ISE Design Suite 13: Installation and Licensing Guide

UG798 (v13.2) July 6, 2011





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Revision History

The following table shows the revision history for this document.

Date	Version	Revision
03/01/11	13.1	Initial Xilinx Release.
07/06/11	13.2	Version Updates.
		Added information about installing Libusb 1.0 for Linux systems.

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Download and Installation (13.2)

This chapter describes how to download and install the Xilinx $^{\mathbb{B}}$ ISE $^{\mathbb{B}}$ Design Suite 13 software and supporting utilities.

Downloading ISE Design Suite 13

This section explains how to download the ISE Design Suite 13 software.

To begin, open an internet browser and navigate to http://www.xilinx.com/support/download/index.htm

All files in the Xilinx Download Center will be downloaded using the Akamai download manager. For the optimum download experience, perform the following:

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

To Download ISE Software, do the following:

- 1. Ensure the Design Tools tab in the web page is selected.
- 2. Under the Version heading, click on the version of the tools you are interested in downloading.
- 3. Click in the link for the installer you wish to download.

Note: For 13.x, the installers under the ISE Design Suite heading also contain the standalone selections for the Software Development Kit and Lab Tools. Depending on your use case, you may not need to download these separate installation programs if you are downloading the ISE Design Suite installers.

4. Enter your User ID and Password to log into your Xilinx account.

Note: If you do not have a Xilinx account, you must create one in order to download products. An address verification screen will appear.

- Once the current address is correct, click Next.
- 6. The Akamai download manager will launch in your browser to complete the download process.

Most files in the Xilinx Download Center are packaged using TAR methods. You will need to use software from a third party provider to unpack them. Consult your IT department for assistance. Commonly used tools for TAR files are 7-ZIP, GNU built-in tools, WinZIP, and WinRar, and these are licensed solely by each respective developer and not Xilinx. Xilinx hereby disclaims any warranties, express or implied, including warranties of merchantability, fitness for a particular purpose, or noninfringement with respect to these suggested software tools.



Installing ISE Design Suite 13: Overview for All Platforms

This section explains the installation process for all platforms for ISE Design Suite 13. Installation for each platform should be preceded by these steps:

- 1. Ensure that you have appropriate privileges on the system that the software will be installed on. Some components, such as programming cable device drivers, require administrator-level permissions.
- 2. Close all programs before you begin installation.
- 3. Ensure that your system meets the requirements described in the <u>ISE Design Suite 13:</u>
 <u>Release Notes Guide</u> Chapter 3, "Architecture Support and Requirements."
- 4. Check the links found in the <u>ISE Design Suite 13: Release Notes Guide</u> Chapter 2, "Important ISE Design Suite 13 Release Information" for any installation issues that pertain to your system or configuration.
- 5. If EDK is installed, make sure the installation is in a directory structure that does not contain spaces.

Note: The ISE Design Suite 13 installers will not set global environment variables, such as XILINX, on Windows. To find out if this affects the way you execute Xilinx software, see "Platform-Specific Installation Instructions."

Platform-Specific Installation Instructions

This section provides platform-specific details of the ISE Design Suite 13 installation.

Microsoft Windows

This section describes how to start the installation for Microsoft Windows operating systems.

To Start Installation

The method of starting the installation depends on how you have obtained the installation program. See "Downloading ISE Design Suite 13" for details on your options.

- If you have downloaded an installation file, decompress that file and run the **xsetup.exe** program contained therein.
- If you have ordered and received an ISE Design Suite DVD, load the DVD. If you have the auto-run feature of your DVD drive enabled, the setup program should start automatically. If it does not, browse to the DVD in Windows Explorer and run the <code>xsetup.exe</code> found at the root of the disc.

To Set Environment Variables

At the completion of the installation process, the installation program creates an environment variable batch file for you. All appropriate Desktop and Program Group shortcuts call this file before launching the target application. A shortcut to a command-line prompt which sets the environment has been created for you. The shortcut is located at Xilinx ISE Design Suite 13.2 > Accessories > ISE Design Suite Command Prompt

To set environment variables in make or script files:

Add <XILINX installation directory>\settings32.bat or settings64.bat to your script. 32 or 64 corresponds to the bit-width of the operating system installed on the machine



Linux

This section describes how to start the installation and set the environment variables for Linux operating systems.

To Start Installation

The method of starting the installation depends on how you have obtained the installation program. See "Downloading ISE Design Suite 13" for details on your options.

- If you have downloaded an installation file, decompress that file and run the **xsetup** program contained therein.
- If you have ordered and received an ISE Design Suite DVD, load the DVD. Click the setup file in your file manager, or browse to the root of your DVD drive and type ./xsetup.

To Set Environment Variables

At the completion of the installation process, the installation program creates an environment variables file for you.

- 1. Go to your Xilinx installation directory.
- 2. Type either source settings32.(c)sh or source settings64.(c)sh, whichever is appropriate to your shell.

To set your environment variables manually or from within your setup script, it is recommended that you copy the settings from the appropriate file for your operating system, as listed above. Xilinx environment variables settings are specific to each operating system platform.

Additional Installation

To make your installation compatible with the Digilent USB JTAG cable, you must have the libusb 1.0 package installed. For more information, see "Installing the libusb Package (Linux Platforms Only)."

Installation Flow

The following section describes important screens that you will encounter during the installation process.

Note: For each of the following installation steps, click on the text of any item that has a checkbox next to it to obtain more information. Information is displayed in the "Description" area near the bottom of the screen.

