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Vivado Design Suite User Guide

Release Notes, Installation, and Licensing

UG973 (v2016.2) June 8, 2016

XILINX®

Revision History

The following table shows the revision history for this document.

Date	Version	Revision
06/08/2016	2016.2	2016.2 What's New Featuring the latest: • New Device Support. • New Vivado Design Edition Tools. • New Simulation section.
04/13/2016	2016.1	Editorial updates and added new devices to the General Access section.
04/06/2016	2016.1	Initial version.

Table of Contents

XILINX
ALL PROGRAMMABLE™

Chapter 1

Release Notes 2016.2

What's New

Vivado® Design Suite 2016.2 and updated *UltraFast Design Methodology Guide for the Vivado Design Suite* (UG949) [Ref 1] Available Now.

Get Vivado Design Suite 2016.2 with support for Virtex® UltraScale+™ and Defense-Grade Kintex® UltraScale™ devices.

Device Support

The following UltraScale+ devices are introduced in this release.

- Virtex UltraScale+ devices: XCVU3P, XCVU5P, XCVU7P, XCVU9P

The following UltraScale devices are introduced in this release.

- Defense-Grade Kintex UltraScale FPGAs: XQKU040, XQKU060, XQKU095, XQKU115

Vivado Design Edition Tools

Power

- Xilinx Power Estimator (XPE) for UltraScale+:
  - Support for the D2104 package with following part-package combinations: XCVU9P-FSGD2104, XCVU11P-FSGD2104, and XCVU13P-FIGD2104.
  - VCCINT current check for Virtex UltraScale+ devices: Checks if VCCINT supply current exceeds the maximum supported by the package. If maximum is exceeded, then the current is highlighted in red to alert the user.
- Xilinx Power Estimator (XPE) for UltraScale and Vivado Report Power introduce support for new Kintex UltraScale Defense parts:
  - Military (-1M) speed grade for Kintex UltraScale Defense parts XQKU040, XQKU060, and XQKU095.
  - XQKU115 devices

Intellectual Property (IP)

- GT in example design
  - AXI Ethernet and 10G/25G Ethernet Subsystem enabled
  - Allows you to manage the transceiver settings within the GT wizard GUI (safest way to tune transceivers).
  - Safely edit transceiver settings with the ability to upgrade the core and/or the transceiver without losing your tuned settings.
  - Makes it easier to share a transceiver with other cores since the transceiver is outside the core.

Important Information

Device Support

IMPORTANT: *When opening a checkpoint targeting UltraScale+ Production Evaluation parts, Vivado will issue the following warning:*

```
Production Evaluation speedfiles are provided in advance of production
release and are intended to closely approximate production level
performance. Once production speedfiles become available, the design will
need to be rerun with the production speedfiles.
```

Simulation

Export Simulation (export_simulation)

Multiple switches have been deprecated in this release.

Table 1-1: **Deprecated Switches**

Switch Name	Default Behavior	User Action	Reason
-ip_netlist	False	None	Fastest simulation is available only in pure RTL. Export simulation optimized to write scripts for fastest simulation performance.

Table 1-1: **Deprecated Switches**

Switch Name	Default Behavior	User Action	Reason
-language	Mixed	Mixed language simulator required	In order to ensure the fastest simulation performance, export simulation will only use the language of the IP RTL
-single_step	• True for Cadence IES • False for others	Be aware of this change	Cadence IES simulation will deliver irun scripts that can handle mixed language RTL simulation. Using single-step for the other simulators requires gate level simulation netlist.

Integrated Simulation (launch_simulation)

- Starting in Vivado 2016.1, the **Generate Scripts Only** capability has been deprecated and removed from the IDE.
- User should use the **Export Simulation** capability instead. This provides the functionality for exporting files from Vivado (IP and IP Integrator) to use in external verification environments.

Vivado Design Suite Documentation Update

In the 2016.2 Vivado Design Suite Documentation release, not all documentation will be available at first customer ship. Use the **Update Catalog** button in DocNav to stay up-to-date with the 2016.2 documentation suite.

Note: DocNav is a 32-bit application and requires the installation of 32-bit libraries on Linux in order to function.

Known Issues

Vivado® Design Suite Tools Known Issues can be found at Answer Record 66830.

Architecture Support and Requirements

Operating Systems

Xilinx® only supports the following operating systems on x86 and x86-64 processor architectures.

Microsoft Windows Support

- Windows 7 and 7 SP1 Professional (64-bit), English/Japanese.
- Windows 8.1 Professional (64-bit), English/Japanese.
- Windows 10 Professional (64-bit), English/Japanese.
- Vivado® Lab Edition is the only Xilinx toolset that supports Windows 7 SP1 Professional, 32-bit Operating System. Lab Edition also supports the 64-bit systems.

Linux Support

- Red Hat Enterprise Workstation 7.0 and 7.1 (64-bit)
- Red Hat Enterprise Workstation 6.6 and 6.7 (64-bit)
- Red Hat Enterprise Workstation 5.11 (64-bit)
- SUSE Linux Enterprise 11.3 and 12.0 (64-bit)
- Cent OS 6.7 and 7.1 (64-bit)
- Ubuntu Linux 14.04.3 LTS (64-bit)
- Vivado Lab Edition is the only Xilinx toolset that supports the Red Hat Enterprise Workstation 6.6 and 6.7, 32-bit Operating Systems. Lab Edition also supports the 64-bit systems.

Architectures

The following table lists architecture support for commercial products in the Vivado Design Suite WebPACK™ tool versus all other Vivado Design Suite editions. For non-commercial support:

- All Xilinx Automotive devices are supported in the Vivado Design Suite WebPACK tool.
- Xilinx Defense-Grade FPGA devices are supported where their equivalent commercial part sizes are supported.

