

# Lattice Radiant Software 2026.1.1 Installation Guide for Linux/Ubuntu



October 8, 2026

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## Type Conventions Used in This Document

| Convention                                         | Meaning or Use                                                                                    |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Bold</b>                                        | Items in the user interface that you select or click. Text that you type into the user interface. |
| <i>&lt;Italic&gt;</i>                              | Variables in commands, code syntax, and path names.                                               |
| <b>Ctrl+L</b>                                      | Press the two keys at the same time.                                                              |
| <code>Courier</code>                               | Code examples. Messages, reports, and prompts from the software.                                  |
| <code>...</code>                                   | Omitted material in a line of code.                                                               |
| <code>.</code><br><code>.</code><br><code>.</code> | Omitted lines in code and report examples.                                                        |
| <code>[ ]</code>                                   | Optional items in syntax descriptions. In bus specifications, the brackets are required.          |
| <code>( )</code>                                   | Grouped items in syntax descriptions.                                                             |
| <code>{ }</code>                                   | Repeatable items in syntax descriptions.                                                          |
| <code> </code>                                     | A choice between items in syntax descriptions.                                                    |

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# Introduction

This document provides instructions on installing Lattice Radiant™ software in a Linux/Ubuntu environment.

Radiant software supports the following device families:

- ▶ iCE40 UltraPlus™ (iCE40UP)
- ▶ Avant™ (LAV-AT)
- ▶ CertusPro™-NX (LFCPNX)
- ▶ Certus™-NX (LFD2NX)
- ▶ MachXO4™ (LFMXO4)
- ▶ MachXO5™-NX (LFMXO5)
- ▶ CrossLink™-NX (LIFCL)
- ▶ Certus™-N2 (LN2-CT)
- ▶ Mach™-N2 (LN2-MH)
- ▶ Certus™-NX-RT (UT24C)
- ▶ CertusPro™-NX-RT (UT24CP)

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**Note**

The devices available vary depending on the type of license.

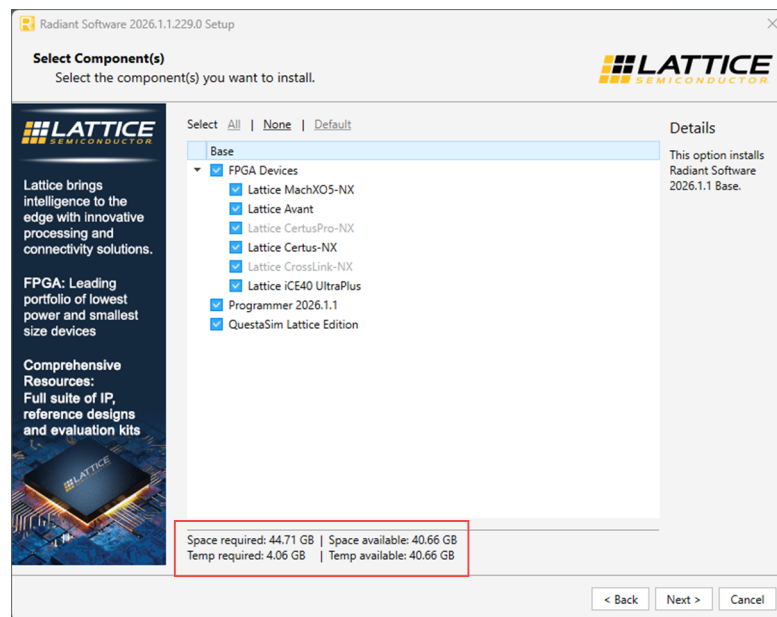
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# System Requirements

The following are the basic system requirements for Radiant software on Linux/Ubuntu:

- ▶ Intel Pentium or Pentium-compatible PC, or AMD Opteron system support:
- For Radiant Programmer:
  - ▶ Radiant software contains a 64-bit driver to support the 64-bit system.
- ▶ Red Hat Enterprise Linux version 8.10 operating system.
- ▶ Ubuntu version 22.04 or 24.04 LTS operating system.
- ▶ Installation on an NFS-mounted location is supported.
- ▶ The host operating system can only be 64-bit.
  - ▶ Radiant software is available in a 64-bit version and can only be installed on a 64-bit system.
- ▶ Approximately 50 GB free disk space plus 6 GB of temporary space.

The required disk space varies based on the features selected during installation. In the installation wizard, the note displaying the space requirement updates dynamically whenever you modify the selected features.



- ▶ Network adapter and network connectivity.

**Note**

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A floating license requires access to the license server, so both a network adapter and connectivity are required.

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- ▶ 1024 x 768 graphics display.
- ▶ JavaScript-capable Web browser.