Accept Software Licenses

After the Welcome screen there are two Accept Software License Agreement Screens you will have to click through. To proceed:

- 1. Click the I accept the terms of this software agreement checkbox.
- 2. Click **Next** on each screen.



Select Xilinx Products to Install

The following figure shows the screen that allows you to select the Xilinx products you want to install.

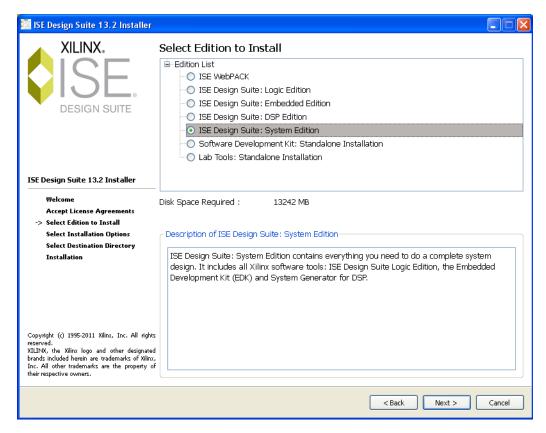


Figure 1-1: ISE Design Suite 13 Installation - Select Xilinx Products Screen

For 13.2, the product selection choices are WebPACK software, various ISE Design Suite Editions, and two standalone tools.

Note: The ISE WebPACK product installer will install both ChipScope PRO software and the Embedded Development Kit. Although installed, these applications will require a separate license to run.

Select Installation Options

There are several optional installation steps that can be performed during the installation process. If selected, these options will install toward the end of the installation process, after the main software installation has completed. Several of these options open dialog boxes that pause the installer until a response is given.



The following figure shows the screen from the Installation Software that enables you to select Xilinx Installation Options.

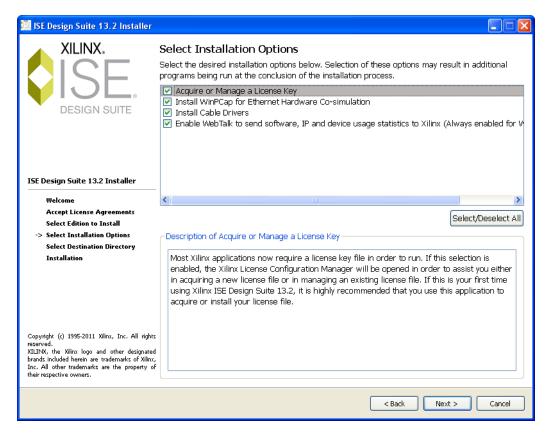


Figure 1-2: ISE Design Suite 13 Installation - Xilinx Modules and Devices

Note: WebTalk is always enabled when using WebPACK software. If the ISE WebPACK product is selected on the previous screen, the "Enable WebTalk" option will not be selectable. If you install an Edition product, you can deselect "Enable WebTalk" in the installer. However, if a WebPACK license is used to process the design, the "Enable WebTalk" preference is ignored. Please click on the "Enable WebTalk" item, in the installer, and read the description box for full details.

Select Destination Directory

In the Select Destination Directory screen shown in Figure 1-3, page 10, select the directory in which to install the software, and enter a name for the Program Folders list. Please note that the installer will add a level of hierarchy underneath the installation path you specify. The name of the directory will vary depending upon the type of product you are installing. Any Editors or WebPACK software installation will create a directory named \ISE_DS. Lab tool standalone installations will create \LabTools and SDK software standalone installations will create \SDK. This is done to ensure that Edition and Standalone tools can coexist properly on your hard drive.



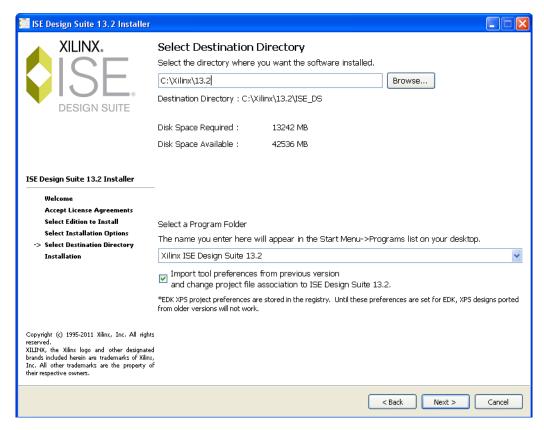


Figure 1-3: ISE Design Suite 13 Installation - Select Destination Directory

Installation Options Summary

The Installation Options Summary screen gives you a summary of the tools, products, and options to be installed. If you want to change anything, select the **Back** button and make changes. To begin the installation, click **Install**.

Towards the end of the installation process, the Xilinx License Configuration Manager opens by default. Follow the instructions in the Manager to obtain or locate a license file.

Note: EDK tools require the Cygwin tools distributed by RedHat. A copy of these tools is distributed with EDK installation.

Installing the USB FLEXid Dongle Driver

If you have purchased a USB FLEX ID Dongle for use with Windows operating systems, you will need to install the appropriate driver prior to creating a FLEXnet license for use with it.

- 1. Install Xilinx ISE Design Suite 13.2 software first. This will contain the installer for the USB FLEXid dongle driver.
- 2. Run FLEXId_Dongle_Driver_Installer.exe found in <Xilinx Installation Directory>\13.2\ISE_DS\ISE\bin\nt.



In the Select Options screen, shown in Figure 1-4, ensure that only FLEXid 9 Drivers is checked.

