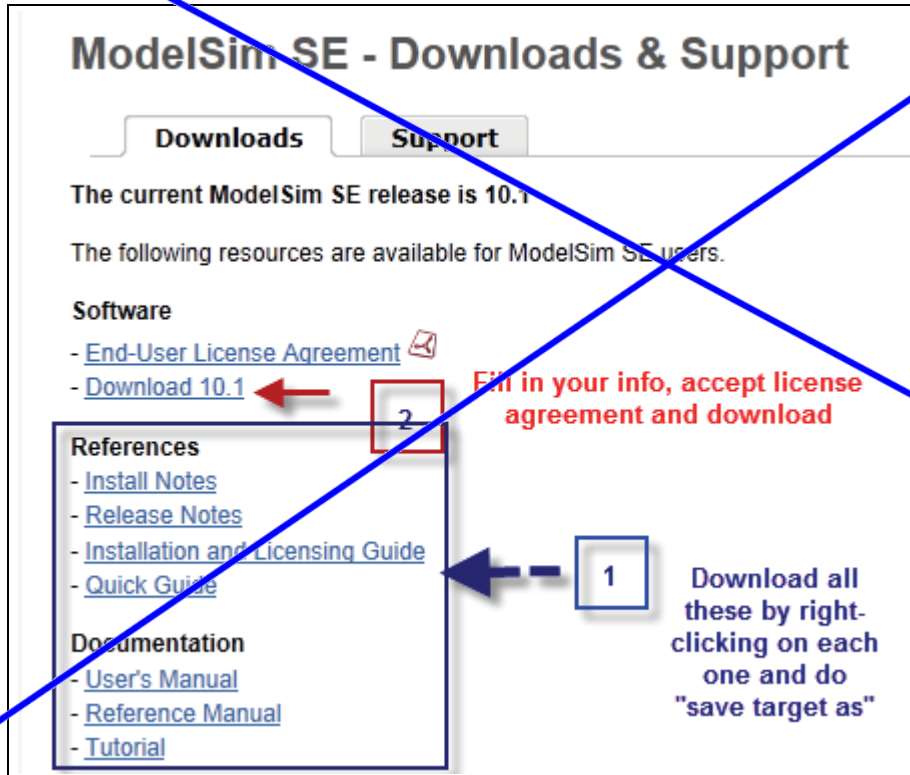


Handmarked to change 10.2 to 10.4a

**ModelSim SE Installation on Windows machines by USC students (confidential)****1 ModelSim SE is not a FREE version. Hence this is open to USC members only with USC login privileges.**

**1.1** Prior to Summer 2012, we were asking students to download Modelsim SE as if they were going to evaluate this tool. But, instead of seeking evaluation license, they point to the USC license server running on USC unix system. In Summer 2012, Modelsim stopped providing Modelsim SE evaluation licenses and stopped making the software openly downloadable on <http://model.com/>. Following is one of the pages in Spring 2012.



**1.2** We have downloaded version 10.4a and made it available to students in specific classes of USC. If your instructor has asked you to install ModelSim SE, he or she would have included you in the authorized user list. Please open the following page.

[http://ee-classes.usc.edu/ee201/01O100ool11/f0r\\_UsC\\_oN1y/MSim\\_SE\\_10.2/](http://ee-classes.usc.edu/ee201/01O100ool11/f0r_UsC_oN1y/MSim_SE_10.2/)

You will see the login screen as shown on the side.

~~Please provide your username (same as your username for USC email and USC ONLY login). Use your 10-digit student ID as your password. Do not share your Student ID with anyone.~~

Download

(1) INSTALL\_NOTES.txt,

(2) modelsim\_se\_install.pdf and either

(3.1) modelsim-win32-10.2-se.exe or

(3.2) modelsim-win64-10.2-se.exe

depending on whether you are running windows 32-bit or windows 64-bit OS. The two .exe files are each about 430 MB and it does take a lot of time if you do not have a high-speed internet.



[http://ee-classes.usc.edu/ee201/01O100ool11/f0r\\_UsC\\_oN1y/MSim\\_SE\\_10.4a/](http://ee-classes.usc.edu/ee201/01O100ool11/f0r_UsC_oN1y/MSim_SE_10.4a/)

May 15, 2015  
March 15, 2013 11:46 pm

- 1.3** As advised in the INSTALL\_NOTES.txt, first remove any previous versions of ModelSim before proceeding with installing this new version.

