Xilinx ISE Webpack + Project Setup Instructions

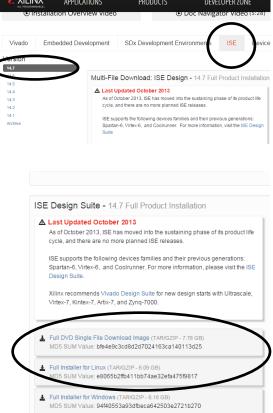
- 1. Downloading
 - The Xilinx tools are free for download from their website and can be installed on your Windowsbased PC's. Go to the following URL: <u>http://www.xilinx.com/support/download/ind</u>

<u>ex.htm</u>

- 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: http://www.7-zip.org/)

2. Installation and License Acquiring

2.1. Follow the guidelines below based on your OS:
Windows 7: 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.

Windows 8: be warned that the Xilinx tools may be incompatible and if you encounter installation and usage errors 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.

- 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.

🔺 XILINX.	Select Edition to Install
	Edition List
	ISE WebPACK
	ISE Design Suite: Logic Edition
DESIGN SUITE	ISE Design Suite: Embedded Edition
	ISE Design Suite: DSP Edition
	ISE Design Suite: System Edition
	Software Development Kit: Standalone Installation
	C Lab Tools: Standalone Installation
E Design Suite 13.2 Installer	
Welcome Accept License Agreements -> Select Edition to Install	Disk Space Required : 10488 MB
Select Installation Options	Description of ISE WebPACK
Select Destination Directory Installation	ISE WebPACK contains the most important tools you need for designing CPLDs and small to medium-sized FPGAs. Includes: ISE Design Tools (w/reduced device support), PlanAhead, and Connectivity and DSP IP. ChipScope Pro and The Embedded Development Kit will also be installed with WebPACK but are licensed separately (not included in a WebPACK license file).
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2.5. On the next screen, select the installation options as shown below and click "Next".

ISE Design Suite 13.2 Installer	
XILINX. ISE DESIGN SUITE	Select Installation Options Select the desired installation options below. Selection of these options may result in additional programs being run at the conclusion of the installation process. Acquire or Manage a License Key Enable WebTalk to send software, IP and device usage statistics to Xilinx (Always enabled for Install WinPCap for Ethernet Hardware Co-simulation Install Cable Drivers
ISE Design Suite 13.2 Installer	
Welcome	4 III III III III III III III III III I
Accept License Agreements	Select/Deselect All
Select Edition to Install	
-> Select Installation Options	Description of Acquire or Manage a License Key
Select Destination Directory	
Installation	Most Xilinx applications now require a license key file in order to run. If this selection is enabled, the Xilinx License Configuration Manager will be opened in order to assist you either in acquiring a new license file or in managing an existing license file. If this is your first time using Xilinx ISE Design Suite 13.2, it is highly recommended that you use this application to acquire or install your license file.
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	< Back Next > 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.

ISE Design Suite 13.2 Installer	
	Installation Options Summary Install Location : C:\Xilinx\13.2\ISE_DS Program Group : Xilinx ISE Design Suite 13.2 Acquire or Manage a License Key Edition : ISE WebPACK
ISE Design Suite 13.2 Installer Welcome Accept License Agreements Select Edition to Install Select Installation Options Select Destination Directory -> Installation	ISE DS Common Install Location : C:\Vilinx\13.2\ISE_DS\common ISE DS Common xvcredist 32-bit ISE Install Location : C:\Vilinx\13.2\ISE_DS\ISE WebPACK Devices Design Environment Tools Enable Web Talk to send software, IP and device usage statistics to Xilinx (Always enabled for WebPACK license) Corfigure Web Talk Install Windows System Generator Info XML Install Cable Drivers
Copyright (c) 1995-2011 Xilinx, Inc. All rights reserved. XILINX, the Xilinx logo and other designated brands included herein are trademarks of Xilinx, Inc. All other trademarks are the property of their respective owners.	PlanAhead Analysis Tool Install Location : C:\Vilimx\13.2\JSE_DS\PlanAhead PlanAhead Common Files setupEnv bat EDK Install Location : C:\Vilimx\13.2\JSE_DS\EDK EDK
	<back cancel<="" instal="" td=""></back>

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.

🚺 ISE Design Suite 13.2 Installer [919	
XILINX.	ISE: Install Cable Drivers
DESIGN SUITE	Windows Security Would you like to install this device software? Name: Digilent Universal Serial Bus controller Publisher: Digilent Inc.
ISE Design Suite 13.2 Installer Welcome Accept License Agreements Select Edition to Install Select Installation Options Select Destination Directory -> Installation	 Always trust software from "Digilent Inc." Install Don't Install You should only install driver software from publishers you trust. How can I decide which device software is safe to install?
	www.xilinx.com/embedded

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".

- 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".

Create New Licenses Madage Licenses Legacy Licensing

Have a Voucher to Redeem? 2		.	Evaluation and No Charge Cores ? Search the Evaluation and No Charge cores catalog and add specific cores to Search No	
enter voucher code	Redeem Now		cores catalog and add specific cores to Search No table below	w

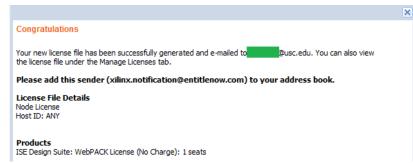
Create a New License File

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

Product	Туре	License	Available Seats	Status
Vivado HLS Evaluation License	Evaluation	Node	1/1	Current
ISE Design Suite: WebPACK License 2	No Charge	Node	1/1	Current
ISE Design Suite: 30-Day Evaluation, Node-Locked License	Evaluation	Node	1/1	Current

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

8	Xilinx License Configuration Manager	<u> </u>
	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.
- 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.

	n and type.
Enter a name, locati	ons, and comment for the project
Name:	test
Location:	C: \Users\Mark Redekopp\Documents\EE101\EE101Lab \Xilinx\test
Working Directory:	C:\Users\Mark Redekopp\Documents\EE101\EE101Lab\Xilinx\test
Description:	
Select the type of to	p-level source for the project
	pe:
Top-level source typ	
Top-level source typ Schematic	

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
	Mew Source Wizard - Select Source Type			
Creating a new source to add Additional sources car	If IP (Coregon & Archhechure Witzerd) Corected and a constraint of the Disgram Start Electric WaveForm Unet Occurrent Verlag Hocha Inter Verlag Hocha Inter VHOL Nocke VHOL Nocke VHOL Package VHOL Test Barch	File name: en10_ia60 C-Wsen'MeiN0coument/Vilm/ve101_ia60		
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.	e ''Project->Add
		V Add to project		
	More Info	< Back Next > Cancel	More Info Kext >	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.