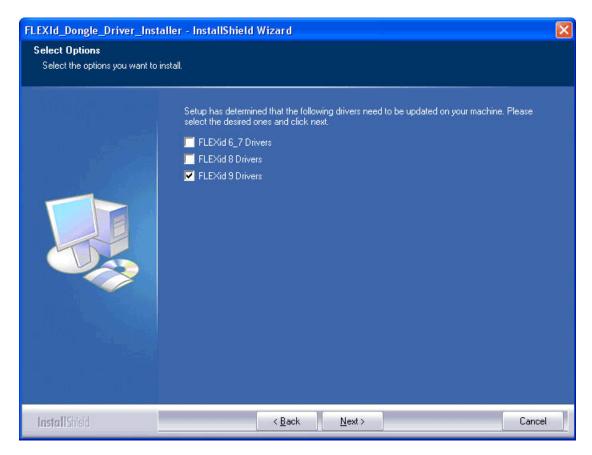


Figure 1-4: Select Options Screen

4. Click **Next** twice, and the driver installs.

After installation, a screen that opens asks you if you wish to reboot. You must reboot to ensure that the dongle operates correctly.

Installing the libusb Package (Linux Platforms Only)

To use the Digilent cable on your Linux platform, you must have the libusb 1.0 package installed on your machine. If your distribution does not provide a package for libusb 1.0, you must manually download and build this package.

Testing for the Presence of the libusb 1.0 Installation

You can perform a test to determine whether the libusb 1.0 package was installed by your Linux distribution.

- 1. Use your distribution's package manager to check whether libusb 1.0 is installed.
- 2. Determine whether the system's dynamic loader recognizes the library. To do this, check to see if the output of the /sbin/ldconfig -p | grep libusb-1 -c command is a non-zero count.



Installing the libusb Package

If you determined that libusb 1.0 is not already installed on your system, you can download and install the package yourself.

Note: The current version of libusb 1.0 is 1.0.8. If necessary, substitute a newer version in the following steps. Root permission is not required to perform this installation.

- 1. Download the package from: http://www.libusb.org/.
- 2. Open a shell or terminal console.
- Extract the libusb package script and its support files by typing tar xzvf libusb-1.0.8.tar.bz2.

This command creates a subdirectory named libusb-1.0.8 in the current directory.

Note: If the previous command did not properly extract the tar file, run the following commands:

```
bunzip2 libusb-1.0.8.tar.bz2
tar xvf libusb-1.0.8.tar
```

- 4. Type **cd libusb-1.0.8** to change to the libusb-1.0.8 directory.
- 5. Run the configure script using one of the following commands:
 - ./configure script

Run this command without arguments to install the libusb shared libraries to the /usr/local directory. Root permission is required to write to this directory.

- ./configure --prefix=<install-dir>

Run this command with the --prefix argument if root permission is not available.

Note: <install_dir> is a directory where the libusb shared libraries will be installed, and this directory can be owned by a regular user.

6. Run the following commands to complete the installation:

```
make
make install (can also be run from a root account)
```

- 7. Do the following to make sure the Digilent cable software can load the libusb 1.0 package.
 - If the package was installed from a root account, the user can update the LD_LIBRARY_PATH environment variable as described below. Alternately, create a text file containing /usr/local/lib, the default path for the libusb shared libraries, in the /etc/ld.so.conf.d directory and then run /sbin/ldconfig.
 - Update the LD_LIBRARY_PATH environment variable, if necessary, to point to the libusb shared libraries. If the installation was performed from a root account, make sure that the /usr/local/lib directory is included in the LD_LIBRARY_PATH environment variable. If the installation was performed from a regular user's account, add <install_dir>/lib to the LD_LIBRARY_PATH environment variable.

For the C shell, type:

```
setenv LD_LIBRARY_PATH<install_dir>/lib:$LD_LIBRARY_PATH
```

For a Bourne shell, type:

```
export LD_LIBRARY_PATH=<install_dir>/lib:$LD_LIBRARY_PATH
```

The user's login script can also be modified to add the libusb shared library location to the LD_LIBRARY_PATH environment variable to make libusb 1.0 available for the user at all times and after system reboots.



Network Installations

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

UNIX Clients

Each software user must source **settings32.(c)** sh or **settings64.(c)** sh (whichever is appropriate for your OS) from the \$XILINX area where the software is installed. This points the Xilinx environment variable, path, and LD_LIBRARY_PATH to the installed location.

To run the software applications 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 software 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 the ISE software tools to a PC network server. Make sure that your users know the location of the software tools and have access to the installation directory, and that they have Administrator privileges for the following steps.
- - 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 ISE tools using the Program Group or Desktop shortcuts, or by running the applications on the network drive.

Installing to a Mounted Network Drive

Xilinx software is designed to be installed in a directory under ROOT (typically C:\Xilinx). The installer presents this option normally when installing to a local driver, but when installing to a mounted network drive, a subdirectory might not be defined and it appears to the Installer as if it is installing to a ROOT directory.

To work around this issue, define your target installation directory as \Xilinx under the network mount point (For example, N:\Xilinx).



Obtaining 13 Quarterly Releases

Xilinx releases quarterly versions of the ISE Design Suite 13 software throughout the year. Each quarterly version contains device support updates, new features, and bug fixes. Quarterly releases are only available in the full installation version. Unlike in previous versions, there is not an option to update, for example, from 13.2 to 13.4. Instead, the 13.4 installer will install a complete 13.4 version into separate directory on the target machine. The following sections describe the ways to obtain to software updates through XilinxNotify and the Download Center.