Table 2-1: **Architecture Support**

	Vivado WebPACK Tool	Vivado Design Suite (All Other Editions)
Zynq® Device	Zynq-7000 AP SoC Device • XC7Z010, XC7Z015, XC7Z020, XC7Z030	Zynq-7000 AP Soc Device • All
Virtex® FPGA	Virtex-7 FPGA • None Virtex UltraScale™ FPGA • None Virtex US • None	Virtex-7 FPGA • All Virtex UltraScale FPGA • All
Kintex® FPGA	Kintex-7 FPGA • XC7K70T, XC7K160T Kintex UltraScale™ FPGA • XCKU025, XCKU035	Kintex-7 FPGA • All Kintex UltraScale FPGA • All
Artix® FPGA	Artix-7 FPGA • XC7A15T, XC7A35T, XC7A50T, XC7A75T, XC7A100T, XC7A200T	Artix-7 FPGA • All

Compatible Third-Party Tools

Table 2-2: **Compatible Third-Party Tools**

Third-Party Tool	Red Hat Linux	Red Hat Linux-64	SUSE Linux	Windows-7/10 32-bit	Windows-7/10 64-bit	Ubuntu
Simulation						
Mentor Graphic ModelSim SE/DE/PE (10.4d)	Yes	Yes	Yes	Yes	Yes	N/A
Mentor Graphics Questa Advanced Simulator(10.4d)	Yes	Yes	Yes	Yes	Yes	N/A

Table 2-2: **Compatible Third-Party Tools**

Third-Party Tool	Red Hat Linux	Red Hat Linux-64	SUSE Linux	Windows-7/10 32-bit	Windows-7/10 64-bit	Ubuntu
Cadence Incisive Enterprise Simulator (IES) (15.10.013)	Yes	Yes	Yes	N/A	N/A	N/A
Synopsys VCS and VCS MX (K-2015.09)	Yes	Yes	Yes	N/A	N/A	N/A
The MathWorks MATLAB® and Simulink® with Fixed-Point Toolbox (2015a and 2015b)	Yes	Yes	N/A	Yes	Yes	Yes
Aldec Active-HDL (10.3)[a]	N/A	N/A	N/A	Yes	Yes	N/A
Aldec Riviera-PRO (2015.10)	Yes	Yes	Yes	Yes	Yes	N/A
Synthesis[b]						
Synopsys Synplify/Synplify Pro (L-2016.03)[c]	Yes	Yes	Yes	Yes	Yes	N/A
Mentor Graphics Precision RTL/Plus (2015.2)	Yes	Yes	Yes	Yes	Yes	N/A
Equivalence Checking						
Cadence Encounter Conformal (9.1)[d]	Yes	Yes	Yes	N/A	N/A	N/A
OneSpin 360 (2015_12)	Yes	Yes	Yes	N/A	N/A	N/A

a. Support for Aldec simulators is offered by Aldec.

b. Most Vivado IPs can only be synthesized by Vivado synthesis, because the RTL source can include encrypted files. To use these IPs in a third party synthesis flow, the synthesized netlist can be exported from the Vivado tool in a suitable format for use in the third-party synthesis project.

c. Contact Synopsys for availability of Synplify Overlay or Service Pack.

d. Cadence Encounter Conformal Support is for RTL2Gate using Synopsys Synplify only.

System Generator support is restricted to operating systems that are compatible with The MathWorks MATLAB and Simulink tools.

System Requirements

This section provides information on system memory requirements, cable installation, and other requirements and recommendations.

The lab exercises require the installation of MATLAB 2014a (or later) and Vivado Design Suite 2014.2 (or later).

System Memory Recommendations

For memory recommendations for the Vivado Design Suite tools, see: http://www.xilinx.com/design-tools/vivado/memory.htm.

Operating Systems and Available Memory

The Microsoft Windows and Linux operating system (OS) architectures have limitations on the maximum memory available to a Xilinx program. Users targeting the largest devices and most complex designs might encounter this limitation. The Vivado Design Suite has optimized memory and enabled support for applications to increase RAM memory available to Xilinx tools.

Linux

For 32-bit Red Hat Enterprise Linux systems, the operating system can use the hugemem kernel to allocate 4 GB to each process. More information can be found on the Red Hat support site at http://www.redhat.com/docs/manuals/enterprise/.

Cable Installation Requirements

Platform Cable USB II is a high-performance cable that enables Xilinx design tools to program and configure target hardware.

Note: The Xilinx Parallel Cable IV is no longer supported for debugging or programming.

RECOMMENDED: *To install Platform Cable USB II, a system must have at least a USB 1.1 port. For maximum performance, Xilinx recommends using Platform Cable USB II with a USB 2.0 port.*

The cable is officially supported on the 32-bit and 64-bit versions of the following operating systems: Windows-7, Red Hat Linux Enterprise, and SUSE Linux Enterprise 12. Additional platform specific notes are as follows:

- Root privileges are required.
- SUSE Linux Enterprise 11: The fxload software package is required to ensure correct Platform Cable USB II operation. The fxload package is not automatically installed on SUSE Linux Enterprise 11 distributions, and must be installed by the user or System Administrator.

For additional information regarding Xilinx cables, refer to the following documents:

- *USB Cable Installation Guide* (UG344) [Ref 13]
- *Platform Cable USB II Data Sheet* (DS593) [Ref 14]

Equipment and Permissions

The following table lists related equipment, permissions, and network connections.

Table 2-3: **Equipment and Permissions Requirements**

Item	Requirement
Directory permissions	Write permissions must exist for all directories containing design files to be edited.
Monitor	16-bit color VGA with a minimum recommended resolution of 1024 by 768 pixels.
Drive	You must have a DVD-ROM for Vivado Design Suite (if you have received a DVD, rather than downloading from the web).
Ports	To program devices, you must have an available parallel or USB port appropriate for your Xilinx programming cable. Specifications for ports are listed in the documentation for your cable. ***Note:*** Installation of the cable driver software requires Windows-10. If you are not using one of these operating systems, the cables might not work properly.

