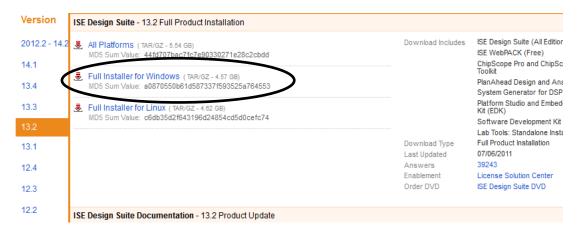
Xilinx ISE Webpack + Project Setup Instructions

1. Downloading

- The Xilinx tools are free for download from their website and can be installed on your Windowsbased PC's. Go to the following URL: http://www.xilinx.com/support/download/index.htm
- The current version of Xilinx ISE is 14.2 but we would like to continue using version 13.2. Click on 13.2 then under "ISE Design Suite" click on All Platforms as shown below.

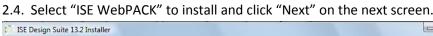


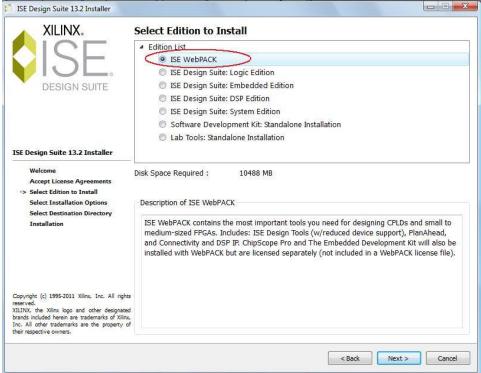
- You will likely be prompted to login or create an account before you can download the tool. Create your account and supply the requested information.
- After the download is completed, unzip the downloaded file
 (Xilinx_ISE_DS_Win_13.2_O.61xd.0.0) using Winzip or 7-zip to a known directory (7-Zip is available at: http://www.7-zip.org/)

2. Installation and License Acquiring

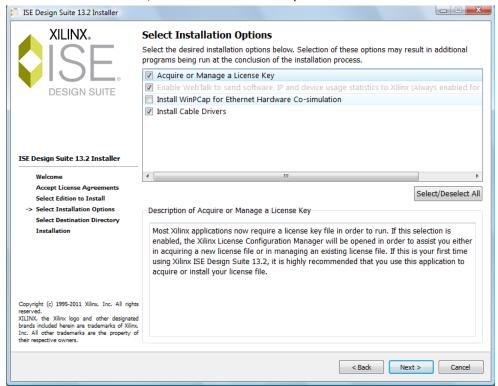
- 2.1. If you are on Windows XP/Vista machine, launch xsetup.exe under the folder "Xilinx_ISE_DS_Win_13.2_O.61xd.0.0" where you extracted the tar file to.

 If you are on Windows 7 machine, in the same folder, right-click on xsetup.exe and select "Troubleshoot compatibility" and click "Try recommended settings". Windows XP (Service Pack 2) will be applied and click "Start the program ..." then "Next" at the end.
- 2.2. Click "Next" on the Welcome screen.
- 2.3. Accept the next two license agreement screens.

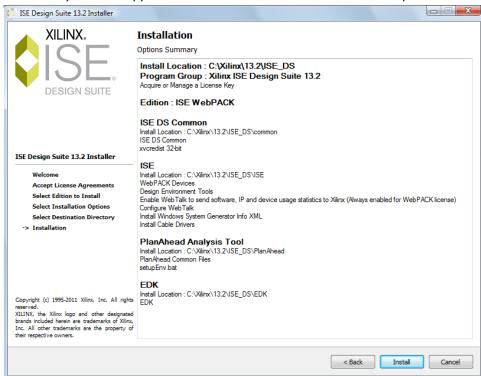




2.5. On the next screen, select the installation options as shown below and click "Next".



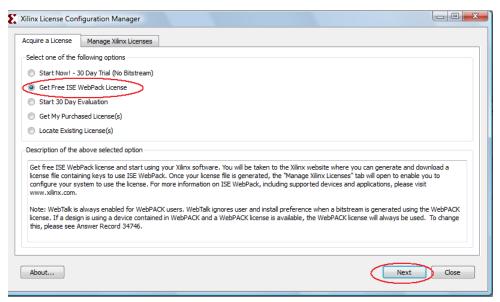
- 2.6. Accept the suggested destination directory and the program folder. Keep the "Import tool preferences from previous version and change project file association to ISE Design Suite 13.2" checked. Then click "Next".
- 2.7. A summary window appears. Click "Install" to start the installation process.



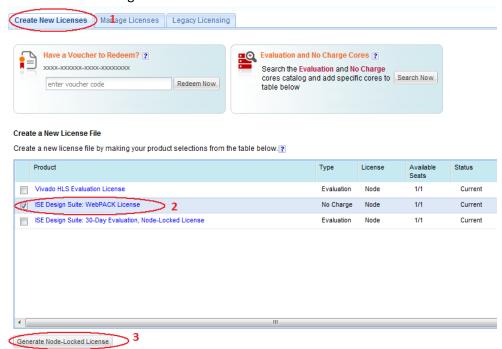
2.8. The installation appears to be stuck at "Install Cable Drivers" around 91%. A window pops up asking whether to install "Digilent Universal Serial Controller ..", click "Install" and the process shall continue.