XilinxNotify

The XilinxNotify tool is the preferred method of obtaining software updates. It provides the following features:

- Compares the latest version of Xilinx software updates available on
 http://www.xilinx.com/support with what you have installed, and notifies you if a
 newer version is available.
- Provides a "Download" button that will launch a browser, allowing you to login to the Xilinx Download Center. After you log in, the download of your selected product begins. XilinxNotify can be run in any of the following ways:
 - Automatic periodic checks at Project Navigator startup time.
 - Select Help > Check for Updates from Project Navigator.
 - Select Start > All Programs > Xilinx ISE Design Suite 13.2 > Accessories > Check for Updates.
 - Type **xilinxnotify** in a Linux shell

Note: You can use the **Edit > Preferences** menu selection in Project Navigator to control the frequency of the automatic checks that happen when Project Navigator starts.

XilinxNotify Network Installations

By default, the **Automatically check for software updates** option at Project Navigator startup is enabled on the machine used to install the ISE software to the network location. All clients pointing to this network location have this option disabled by default. Client users have the option of enabling this option (**Edit > Preferences > XilinxNotify** from Project Navigator) and also running manual checks.

Note: To perform a software update installation, you must have write permissions for the \$XILINX installation directory.

Download Center

Quarterly releases for all platforms are regularly made available on the Download Center at:

http://www.xilinx.com/support/download/index.htm



Uninstalling ISE Design Suite 13

Microsoft Windows

The following sections describe how to uninstall the products that comprise ISE Design Suite on Microsoft Windows.

To uninstall any Xilinx product, select the Uninstall item from the Start Menu folder for that product. For instance, to uninstall ISE WebPACK software or an ISE Design Suite: Edition, select **Start > All Programs > Xilinx ISE Design Suite 13.2 > Accessories > Uninstall**.

Depending on what you have installed, some ancillary applications might also need to be uninstalled, such as WinPcap 4.0 (optional component of DSP Tools).

Before uninstalling, be sure you have moved any project files that you want to keep outside your Xilinx installation directory structure; otherwise, they will be deleted.

Linux

To uninstall the Xilinx Design Suite product, you need to remove the Xilinx installation directory from the shell.





Obtaining and Managing a License (13.2)

The Xilinx[®] Product Licensing Site is an online service for licensing, administering evaluation, and obtaining full copies of Xilinx software and IP products. This chapter describes the FLEXnet license generation functionality of the Product Licensing Site.

Accessing the Product Licensing Site

The Product Licensing Site is accessible in various ways depending upon the type of license being generated.

- If you purchased products, follow the link included in your order confirmation email. It will provide direct access to an account containing your product entitlements.
- If you want to evaluate ISE[®] Design Suite 13 products, go to www.xilinx.com/ise_eval.
- If you want to evaluate IP products, go to www.xilinx.com/ipcenter and follow the "Evaluate" link on the IP product page of interest.
- You can also access the Product Licensing Site directly by going to www.xilinx.com/getlicense. You must register or enter your registration information.

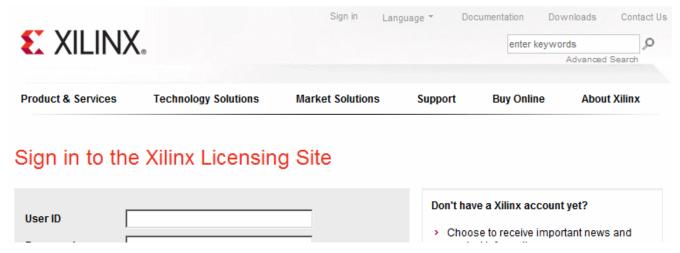


Figure 2-1: Xilinx Sign In Page

You must first sign in. If you already have a Xilinx user account, enter your user ID and password, and then validate that your contact information is current. If you do not have an account, click the **Create Account** button.



Product Licensing Accounts

When you purchase a software or IP product from Xilinx, you are purchasing a license to use and receive updates for that product for one year. The license to use Xilinx software and IP products is managed through the use of product entitlements. A product entitlement is the determination of:

- Which product was purchased
- The number of seats purchased
- The license type (floating or node-locked)
- The product subscription period (product updates are provided throughout the year)

In addition to managing the product entitlements for your purchased software tools and IP, you can also access product entitlements for "No Charge" or "Evaluation" products. Full and No Charge licenses have a subscription period of one year. Software tools evaluations are for 30 days, and IP evaluations are for 120 days.

Activating a product entitlement results in one or more license keys being generated by the website. When installed, the license keys enable the use of the software and IP that was purchased or is being evaluated. Your product entitlements and resulting license key files are managed in a product licensing account on the Xilinx website.

Product licensing accounts are specific to the individual listed on the Xilinx Software Purchase Order, which is either the end-user or administrator of the software. All purchases made can be managed in the same product licensing account if a single administrator is named, or a company site can have multiple accounts managed by different administrators. The latter is helpful if a site has multiple design teams working on differing projects with different budget pools.

Note: A license key can be generated for a product entitlement that has expired; however, it will only enable product releases up to the subscription end date. Applying a product update that was made available after the subscription end date of your license will result in an error.