Note: X Servers/ Remote Desktop Servers, such as Exceed, ReflectionX, and XWin32, are not supported.

Network Time Synchronization

When design files are located on a network machine, other than the machine with the installed software, the clock settings of both machines must be set the same. These times must be synchronized on a regular basis for continued proper functioning of the software.

Download and Installation

This guide explains how to download and install the Vivado® Design Suite tools, which includes the Vivado Integrated Design Environment (IDE), High Level Synthesis tool, and System Generator for DSP.

Downloading the Vivado Design Suite Tools

Xilinx® Design Tools users have multiple choices for download and installation.

Xilinx introduced **Vivado Lab Edition**, which features a dedicated and streamlined environment for programming and debugging devices in lab settings.

TIP: *No license is required to use Vivado Lab Edition tools.*

For users wishing to install one of the full Vivado Editions, there are three choices.

Vivado Design Suite - HLx Editions:

- **WebPack and Editions**: Web installer for windows
- **WebPack and Editions**: Web installer for Linux
- **All OS Single File Download**

All Editions and download options are available on the Xilinx website:
http://www.xilinx.com/support/download/index.htm

Most files in the Xilinx Download Center are downloaded using the Akamai download manager. For the optimum download experience:

- Allow pop-ups from entitlenow.com.
- Set security settings to allow for secure and non-secure items to be displayed on the same page.
- Allow the Akamai download manager to run Java processes.

To download a full Edition of the Vivado Design Suite:

1. Select the **Vivado Design Tools** tab in the web page.

2. Under the Version heading, click the version of the tools you want to download.
3. Click the link for the installer you want to download.

To download the Vivado Lab Edition tools, go to the Vivado Design Tools tab, select a version of 2015.1 or newer, and download the file associated with the Vivado Lab Edition.

Note: Lab Edition installer can be run on both 32 or 64-bit machines. The Full Edition installers work only on 64-bit machines.

Installing the Vivado Design Suite Tools

This section explains the installation process for all platforms for the Vivado Design Suite.

Installation Preparation

IMPORTANT: *Before starting installation the follow steps must be completed:*

- Check the links in Important Information section in Chapter 1 for any installation issues pertaining to your system or configuration.
- Make sure your system meets the requirements described in Chapter 2, Architecture Support and Requirements.
- Disable anti-virus software to reduce installation time.
- Close all open programs before you begin installation.
- The Vivado Design Suite installer does not set global environment variables, such as XILINX, on Windows.

Lab Edition, Full Product Download, or DVD

If you downloaded the Lab Edition or full product installation, decompress the file and run xsetup (for Linux) or xsetup.exe (for Windows) to launch the installation. If you received a DVD, which only contains the full Edition products, launch xsetup(.exe) directly.

RECOMMENDED: *Xilinx recommends the use of 7-zip or WinZip (v.15.0 or newer) to decompress the downloaded tar.gz file.*

Lightweight Installer Download

If you downloaded the lightweight installer, launch the downloaded file. You are prompted to log in and use your regular Xilinx login credentials to continue with the installation process.

After entering your login credentials, you can select between a traditional web-based installation or a full install image download.

- The **Download and Install Now** choice allows you to select specific tools and device families on following screens, downloads only the files required to install those selections, and then installs them for you.
- The **Download Full Image** requires you to select a download destination and to choose whether you want a Windows only, Linux only, or an install that supports both operating systems. There are no further options to choose with the **Download Full Image** selection, and installation needs to be done separately by running the xsetup application from the download directory.

Note: Lab Edition is not supported through a lightweight installer. You may download the single-file download image for Lab Edition.