2.9. After the installation process completed, the **License Configuration Manager** window should pop up. (If not, you can invoke this manually by start → All Programs → Xilinx ISE Design Suite 13.2→ Accessories → Manage Xilinx Licenses). Under "Acquire a License" tab, select "**Get Free ISE WebPACK License**" and click "Next".

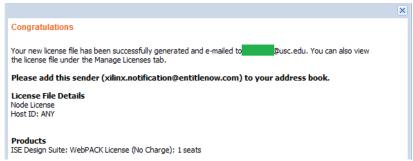


- Click "Connect Now" on the next window showing your local system information.
- 2.11. Sign in to your Xilinx account in the internet browser. Under "Create New Licenses" select "ISE Design Suite: WebPACK License" and click "Genereate Node-Locked License".

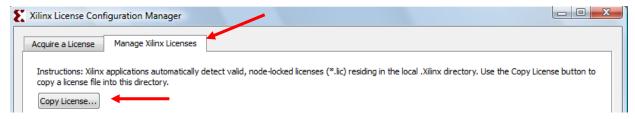


2.12. In the next two "Generate Node License" screens, click "Next".

2.13. A license file will be generated and sent to your registered email along with the instructions to install license in the email.



2.14. Follow their "Quick-Start License Installation Instructions". In step 2: "Xilinx License Configuration Manager" is probably opened already (if not, go to All Programs → Xilinx ISE Design Suite 13.2→ Accessories → Manage Xilinx Licenses). Switch to "Manage Xilinx Licenses" tab shown below.



- 2.15. Click "OK" in the "License installation was successful" window.
- 2.16. You should see WebPACK in the list of licenses in "Manage Xilinx Licenses" window. Click "Close" to complete this part. The Xilinx ISE installation and license acquiring tasks are

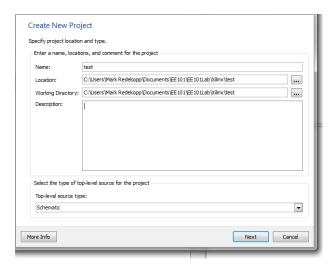
COMPLETE in this step!

| Feature | S/W or IP Core | | Expiration Date | License Type | Count |
|-------------|-------------------|---------|--------------------|-----------------|-----------|
| PlanAhead | S/W | 2013.09 | Permanent | Nodelocked | Uncounted |
| V_WebPACK | S/W | 2013.09 | Permanent | Nodelocked | Uncounted |
| WebPACK | S/W | 2013.09 | Permanent | Nodelocked | Uncounted |
| Web_Package | S/W | 2013.09 | Permanent | Nodelocked | Uncounted |

Xilinx Project Creation Settings

For most labs in this course, we will provide you a set of source schematics or Verilog files as well as simulation testbenches. You will need to create a Xilinx project and then import these files into the project. Below is a description of how to do this.

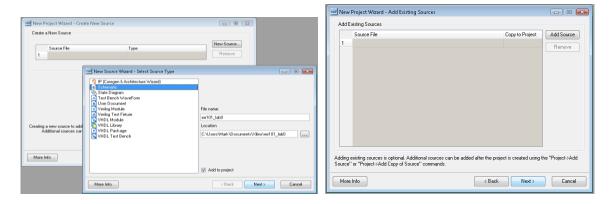
- a. Start Xilinx. Click Start..All Programs..Xilinx 13..ISE Design Tools..XX-bit Project Navigator. To create a new project, click File..New Project to start the new project wizard.
- b. Select the desired folder under Project Location. Enter a Project Name which will create a subfolder under the Project Location with that name. Finally, for a Verilog based design, choose "HDL" under Top-Level Source Type. For a schematic-based design, choose "Schematic" (usual). Click Next.



c. In the "Device Properties" dialog box select the following values then click Next.

| Family | Spartan 3E | | |
|--------------------|---------------------|--|--|
| Device | XC3S500E | | |
| Package | FG320 | | |
| Speed | -4 | | |
| Synthesis Tool | XST (VHDL/Verilog) | | |
| Simulator | ISim (VHDL/Verilog) | | |
| Preferred Language | Verilog | | |

- d. Click Next...Then Finish.
- e. If this is the start of a new project you can create a new source file by choosing Project..New Source. If you will be adding source files provided to you (or that you've already created, wait until after the project has been fully created), click Project..Add Source or Add Copy of Source and find and select the desired source files. (In the file dialog box you can select multiple source files and add them all together).



From the "Project" menu, click "New Source" and walk through the dialog sequence or "Add Copy of Source" and select the files you've downloaded or created.

Running Xilinx ISE 13 on Campus PC's

The USC campus PC user rooms also have Xilinx installed on them but it may be a bit hard to find. To start and running the Xilinx tools follow the steps below:

- a) From a user-room PC, choose the Windows boot and not the Mac boot.
- b) From the Windows Start Menu choose All Programs..Virtual Machines...XP32-201108-PUVVADA (This will start a windows XP virtual machine session).
- c) On the Desktop of the Win-XP virtual machine, choose the Xilinx ISE 13 icon and double-click