Go to

control panel => Uninstall or Change a Program =>  Mentor Graphics Products

or/and  
control panel => Uninstall or Change a Program =>  ModelSim PE Student Edition

## 1.4 Windows XP, Windows 7 win-32/win64, Solaris and floating licenses

I am writing this document while installing Modelsim SE on my PC running **windows 7 64-bit system**. If you are installing on Windows XP or on SUN OS, please follow appropriate sections of instructions in INSTALL\_NOTES.txt and modelsim\_se\_install.pdf. We have floating licenses already installed on licence.usc.edu and we can get the license by pointing the [LM\\_LICENSE\\_FILE](mailto:1800@license.usc.edu) variable to [1800@license.usc.edu](mailto:1800@license.usc.edu).

- 1.4.1** Significant info from the above INSTALL\_NOTES.txt is included here. Do read the INSTALL\_NOTES.txt completely, if your platform is different from Window 7 64-bit.

Never overlay a new ModelSim release over the top of an old release.  
Either remove the old release first or install the new release to a different location.

-- Common files --	
INSTALL_NOTES	This file.
RELEASE_NOTES	Release notes for current release.
modelsim_se_10.2_install.pdf	Installation details.

Note:  
The win32 gcc is NO LONGER automatically installed when Modelsim is installed.  
See below installation instructions.

← Not important to us as we are not using "System C"

-- For windows --	
modelsim-win32-10.2-se.exe	Modelsim 32-bit self extracting executable.
modelsim-win64-10.2-se.exe	Modelsim 64-bit self extracting executable.


-- For windows --	
win32:	
modelsim-win32-10.2-se.exe	Double click the file to install Modelsim.
win64:	
modelsim-win64-10.2-se.exe	Double click the file to install Modelsim.

ADDITIONAL SYSTEMC INSTALLATION:  
copy modelsim-gcc-4.2.1-mingw32vc9.zip into the <install\_path modeltech> folder  
open up the zip file modelsim-gcc-4.2.1-mingw32vc9.zip and extract the contents  
into this <install\_path modeltech> folder.

← Not important to us as we are not using "System C"

win64 does not support systemc

- 1.5** Start installing. Assuming that your OS is Windows 64-bit, after double-clicking on

 modelsim-win64-10.2-se.exe

you see



- 1.6** Click next in the Welcome screen.

Welcome to Modelsim SE-64 10.2

**1.7** Accept the target location. Select a target location:

C:\modeltech64\_10.2 

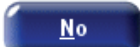
Let the tool create the target directory.

**1.8** Agree to the **License Agreement**

**1.9** **Installation in progress ... Please Wait**

**1.10** The tool takes a few minutes to install. Allow it to create the **Modelsim Desktop Shortcut**

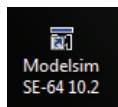
**1.11** Allow the installer to **Add Modelsim To Path**

**1.12** Say  to **Install Hardware Security Key Driver**

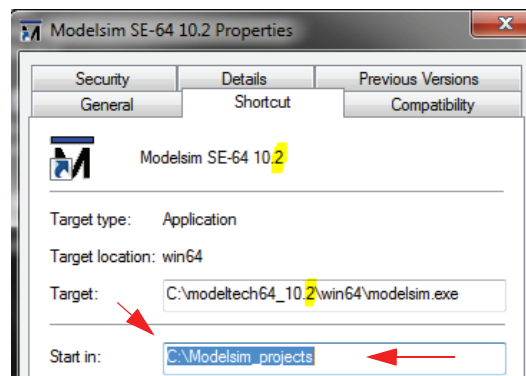
**1.13** **Modelsim-64 Setup Complete** Click on Done.

**1.14** For our courses at USC, we keep all our modelsim projects in a directory created under C:\.  
Please create C:\Modelsim\_projects

Then right-click on the desktop icon



and select Properties. In the Properties dialogue box (shown on the right) change the Start in directory to C:\Modelsim\_projects.



## 2 Connecting to the floating license server `license.usc.edu`

**2.1** Please refer to the section **Windows PC Client (Obtains License from a Server)** on page 13 of 41 of `modelsim_se_install.pdf`.