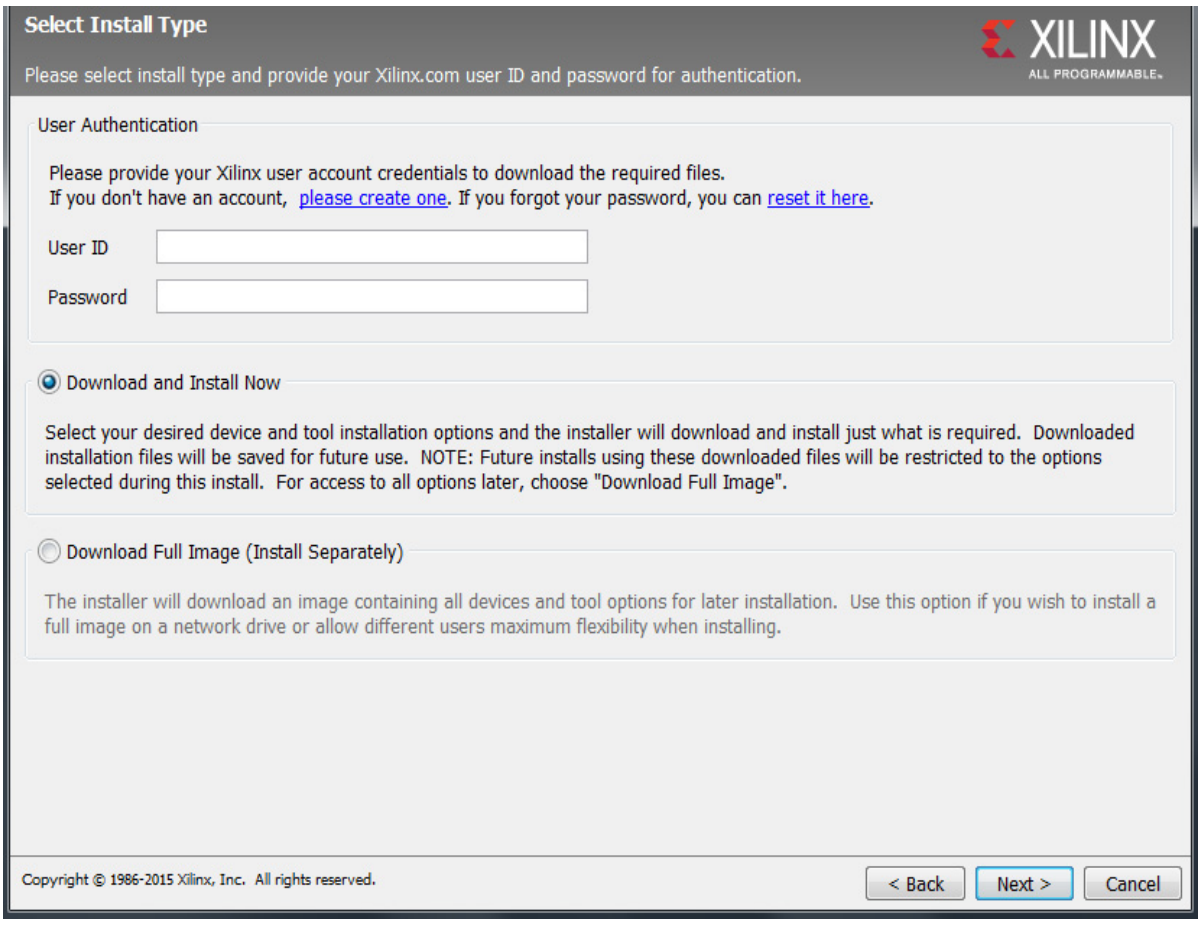

Figure 3-1: **Vivado Design Suite Installation - Select Installation Source**

Connectivity

The installer connects to the internet through the system proxy settings in Windows. These settings can be found under **Control Panel > Network and Internet > Internet Options**. For Linux users, the installer uses Firefox browser proxy settings (when explicitly set) to determine connectivity.

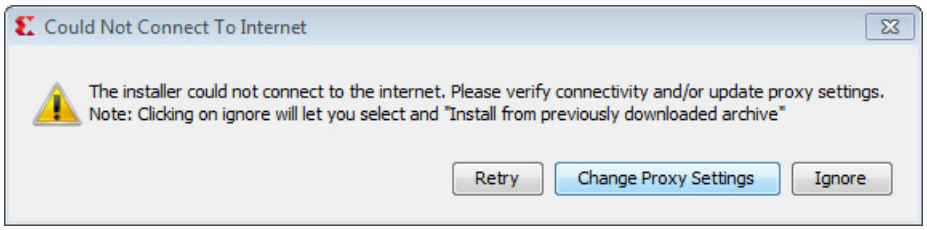

Figure 3-2: **Vivado Design Suite Installation - Connectivity**

If there are connectivity issues, verify the following:

1. If you are using alternate proxy settings to the ones referred to, select the **Manual Proxy Configuration** option to specify the settings.

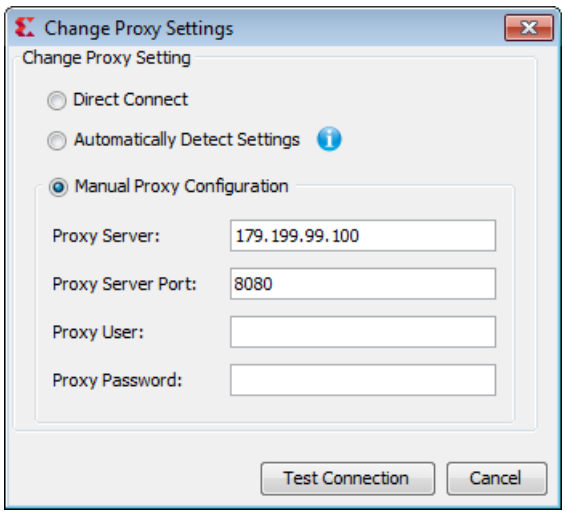

Figure 3-3: **Vivado Design Suite Installation - Change Proxy Settings**

2. Check if your company firewall requires a proxy authentication with a username and password. If so, select the **Manual Proxy Configuration** option in the dialog box above.
3. For Linux users, if either the **Use System settings** or the **Auto detect settings** option is selected in the Firefox browser, you must manually set the proxy in installer.

License Agreements

Carefully read the license agreements before continuing with the installation. If you do not agree to the terms and conditions, cancel the installation and contact Xilinx.

Edition Selection

Select the edition or standalone tool that is required. You can also install the Xilinx Software Development Kit (XSDK) as part of the Vivado WebPACK, System and Design editions.