LogiCORE IP License Generation In ISE Design Suite 13

Beginning in ISE Design Suite 13, LogiCORETM IP licenses are no longer generated through lounges on the Xilinx web site. Instead, the entitlement process for LogiCORE IP is automated and uses the same electronic entitlement process used for other software. When a purchase order for LogiCORE IP is entered into the Xilinx system, it is processed in less than 2 hours, following which you can generate LogiCORE IP licenses on the Product Licensing Site, as described in this section.

Any IP and software entitlements you have purchased appears in your list of entitled products when you log into the Product Licensing Site. Licenses for Evaluation and No Charge IP are also available on the site in a separate area. Licenses for all your software and IP can now be generated in one pass and are emailed to you in a single license file. In addition, IP core FLEXnet licenses now feature more licensing options, such as single or Triple-Redundant Floating Server support, and more host options for node-locked license keys: Ethernet MAC address, Hard Drive Serial Number or USB Dongle ID.

User Types and Actions

There are three user types for the Product Licensing Site: customer account administrator, end user, and evaluation user.



Customer Account Administrator

An example of a typical customer account administrator is a CAD tools manager. Every product licensing account *must* have at least one customer account administrator. A customer account administrator can manage more than one product licensing account.

The responsibilities as the customer account administrator include:

- Generating node-locked or floating licenses for Xilinx software and IP products.
- Adding and removing users from the product licensing account (as desired).
- Assigning administrative privileges to other users (as desired).
- Ordering product DVDs (if applicable).

The original customer account administrator is the "Ship To" contact that is identified during the product ordering process. That person receives an email with instructions on how to download and license each purchased product. It is important that the customer account administrator follow the link in the email; it ensures that the administrator can obtain access to the purchased products.

End User

Adding end users to a product licensing account allows an engineer or design team member the flexibility to manage and generate license keys on their own. The end user can generate license keys for node-locked products entitlements within the account as well as evaluation and "no charge" license keys for software and IP products. A customer account administrator can also configure the end user account so that an end user can generate floating licenses. The following are some restrictions that are placed on the role of end user:

- An end user is not able to view or generate floating license keys by default. The customer account administrator can assign this privilege to the end user.
- An end user is not able to view the license keys generated by other users.
- An end user is not able to add or remove other users to or from the product licensing account.

Evaluation User

An evaluation user is someone who would like to test-drive ISE Design Suite 13 products. Evaluation users can:

- Generate a 30-day free evaluation license key for ISE Design Suite 13: System Edition.
- Generate license keys for evaluation and no charge IP products.
- Request an ISE Design Suite 13 DVD with one of the following Shipping Options:
 - Free Shipping (2-4 Weeks)
 - Standard (2-3 Days)
 - Overnight

Note: A customer who is already licensed for a full version of an ISE Design Suite product edition can test-drive other ISE Design Suite product editions or IP. These product entitlements are made available in the same product licensing account.

All user types can download products electronically and request an ISE Design Suite 13 DVD.



Creating a License Key File

As shown in Figure 2-2, the Create New Licenses tab on the Product Licensing Site is the starting point for license key file generation. The software tool and IP product entitlements you have purchased or wish to evaluate are presented in the product entitlement table.

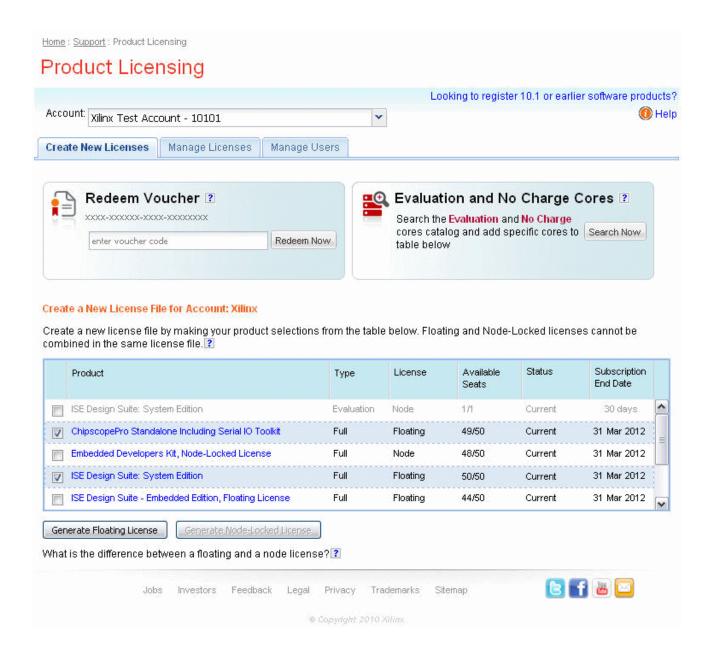


Figure 2-2: Create New License

Selecting Products

You begin the license generation process for products you have purchased or wish to evaluate by performing the following actions:



- 1. Select a product licensing account from the Account drop-down list.
 - *Note:* This selection is not available if you are only entitled to evaluation or free products.
- 2. Enter product voucher codes for Software or IP product licenses purchased with kits (optional).
- Add evaluation or no-charge IP product entitlements to the product entitlement table (optional).
- 4. Make your product selections from the product entitlement table.

The type of product entitlements available are Full (purchased), No Charge, or Evaluation. Full and No Charge licenses have a subscription period of one year. Software tools evaluation is for 30 days, and IP evaluations are for 120 days.

Floating and node-locked licenses cannot be combined in the same license key file, and the interface is designed to prevent this.

Note: A floating license resides on a network server and enables applications to check out a license when they are invoked. At any one time, the number of licenses for simultaneous users is restricted to that of the license seats purchased. A node-locked license allows for the use of a single seat of a product entitlement on a specific machine.