4. Set the `LM_LICENSE_FILE` environment variable with the port# and hostname given you by the system administrator.

- For Windows XP, right-click the My Computer icon and select Properties, then select the Advanced tab and then Environment Variables.

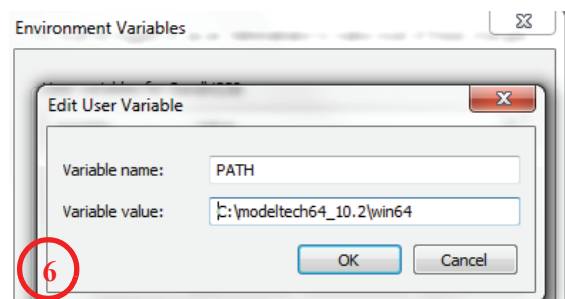
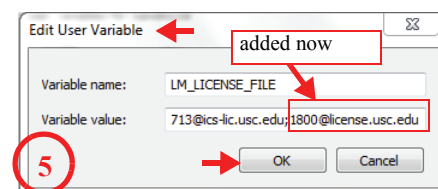
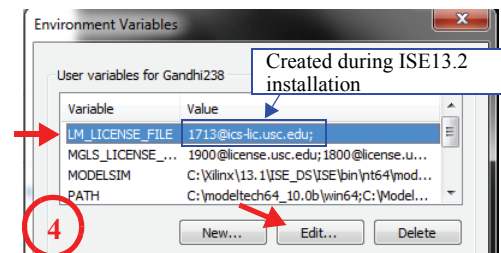
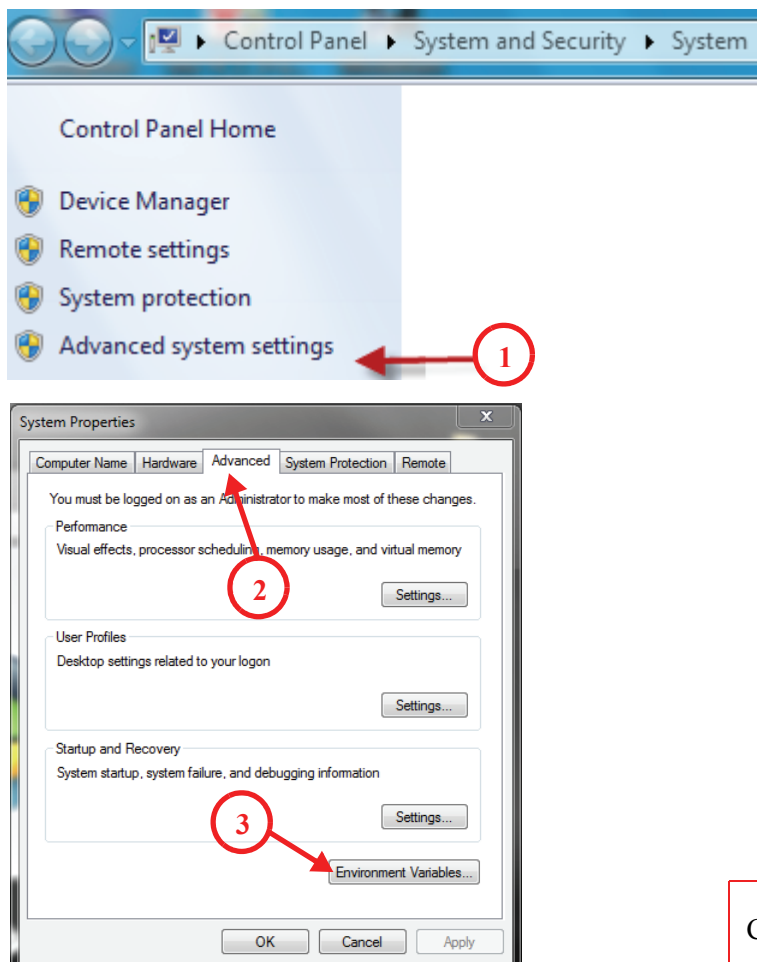
For Windows Vista or 7, right-click the Computer icon and select Properties, then select Advanced System settings and then select Environment Variables.

