# 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
- CLICK ON THE "ISE DESIGN TOOLS TAB"
- The current version of Xilinx ISE is 14.7
- Scroll down to the ISE Design Suite area FULL Installer for your desired OS (Windows or Linux) as shown below. We will reference the Windows install in this document.
- 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: <u>http://www.7-zip.org/</u>)

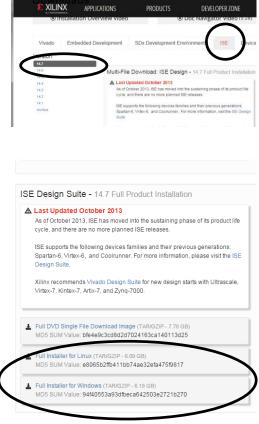
### 2. Installation and License Acquiring

2.1. Follow the guidelines below based on your OS:
Windows 7: In the same folder, right-click on <a href="mailto:xsetup.exe">xsetup.exe</a> 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.

**Windows 8 or 10:** The Xilinx tools have a compatibility issue on Windows 8/10. However there is a fix. (<u>http://www.xilinx.com/support/answers/62380.html</u>)

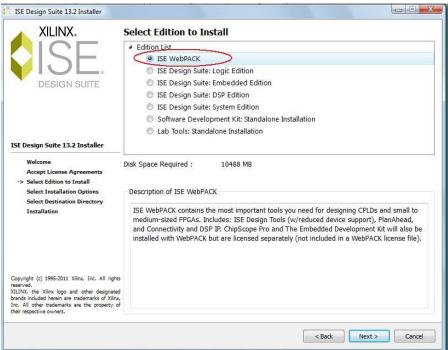
- 1. Assuming you are using ISE 14.7 and have installed it to the default location
- 2. Open the following directory: C:\Xilinx\14.7\ISE\_DS\ISE\lib\nt64
- 3. Find and rename libPortability.dll to libPortability.dll.orig
- 4. Make a copy of libPortabilityNOSH.dll (copy and paste it to the same directory) and rename it libPortability.dll
- 5. Copy libPortabilityNOSH.dll again, but this time navigate to C:\Xilinx\14.7\ISE\_DS\common\lib\nt64 and paste it there
- 6. In C:\Xilinx\14.7\ISE\_DS\common\lib\nt64 Find and rename libPortability.dll to libPortability.dll.orig
- 7. Rename libPortabilityNOSH.dll to libPortability.dll



If you still encounter errors installing or using Xilinx, you are encouraged to use the tools on the PCs in SAL or the virtual desktop system provided by Viterbi IT.

**Mac:** Mac OS is NOT supported by Xilinx. If you install Parallel's or other Windows emulation software you can likely install Xilinx. Otherwise use the **Viterbi virtual desktop interface**.

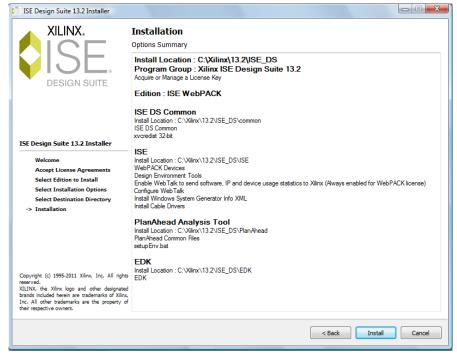
- 2.2. Click "Next" on the Welcome screen.
- 2.3. Accept the next two license agreement screens.
- 2.4. Select "ISE WebPACK" to install and click "Next" on the next screen.