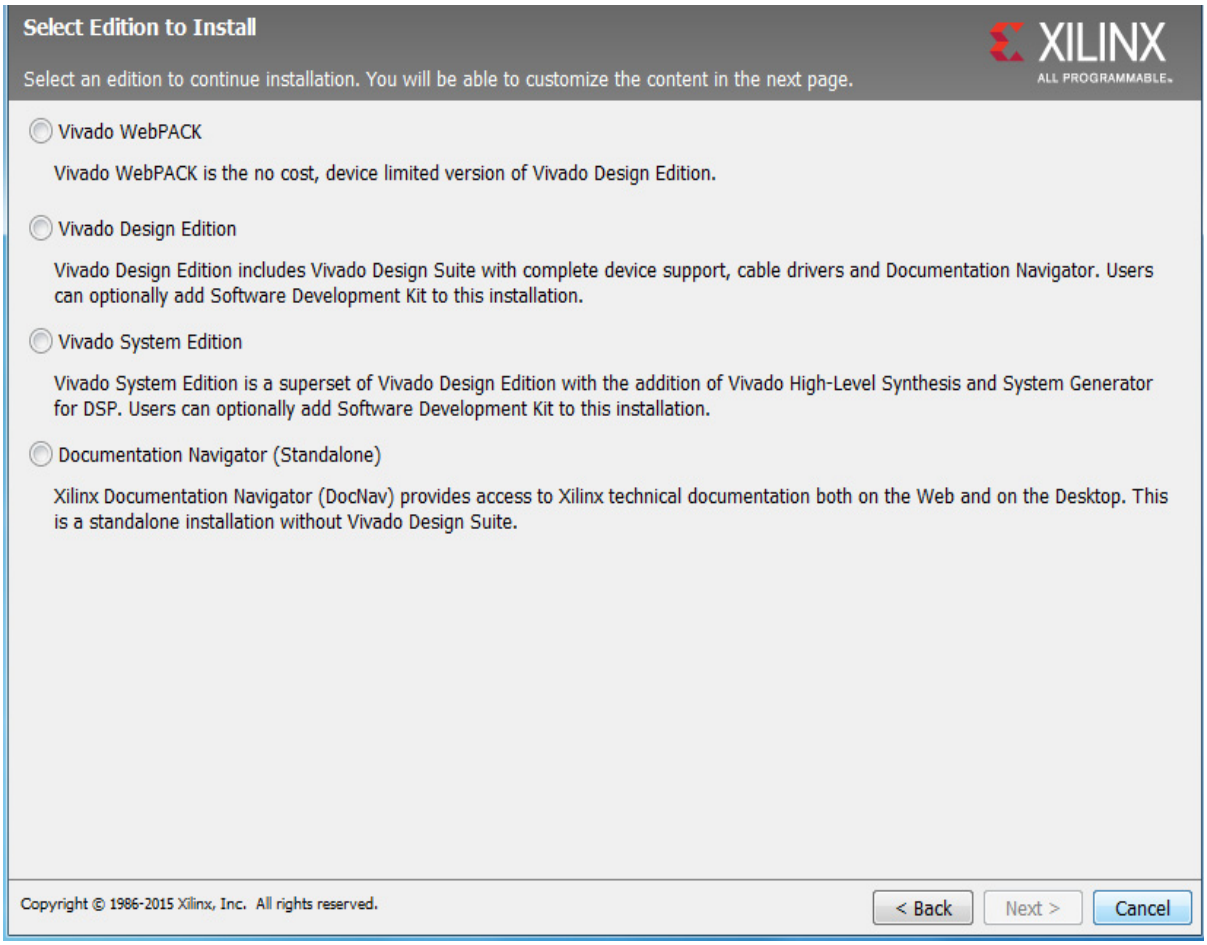

Figure 3-4: **Vivado Design Suite Installation - Select Products**

Vivado WebPACK and Design edition users will also be able to upgrade to a higher edition post installation. See Adding Additional Tools and Devices, page 19 for more details.

Tools, Devices, and Options

Customize the installation by choosing the design tools, device families and installation options. Selecting only what you need helps to minimize the time taken to download and

install the product. You will be able to add to this installation later by clicking **Add Design Tools or Devices** from either the operating system Start Menu or the **Vivado > Help** menu.