Add `LM_LICENSE_FILE` with the value `port#@hostname`, reflecting the data given you by your system administrator, such as `1650@server1`.

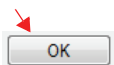
The software does not look for licensing variables in the registry, therefore you must set either `LM_LICENSE_FILE` or `MGLS_LICENSE_FILE` environment variable.

**2.1.1** On my PC, I have created/edited a user environment variable `LM_LICENSE_FILE` and set its value as `1800@license.usc.edu`.

I also verified that the path variable includes the Modelsim Executable `C:\modeltech64_10.2\win64`.



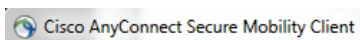
Close all these windows by clicking on



**2.2** If you are new to creating/editing an user environment variable on a PC, read the procedure in the following page for Windows 7:  
<http://www.itechtalk.com/thread3595.html>  
 And for Windows XP, read:  
<http://vlaurie.com/computers2/Articles/environment.htm>


**2.3** Since you are trying to checkout university floating license to run Modelsim-SE (a licensed full version of Modelsim), you need to prove to USC that you are a member of USC community. This is done by doing vpn to USC.

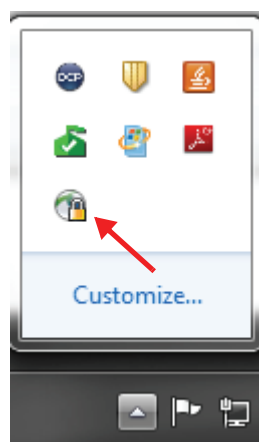
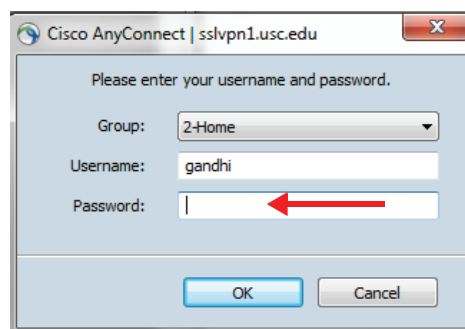
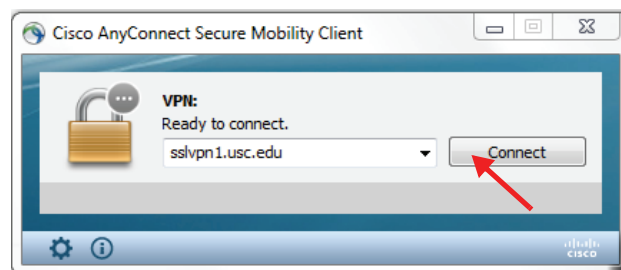
**2.3.1** If you are a new student at USC, probably you will not have the following program on your PC:



**If you do not have the above program on your PC go to the next step to install the program.**

If you have the above program, then click on it. It will show you the dialog box on the side. After you press Select, you will receive the following. Login and proceed.

After you login, wait until the lock symbol  appears in your system tray at the right-bottom of your screen.



**2.3.2** If you do not have  Cisco AnyConnect Secure Mobility Client on your PC, go to [sslvpn.usc.edu](https://sslvpn.usc.edu) and login there using your USC login.

From Home 2-Home

**Login**

Please enter your username and password.