For software tools, available seats represents the number of seats available for licensing over the total number of seats purchased. For IP, seats are managed according to the terms of the site wide license agreement.

Products with a status of "Current" are within their warranty period. Products with a status of "Expired" have a warranty period end date that has passed. If seats are available, licenses can be generated for either "Current" or "Expired" product entitlements.

The ISE Design Suite: System Edition evaluation product entitlement provides access to all the capabilities in the ISE Design Suite tool set. This product entitlement is automatically included in your product licensing account.

Product vouchers for Software and IP product licenses can be shipped with a Xilinx or partner development board or design kit. If you have a product voucher card, you can enter the voucher code on the card into the associated text field and click **Redeem Now**. This places the corresponding Software or IP product entitlement in the product entitlement table which you can use to generate a license key.



Evaluation and No Charge IP can be added to the list of product entitlements by clicking the "Search Now" button within the "Add Evaluation and No Charge IP Cores..." section of the page. This opens an IP product finder tool as shown in Figure 2-3.

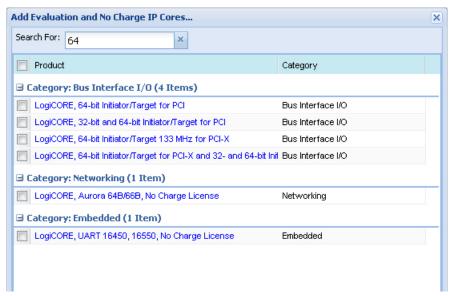


Figure 2-3: IP Product Selector

Note: IP products are typically sold as site licenses providing the administrator the ability to generate license keys for floating and node-locked license types. End users will only see product entitlements for node-locked products. The customer account administrator, or an End User who has been granted Floating License generation status by the administrator will see product entitlements for both node-locked and floating products.



Generating a License

Click the **Generate License** button that corresponds to the type of license key file you are generating (floating or node-locked). The license generation form, shown in Figure 2-4, opens.

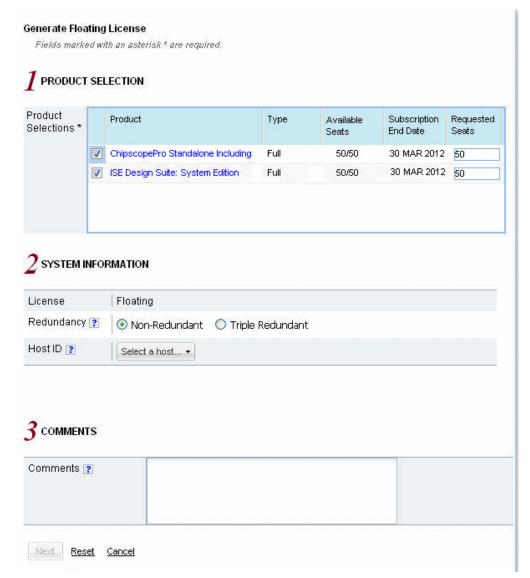


Figure 2-4: Generate Floating License

Complete the form as follows:

- 1. Select the number of seats required for each product license.
 - This is for floating licenses only. All node-locked licenses are for one seat. The number of seats available for a product entitlement is automatically maintained by the system. The "Requested Seats" field is populated, by default, with the full number of seats remaining on the product entitlement. A product is removed from the product entitlement table if all seats have been activated.
- 2. Enter system information.



System information is pre-populated in the option menu if you arrived at the Product Licensing Site from a link within the Xilinx License Configuration Manager (XLCM).

A redundant server configuration provides a failover for the license manager software. As long as two of the three servers are running, the license manager can continue to run.

If you do not have pre-populated system information or want to add a different host, select the **Add a host** option from the option menu.

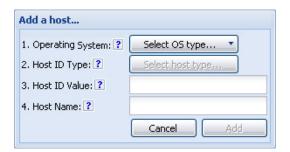


Figure 2-5: Add a Host

The host ID is a value that uniquely identifies the machine to which your software tools or IP is licensed. You can choose a host ID type to be a MAC address, a hard drive serial number, a dongle ID, or a Solaris host ID.

Note: Not all host ID types are supported for all operating systems. The easiest way to obtain your host ID is to run the XLCM on the machine that will serve as the license host.

3. Enter a comment.

Adding a comment to the license key file makes it easy for an administrator to keep notes on how software and IP product entitlements are allocated among users.

4. Click Next.

The Review License Request form, shown in Figure 2-6, opens.

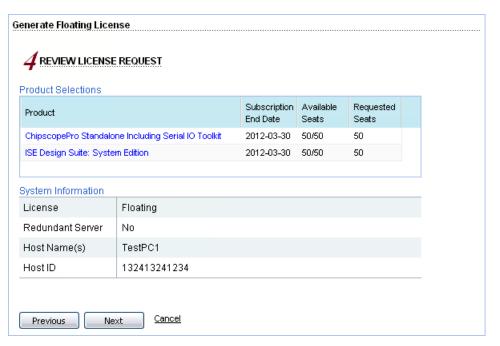


Figure 2-6: Review License Request

- 5. Review your selections.
- 6. If you are satisfied with your selections, click **Next**.

End User License Agreements (EULAs)

ISE Design Suite Software tools and No Charge IP product EULAs are agreed to during the product installation process. If you license IP products, you must accept the terms of the associated IP product EULAs before the license file can be generated.