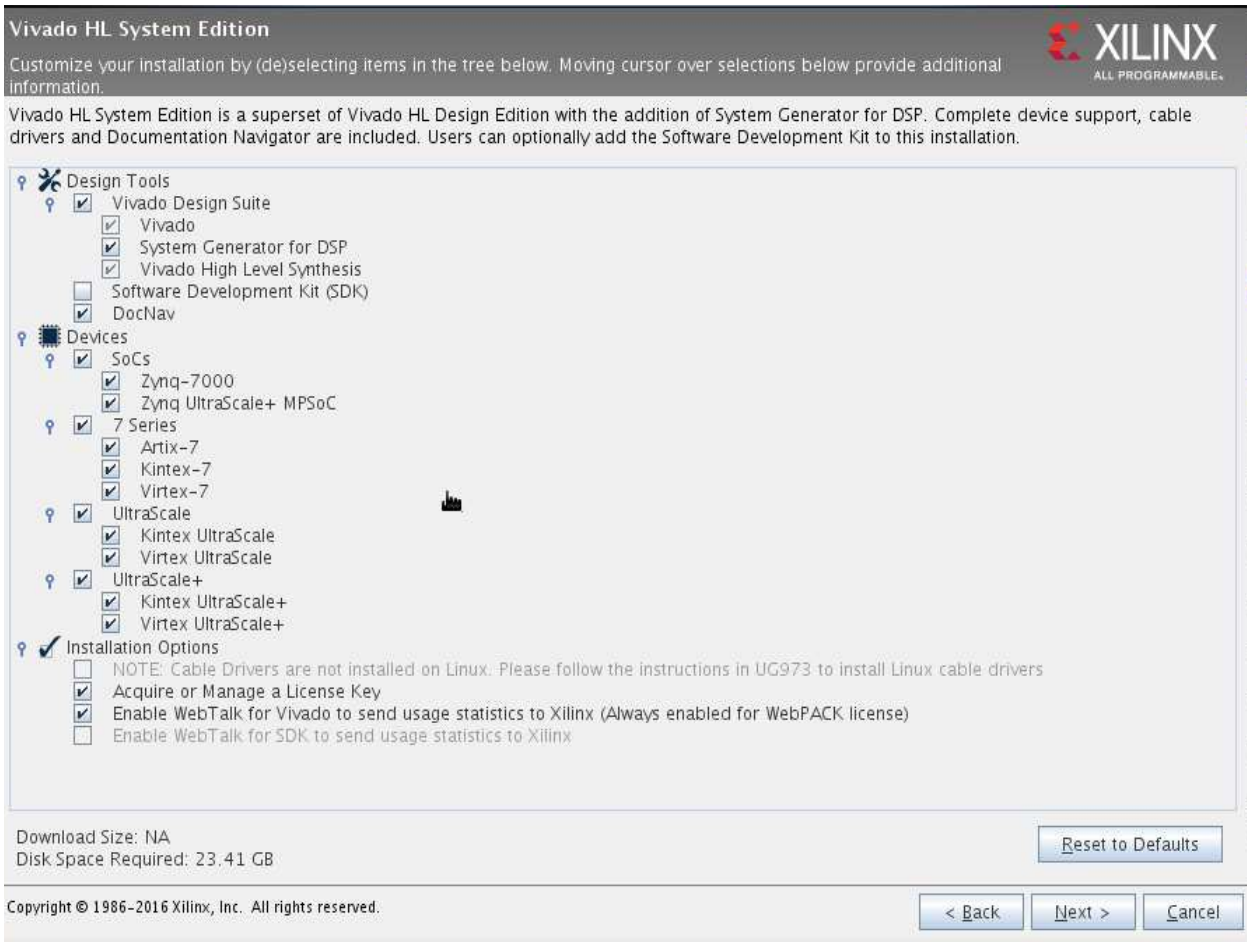

Figure 3-5: **Vivado Design Suite Installation - Vivado System Edition**

Shortcuts and File Associations

You can customize the creation of the program group entries (Start Menu) and the creation of desktop shortcuts. Optionally, you can also create file associations to launch Vivado project files directly with this version of Vivado. The shortcut creation and file association options can be applied to the current user or all users.

Installing Cable Drivers

On Windows, **Install Cable Drivers** is an optional selection in the installer.

For Linux, because root or sudo access is required to install drivers, this option has been removed from the Linux installer beginning in Vivado 2015.4. The general Vivado installer can now be run on Linux without root or sudo privileges. To install cable drivers on Linux, there is now a script that must be run as root or sudo post installation.

Script Location: `<Vivado Install Dir>/data/xicom/cable_drivers/lin64/install_script/install_drivers/`

Script Name: `install_drivers`

Adding Additional Tools and Devices

You can incrementally add additional tools, devices or even upgrade Vivado editions post-install. This is useful for users that have chosen to install a subset of devices and/or tools.

To add new tools or devices:

- **Start Menu > Xilinx Design Tools > Vivado <version> > Add Design Tools** or **Devices**.
- Launch **Vivado > Help > Add Design Tools** or **Devices**.

If you have installed the Vivado WebPACK or Design Edition, you are presented with the option to upgrade the edition.

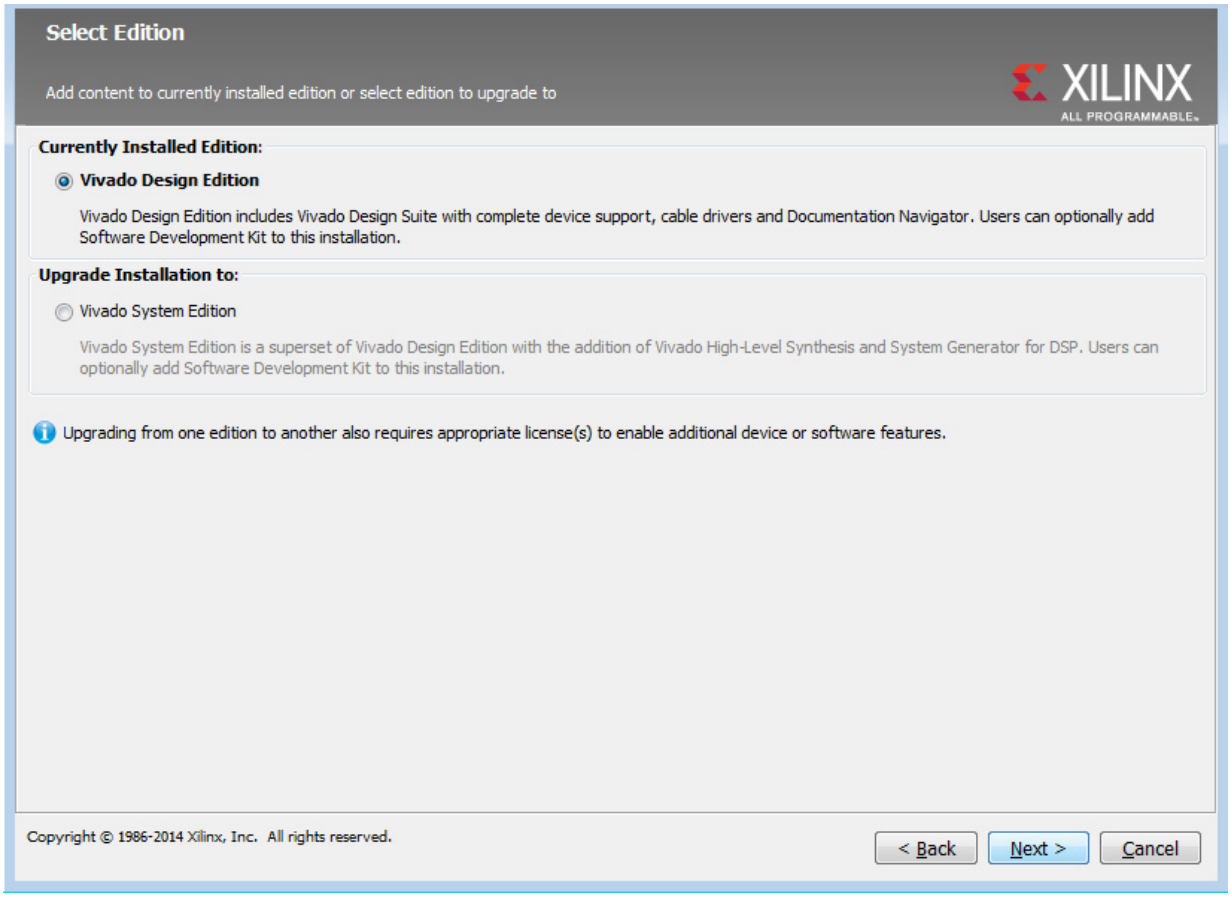

Figure 3-6: **Vivado Design Suite Installation - Select Edition**

Based on the above selection, you are presented with all available tools and devices that can be added to the current installation.