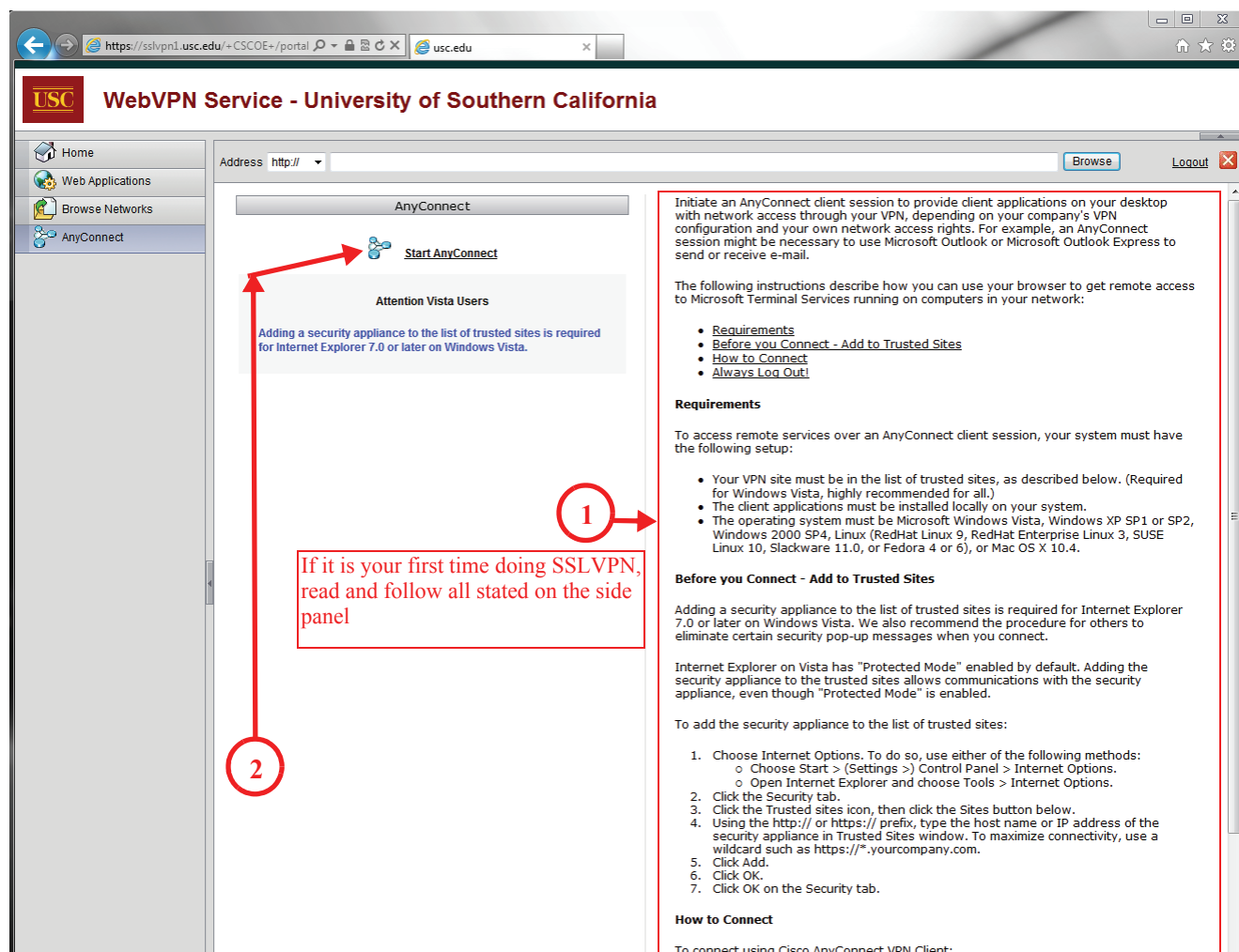
GROUP: 1-Wireless

USERNAME:

PASSWORD:

On Campus

**2.3.2.1** After you login, the following screen appears.



**WebVPN Service - University of Southern California**

Home | Web Applications | Browse Networks | **AnyConnect**

Address: <http://>

**AnyConnect**

[Start AnyConnect](#)

**Attention Vista Users**

Adding a security appliance to the list of trusted sites is required for Internet Explorer 7.0 or later on Windows Vista.

**1**

If it is your first time doing SSLVPN, read and follow all stated on the side panel

**2**

Initiate an AnyConnect client session to provide client applications on your desktop with network access through your VPN, depending on your company's VPN configuration and your own network access rights. For example, an AnyConnect session might be necessary to use Microsoft Outlook or Microsoft Outlook Express to send or receive e-mail.

The following instructions describe how you can use your browser to get remote access to Microsoft Terminal Services running on computers in your network:

- [Requirements](#)
- [Before you Connect - Add to Trusted Sites](#)
- [How to Connect](#)
- [Always Log Out!](#)

**Requirements**

To access remote services over an AnyConnect client session, your system must have the following setup:

- Your VPN site must be in the list of trusted sites, as described below. (Required for Windows Vista; highly recommended for all.)
- The client applications must be installed locally on your system.
- The operating system must be Microsoft Windows Vista, Windows XP SP1 or SP2, Windows 2000 SP4, Linux (RedHat Linux 9, RedHat Enterprise Linux 3, SUSE Linux 10, Slackware 11.0, or Fedora 4 or 6), or Mac OS X 10.4.