Third-Party Licenses

A complete copy of the third-party licenses for 13.2 is located here: <install_directory>/common/licenses/unified_3rd_party_eula.txt

License Generation Confirmation

Upon completion of the license generation process, you will receive a confirmation message providing a summary of your licensing activity. Figure 2-7 shows the confirmation.



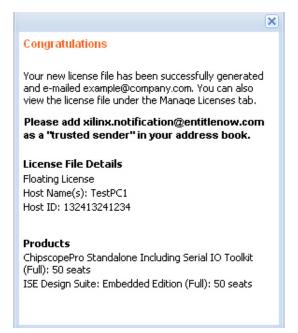


Figure 2-7: License Generation Confirmation

You also receive a license generation confirmation email. This message contains the license key file that was generated as an attachment. Add xilinx.notification@entitlenow.com as a trusted sender in your email address book.

Managing License Key Files

The Product Licensing Site keeps track of the license key files you have generated. Select the Manage Licenses tab to see all of the license key files that are generated for your product licensing account. Figure 2-8, page 27 shows the Manage Licenses page.



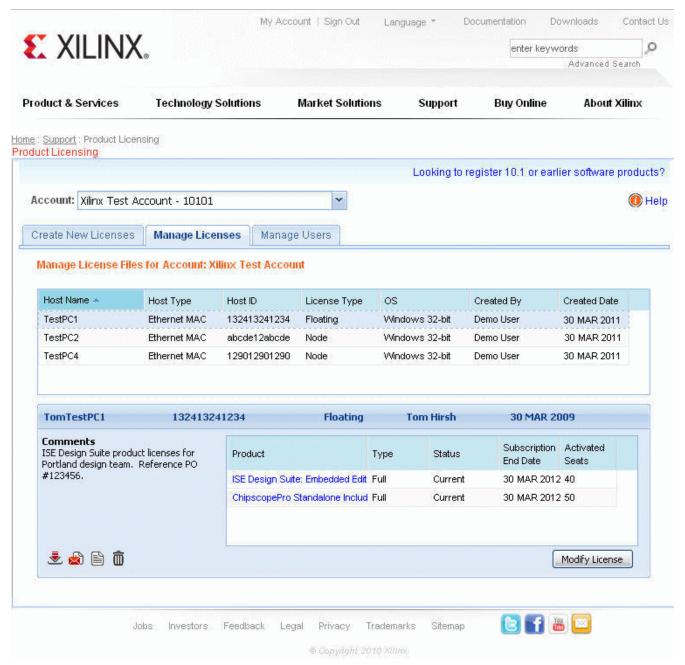


Figure 2-8: Manage Licenses

Using the Manage Licenses page, you can perform a number of actions depending upon your needs. These are described in the following sections.



Exploring and Retrieving Your Existing License Key Files

Information regarding the license key files that have been generated in your product licensing account are presented in a **master / detail** view. By clicking on a row in the master view in the top table, detailed information about the license key file is displayed in the detail view in the bottom table. The detail view table includes the following:

- A list of product entitlements that have been activated in the key file.
- Comments associated with the key file.
- Ability to download, email, or copy and paste the contents of the license key file (click the corresponding icons on the lower left portion of the detail view).
- Ability to delete a license key file.
- Ability to view the end user license agreement you accepted (if applicable).

Modifying a License Key File

In order to modify an existing license key file, select the license key file in the master view and then click the **Modify License** button in the detail view. A license key file can be modified in one of the following ways:

- Rehosting or changing the license server host for a license key file.
- Activating or adding additional seats to an existing licensed product entitlement.
- Deactivating or removing seats from an existing licensed product entitlement.
- Activating or adding additional product entitlements to a license key file.
- Deactivating or deleting product entitlements from a license key file.

The process for modifying a key file uses the same input form as when the license key file was created except that additional product entitlements of the same license type (floating or node-locked) are made available for licensing.

Reclaiming Deactivated Product Entitlements

A product entitlement is deactivated when one of the following activities occur:

- Rehosting or changing the license server host for a license key file.
- Deactivating or removing seats from an existing licensed product entitlement.
- Deactivating or deleting product entitlements from a license key file.

The license generation facility will allow for the reallocation of the deactivated seats or product entitlements by making the corresponding seats or product entitlements available for activation in the product entitlements table on the Create License page.

Before the reallocation of entitlement occurs, you must first agree to an Affidavit of Destruction. This legal agreement is required to ensure that the deactivated product entitlements are no longer being used.

The number of allocation operations is recorded for each user. Administrators are allowed to reallocate product entitlements five times per major release, and end users are allowed to reallocate product entitlements three times per major release.



What Happens to Your License Key File

For each product entitlement that is activated, a FLEXnet increment line and corresponding package line is added to the license key file. When a license key file is modified to activate (add) seats for an existing or new product entitlement, additional increment or package lines are added to the license key file.

When a license key file is "rehosted" or is modified to deactivate (delete) seats or product entitlements, the corresponding increment lines are regenerated or removed from the modified license key file.

Managing User Access to Product Licensing Account

The responsibility of administering a product licensing account may be transferred or shared with another user. The ability to add or remove users from a product licensing account is managed under the Manage Users tab.