You can also add tools or devices from the Xilinx Information Center (XIC). See the Obtaining Quarterly Releases section for using this flow.

Network Installations

Installing to a network location provides a way for client machines to access the design tools by pointing to it on the network drive. To run the design tools on the network, the client machines must be set up correctly to ensure the environment variables, registry, and program groups all point to the network. The following sections describe the procedure for network setups.

Linux Clients

You must source `settings32.(c)sh` or `settings64.(c)sh` (whichever is appropriate for your operating system) from the area in which the design tools are installed. This sets up the environment to point to this installed location.

To run the design tools from a remotely installed location, run an X Windows display manager, and include a DISPLAY environment variable. Define `DISPLAY` as the name of your display. DISPLAY is typically `unix:0.0`. For example, the following syntax allows you to run the tools on the host named bigben and to display the graphics on the local monitor of the machine called mynode.

```
setenv DISPLAY mynode:0.0
xhost = bigbenPC Clients
```

Microsoft Windows Clients

1. Install design tools to a PC network server. Make sure your users know the location of the design tools and have access to the installation directory, and they have Administrator privileges for the following steps.
2. From the local client machine, browse to the following directory: `network_install_location\.xinstall\Vivado_<version>` and run the program `networkShortcutSetup.exe`.

   Running this program sets up the Windows settings batch files and **Program Group** or **Desktop** shortcuts to run the Xilinx tools from the remote location.
3. From the client machine, launch the Vivado Design Suite tools by clicking the **Program Group** or **Desktop** shortcuts, or by running the applications on the network drive.

Installing to a Mounted Network Drive

Xilinx design tools are designed to be installed in a directory under ROOT (typically `C:\Xilinx`). The installer normally presents this option when installing to a local driver.

To work around this issue, either specify a UNC path (for example, `\\network_loc\Xilinx\`) or define your target installation directory as `\Xilinx` under the network mount point (For example: `N:\Xilinx`).

Windows 7 default security levels do not allow you to select remote mapped drives. To install Xilinx Design Tools on remote mapped drives, you must change your account control settings using the following steps:

1. Open the Windows Control Panel, from the Windows Start menu, and select 'User Accounts'. If your Control Panel Uses 'Category View', click 'User Accounts' on two successive screens
2. Click 'Change User Account Control settings' and allow the program to make changes.

3. Click and slide the slide-bar down to the second to lowest setting (as seen in the following figure).
4. Click **OK**.

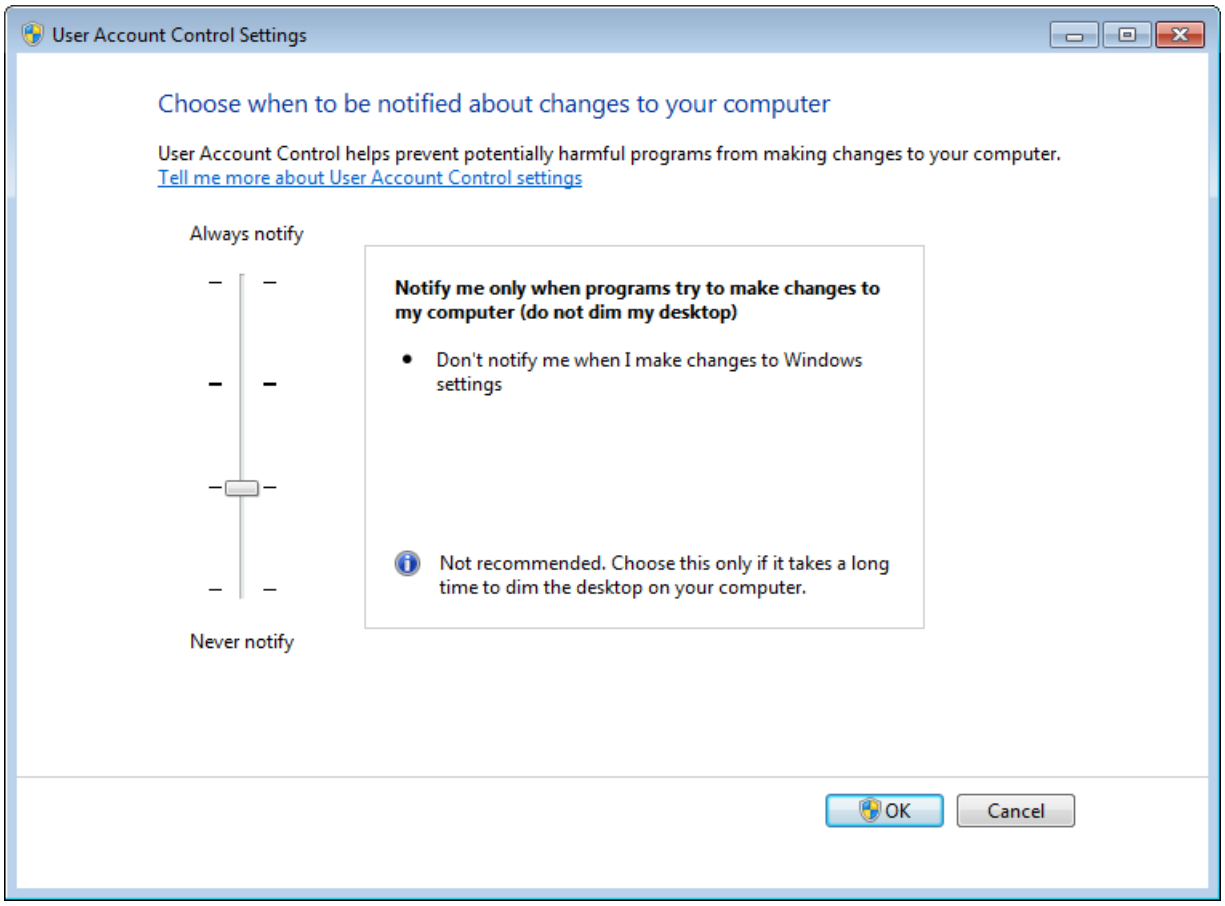

Figure 3-7: **Vivado Design Suite Installation - User Account Control Settings**

RECOMMENDED: *Xilinx recommends that you revisit this procedure to restore your settings to their previous state after installation.*

Note: You are not able to browse to the remote mapped drives using the Xilinx installer. You need to manually type in your installation path which contains a mapped network drive.