**Before you Connect - Add to Trusted Sites**

Adding a security appliance to the list of trusted sites is required for Internet Explorer 7.0 or later on Windows Vista. We also recommend the procedure for others to eliminate certain security pop-up messages when you connect.

Internet Explorer on Vista has "Protected Mode" enabled by default. Adding the security appliance to the trusted sites allows communications with the security appliance, even though "Protected Mode" is enabled.

To add the security appliance to the list of trusted sites:

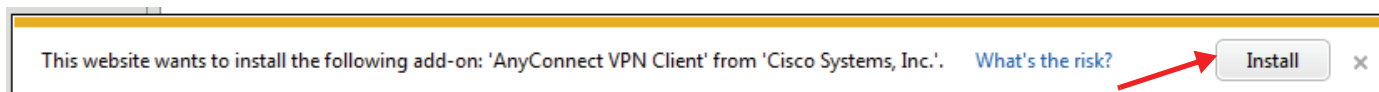
1. Choose Internet Options. To do so, use either of the following methods:
  - o Choose Start > (Settings >) Control Panel > Internet Options.
  - o Open Internet Explorer and choose Tools > Internet Options.
2. Click the Security tab.
3. Click the Trusted sites icon, then click the Sites button below.
4. Using the <http://> or <https://> prefix, type the host name or IP address of the security appliance in Trusted Sites window. To maximize connectivity, use a wildcard such as [https://\\*.yourcompany.com](https://*.yourcompany.com).
5. Click Add.
6. Click OK.
7. Click OK on the Security tab.

**How to Connect**

To connect using Cisco AnyConnect VPN Client:



### 2.3.2.2



2.3.2.3 Wait until the lock symbol  appears in the tray at the right-bottom of your screen.

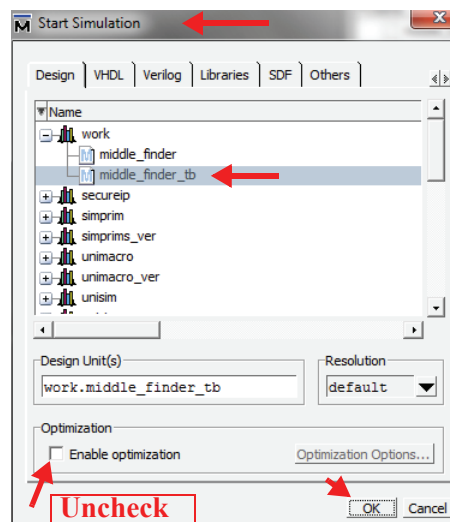
## 3 Test your installation

3.1 Testing is same for any version of the Modelsim. So please use the following items to test your installation. Even though the following document talks about Modelsim PE, the procedure is equally applicable to Modelsim SE.

[http://www-classes.usc.edu/engr/ee-s/457/ee457\\_tools/EE457\\_ModelSim\\_PE\\_Testing\\_USC.pdf](http://www-classes.usc.edu/engr/ee-s/457/ee457_tools/EE457_ModelSim_PE_Testing_USC.pdf)

[http://www-classes.usc.edu/engr/ee-s/457/ee457\\_tools/ee201L\\_Middle\\_Finder.zip](http://www-classes.usc.edu/engr/ee-s/457/ee457_tools/ee201L_Middle_Finder.zip)

Please **make sure that you unchecked the "Enable optimization"** option as shown on the side. Optimizing a test bench unfortunately removes all signals in the design. This is because the test bench (in most cases) is written to instantiate the design under test (DUT) and hence it (the test bench) itself does not have any external inputs or outputs. The optimization tool thinks that the signals in DUT which do not go anywhere beyond the top design (which is the test bench here) are essentially waste signals and trims them off :(



~~4 **compilib**: There is a separate document for the OHE/RTH/SAL installations and for EE101/EE201L/EE560 students to make the Xilinx ISE13.2 to work with this Modelsim SE 10.2. Unix installation can ignore this step as we did not install ISE 13.2 on unix.~~

5 **Celebrate your successful completion of installing the ModelSim SE 10.2!**

10.4a