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

ISE Design Suite 13.2 Installer		
	Select Installation Options Select the desired installation options below. Selection of these options may reprograms being run at the conclusion of the installation process. Cacquire or Manage a License Key Cable WebTalk to send software, IP and device usage statistics to Xilini Install WinPCap for Ethernet Hardware Co-simulation	
ISE Design Suite 13.2 Installer	Install Cable Drivers	
Welcome	•	4
Accept License Agreements		
Select Edition to Install		Select/Deselect All
-> Select Installation Options Select Destination Directory	Description of Acquire or Manage a License Key	
Installation	Most Xilinx applications now require a license key file in order to run. If thi enabled, the Xilinx License Configuration Manager will be opened in order in acquiring a new license file or in managing an existing license file. If thi using Xilinx ISE Design Suite 13.2, it is highly recommended that you use t acquire or install your license file.	to assist you either s is your first time
Copyright (c) 1995-2011 Xilinx, Inc. All rights reserved. XILINX, the Xilinx logo and other designated brands included harein are trademarks of Xilinx, Inc. All other trademarks are the property of their respective owners.		
	< Back Ne	ext > Cancel

- 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".

Acquire a License	Manage Xilinx Licenses
Select one of the f	ollowing options
Start Now! - 3	30 Day Trial (No Bitstream)
Get Free ISE	WebPack License
Start 30 Day I	Evaluation
Get My Purch	ased License(s)
O Locate Existin	g License(s)
configure your sy www.xilinx.com.	ning keys to use ISE WebPack. Once your license file is generated, the "Manage Xilinx Licenses" tab will open to enable you to istem to use the license. For more information on ISE WebPack, including supported devices and applications, please visit always enabled for WebPACK users. WebTalk ignores user and install preference when a bitstream is generated using the WebPACK
license. If a desig	in its using a device contained in WebPACK and a WebPACK license is available, the WebPACK license will always be used. To change inswer Record 34746.

- 2.10. 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".

eate New Licenses Madage Licenses	Legacy Licensing			
Have a Voucher to Redeem? ?		<b>.</b>	Evaluation and No Charge Cores 👔 Search the Evaluation and No Charge	
enter voucher code	Redeem Now		cores catalog and add specific cores to table below	Search Now

#### Create a New License File

Create a new license file by making your product selections from the table below.

Vivado	HLS Evaluation License				
and a second sec	HLS Evaluation License	Evaluation	Node	1/1	Current
V ISE De	sign Suite: WebPACK License 2	No Charge	Node	1/1	Current
ISE De	sign Suite: 30-Day Evaluation, Node-Locked License	Evaluation	Node	1/1	Current

Generate Node-Locked License 3

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- 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.

	×
Congratulations	
Your new license file has been successfully generated and e-mailed to@usc.edu. You can also view the license file under the Manage Licenses tab.	
Please add this sender (xilinx.notification@entitlenow.com) to your address book.	
License File Details Node License Host ID: ANY	
Products ISE Design Suite: WebPACK License (No Charge): 1 seats	

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 14.7→ Accessories → Manage Xilinx Licenses). Switch to "Manage Xilinx Licenses" tab shown below.

8	Xilinx License Configuration Manager					
	Acquire a License Manage Xilinx Licenses					
	Instructions: Xilinx applications automatically detect valid, node-locked licenses (*.lic) residing in the local .Xilinx directory. Use the Copy License button to copy a license file into this directory.					
	Copy License					

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 Design Tools..ISE Design Suite 14.7..XX-bit Project Navigator. To create a new project, click File..New Project to start the new project wizard.
- 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. Click Next.

Name:	test
Location:	C:\Users\Mark\Dropbox\EE209\Lab\test
Working Directory:	C:\Users\Mark\Dropbox\EE209\test
Description:	
elect the type of to Top-level source typ	p-level source for the project
HDL	~ ~

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).

			Mew Project Wizard - Add Existing Sources	
New Project Wizard - Cre	ate New Source		Add Existing Sources	
Create a New Source			Source File Copy to Project	Add Source
Source File	Туре	New Source		Remove
	New Source Wizard - Select Source Type			
Creating a new source to add Additional sources can	C Schemato Ve State Degram Test Bench WaveForm User Document Verlag MoSule Verlag MoSule Verlag Test Flature VHDL Module	File name lee 101_lab0 Looation: (C.VJrent-Math/Discuments-Vitms/ee101_lab0)		
More Info			Adding existing sources is optional. Additional sources can be added after the project is created using the Source" or "Project-Add Copy of Source" commands.	"Project->Add
	L	V Add to project		
	More Info	< Back Next > Cancel	More Info	Cancel

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.