Batch Mode Installation Flow

Beginning in Vivado 2015.1, the installer can be run as an unattended batch process. To run unattended, a standard Edition and install location must be specified or a configuration file must be present which tells the installer the install location and which of the tools, devices and options you wish to install. The installer has a mode in which it can generate a reference

option file for you based on common configurations, which you can further edit to customize your installation.

RECOMMENDED: *It is recommended that you generate this reference for each new quarterly release, so that new devices, tools, options or other changes will be accounted for in your options file.*

To begin using batch mode, open a command shell and change to the directory where you have stored your extracted installer.

Note: For Windows, open the command window with administrator privileges and run the xsetup.bat file, found in the \bin directory, and not xsetup.exe with the options below.

Generate Configuration File

Run: `xsetup -b ConfigGen`

This will put you in an interactive mode where you will see the following menu. Choose an edition from the list given below.

1. Vivado WebPACK
2. Vivado Design Edition
3. Vivado System Edition
4. Documentation Navigator (Standalone)

After you select an edition, you will be prompted for a location/filename for your configuration file and the interactive mode will exit.

Below is a sample of a WebPACK configuration file:

```
#### Vivado WebPACK Install Configuration ####
Edition=Vivado WebPACK
Destination=C:\Xilinx
Modules=Vivado:1,Vivado High Level Synthesis:0,Software Development
Kit:0,DocNav:0,Artix-7,Kintex-7,Zynq-7000:1
#### Shortcut creation ####
CreateProgramGroupShortcuts=1
CreateShortcutsForAllUsers=0
ProgramGroupFolder=Xilinx Design Tools
CreateDesktopShortcuts=1
CreateFileAssociation=1
#### Post install tasks ####
## Post install tasks can be configured as shown below.
InstallOptions=Configure WebTalk:1,Install and Initialize Trusted Storage
Licensing:1,Generating installed device list:1,Install VC++ runtime libraries for
64-bit OS:1,Install Cable Drivers:0,Acquire or Manage a License Key:0,run:xic:1
```

Basically, each option in the configuration file matches a corresponding option in the GUI. A value of `1` means that option is selected, a value of `0` means the option is unselected.

Run the Installer

Now that you have edited your configuration file to reflect your installation preferences, you are ready to run the installer. As part of the installer command-line, you will need to indicate your acceptance of the Xilinx and Third Party license agreements, and confirm you understand the WebTalk Terms and Conditions.

Xilinx End-User License Agreement (EULA)

http://www.xilinx.com/support/documentation/sw_manuals/xilinx2016_2/end-user-license-agreement.pdf

Third Party End-User License Agreement (EULA)

http://www.xilinx.com/support/documentation/sw_manuals/xilinx2016_2/ug763_tplg.pdf

WebTalk Terms and Conditions

> By indicating `I AGREE`, I also confirm that I have read Section 13 of the terms and conditions above concerning WebTalk and have been afforded the opportunity to read the WebTalk FAQ posted at http://www.xilinx.com/webtalk. I understand that I am able to disable WebTalk later if certain criteria described in Section 13(c) apply. If they don't apply, I can disable WebTalk by uninstalling the Software or using the Software on a machine not connected to the internet. If I fail to satisfy the applicable criteria or if I fail to take the applicable steps to prevent such transmission of information, I agree to allow Xilinx to collect the information described in Section 13(a) for the purposes described in Section 13(b).

There is a command-line switch, `-a` or `--agree` for you to indicate your agreement to each of the above. If one of the above is left out of the list, or the agree switch is not specified, the installer will exit with an error and will not install.

Example Command-Lines

This is an example of the command-line for a typical new installation using a configuration file.

```
xsetup --agree XilinxEULA,3rdPartyEULA,WebTalkTerms --batch Install  --config
install_config.txt
```

If you wish to use one of Xilinx's default Edition configurations, you do not have to specify the `--config` option, but since the destination directory is included in the configuration file, you will be required to specify this on the command-line.

```
xsetup --agree 3rdPartyEULA,WebTalkTerms,XilinxEULA --batch Install --edition
"Vivado System Edition" --location "C:\Xilinx"
```

The above command will utilize the default configuration options for the edition specified. To see the default configuration options, use the –b ConfigGen mode as described above.The Vivado installer's batch mode can also perform uninstallation and upgrades (adding additional tools and devices). For the full list of the installer's batch options run `xsetup -h` or `xsetup --help`.

Obtaining Quarterly Releases

Xilinx releases quarterly versions of the Vivado Design Suite tools throughout the year. Each quarterly version contains device support updates, new features and bug fixes. The following sections describe how to obtain updates through the Xilinx Information Center.

Xilinx Information Center

Xilinx Information Center (XIC) is the next generation replacement of XilinxNotify. This functionality resides in the task bar (Windows) and periodically checks for new releases and updates from Xilinx. Users can view and dismiss notifications as well as update installations.

In addition, XIC now includes a cockpit from which you can manage all of your Xilinx tool installations. Update, check licenses or uninstall all from the new Manage Installs tab.