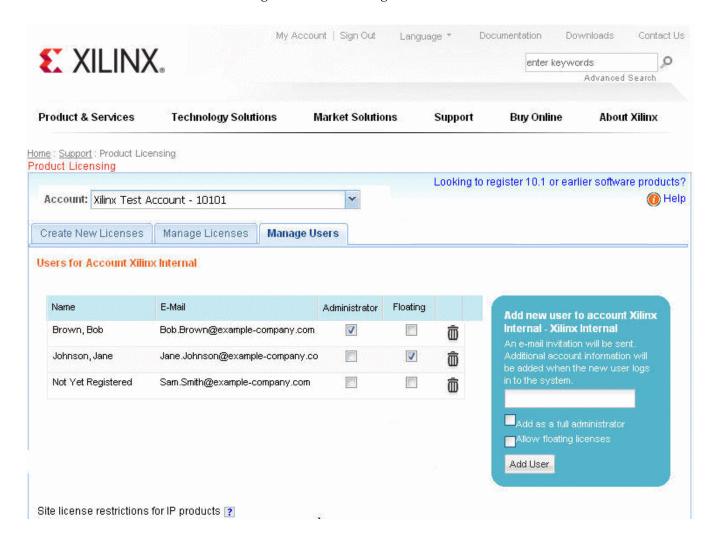


Figure 2-9: Manage Users



Adding Users

To add a user to your product licensing account:

- 1. Type in the corporate email address of the new user.
- Check the Add as a full administrator check box, if you want the new user to have customer account administrative privileges. Check the Allow Floating Licenses check box, if you want the user to be able to generate Floating Licenses, but not have full administrative privileges on the account.

Note: The email address you provide must be the same email address the user supplied or supplies when creating their Xilinx account. If not, the user may not be properly recognized when logging in.

If a user has already logged into the Product Licensing Site, their name will automatically appear in the user list. If the user has never been to the site, the words "Not Yet Registered" appears in the space for their name. Once the user has completed the sign in process, their name is automatically filled in.

In some instances, a customer account administrator might want to have design team members administer license key files for their own use. By leaving both **Add as full administrator** and **Allow Floating Licenses** check boxes unchecked, the user has the following restricted privileges:

- Only able to generate node-locked license keys.
- Only able to view and modify license key files they generated for themselves.
- Unable to manage users.

If you only check **Allow Floating Licenses**, the restriction on node-locked keys is lifted, but the others remain. Checking both boxes is not allowed, as full administrators already have floating license generation capability.

Removing Users

Administrative or floating license generation privileges can be removed from users of an account by unchecking the "Administrator" or "Floating" check box that corresponds to the respective user.

To remove a user from a product licensing account, click the Trash can button that corresponds to the respective user.

Installing Your License Key File

Node Lock License Installation

After generating a license file, you receive an e-mail from xilinx.notification@entitlenow.com.

- 1. Save the license file attached to the e-mail to a temporary directory on your local system.
- 2. Run the Xilinx License Configuration Manager:
 - ♦ For Windows: Select Start > All Programs > Xilinx ISE Design Suite 13.2 > Accessories > Manage Xilinx Licenses.
 - For Linux: Type **x1cm** in a command-line shell.
- 3. Go to the Manage Xilinx Licenses tab.



- 4. Click the **Copy License** button at the top of the page.
- 5. Browse to your license file (Xilinx.lic) and click **Open**.

 This will copy this license file to the C:\.Xilinx (Windows) or <Home>/.Xilinx directory of your machine where it is automatically found by the Xilinx tools.
- 6. Following the "Copy License" operation, the table on the Manage Xilinx Licenses tab will be updated with licensing information from the license file.
- 7. Press **Close** to exit the Xilinx License Configuration Manager.

Floating License Installation on Servers

For existing FLEXnet license servers, a common practice is to copy the contents of the license file, mailed from xilinx.notification@entitlenow.com, into the existing license file on your FLEXnet server.

Note: Restart the floating license server to enable the Xilinx licenses.

For New License Servers

1. Download the appropriate Xilinx FLEXnet license utilities for the operating system of your server from the Xilinx Download Center:

http://www.xilinx.com/download/index.htm

Note: Only customer account administrators on the Product Licensing Site have access to FLEXnet license utilities. To see if you are a customer account administrator, refer to the description in "User Types and Actions."

- 2. Unzip these utilities into a destination directory. It is recommended that you place this directory into your application search path.
- 3. After the FLEXnet utilities are installed, you can run the following commands to start the floating license server:
 - ♦ For Linux
 - <Server Tool directory>/bin/lin/lmgrd -c <path_to_ license>/Xilinx.lic -l <path_to_license>/log1.log
 - <Server Tool directory> bin/lin64/lmgrd -c <path_to_ license>/Xilinx.lic -l <path to license>/log1.log
 - For Windows
 - <Server Tool directory>\bin\nt\lmgrd -c <path_to_
 license>\Xilinx.lic -l <path_to_license>\log1.log
 - <Server Tool directory>\bin\nt64\lmgrd -c <path_to_
 license>\Xilinx.lic -l <path to license>\log1.log



Client Machines Pointing to a Floating License

- Run the Xilinx License Configuration Manager (XLCM) by selecting Start > All Programs > Xilinx ISE Design Suite 13.2 > Accessories > Manage Xilinx Licenses.
- 2. Click the Manage Xilinx Licenses tab.
- 3. Type the network path to the license server in the port@server format into the **XILINXD_LICENSE_FILE** field, and click **Set**. The default Xilinx port number is 2100.

Note: For Linux operating systems, licensing environment variables cannot be set using the XLCM. The environment variable fields are read only, and they are grayed out and there are no "Set" buttons. The environment variable must be set using the appropriate shell and commands.