# Contacting Technical Support

## FAQs

The [Knowledge Base](#) provides solutions to questions that many of our customers have already asked. Lattice Applications Engineers are continuously adding to the database.

To access the Knowledge Base, go to [www.latticesemi.com](http://www.latticesemi.com) > [Support](#) > [Knowledge Base](#).

## For Technical Support Assistance

Submit a technical support case via technical support case portal or go to [www.latticesemi.com](http://www.latticesemi.com) > [Support](#) > [Technical Support Request](#).

## For Local Support

Contact your nearest [Lattice Sales Office](#).

# Installer Contents

The Radiant software installation package is available for download from <https://www.latticesemi.com/latticeradiant>. In the **Software Downloads & Documentation** section, go to **Downloads > Downloadable Software** tab. Some documents and downloads are not visible to anonymous visitors. To view all items, please log in to your Lattice account. Follow the product download instructions and uncompress the software.

The following describes the contents of the Radiant software installer.

- ▶ The Lattice Radiant, Power Estimator, Programmer, and Reveal file names are as follows:
  - ▶ 2026.1.1.229.0\_Radiant\_lin.run
  - ▶ 2026.1.1.229.0\_Radiant\_PowerEstimator\_lin.run
  - ▶ 2026.1.1.229.0\_Radiant\_Programmer\_lin.run
  - ▶ 2026.1.1.229.0\_Radiant\_Reveal\_lin.run
- ▶ The Radiant software “base” installation file installs Radiant software and Synplify Pro for Lattice.
- ▶ The Lattice Power Estimator installation file installs the stand-alone Radiant Power Estimator. It is not necessary to install this package if the Radiant software Base is installed. See [“Installing Stand-Alone Power Estimator” on page 21](#) for more information.
- ▶ The Radiant Programmer installation file installs the stand-alone Radiant Programmer. It is not necessary to install this package if the Radiant Base is installed. See [“Installing Stand-Alone Radiant Programmer” on page 20](#) for more information.
- ▶ The Lattice Reveal installation file installs the stand-alone Radiant Reveal Analyzer. It is not necessary to install this package if the Radiant software Base is installed. See [“Installing Stand-Alone Reveal Analyzer” on page 19](#) for more information.
- ▶ The Installation Notice contains installation and licensing information.

# Radiant Software Installed Directory Structure

Table 1 shows the Radiant software directory structure after installation:

**Table 1: The Radiant Software Directory Structure**

| File or Directory | Description                                                                                                                                                                                                    |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| bin/lin64/        | This directory contains files for running the Radiant software 64-bit GUI.                                                                                                                                     |
| cae_library/      | This directory contains synthesis header libraries for Synplify Pro in both Verilog and VHDL formats. It also contains the libraries for interface kits (ispLSI <sup>®</sup> design and simulation libraries). |
| data/             | This directory contains files for the Radiant software.                                                                                                                                                        |
| docs/             | This directory contains Radiant software documentation, including manuals, tutorials, and the online Help.                                                                                                     |
| examples/         | This directory contains Lattice design examples.                                                                                                                                                               |
| ip/               | This directory contains files, documentation, and example for the ip.                                                                                                                                          |
| ispfpga/          | This directory contains files for the Radiant software.                                                                                                                                                        |
| license/          | This directory contains the license agreement.                                                                                                                                                                 |
| questasim/        | This directory contains files for the QuestaSim for Lattice software.                                                                                                                                          |
| programmer/       | This directory contains files for Radiant Programmer.                                                                                                                                                          |
| scripts/          | This directory contains Lattice script files.                                                                                                                                                                  |
| synpbases/        | This directory contains files for the Synplify Pro for Lattice software.                                                                                                                                       |
| tcltk/            | This directory contains tcl/tk related files.                                                                                                                                                                  |

# Installing Radiant Software on a 64-Bit Platform

## Installation Procedure

Download the installation files from the Lattice Semiconductor Web site. For more information on how to download Radiant software, go to <http://www.latticesemi.com/latticeradiant>. In the **Software Downloads & Documentation** section, go to **Downloads > Downloadable Software** tab. Some documents and downloads are not visible to anonymous visitors. To view all items, please log in to your Lattice account. Follow the product download instructions and uncompress the software.

Radiant software is installed with the **2026.1.1.229.0\_Radiant\_lin.run** installation file. The file installs all Lattice Semiconductor FPGA devices on your 64-bit system, as well as Synplify Pro for Lattice. The following step guides you through the installation procedure.

### Note

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The Linux Installers MD5 Checksums file is no longer provided as a standalone download. The MD5 checksum information is bundled with the corresponding Linux installer package.

---

### To install the Radiant software on 64-bit systems:

1. After downloading the Radiant installer, open a terminal and navigate to the folder where the file is stored.

```
% cd <directory_with_RUN_file>
```

2. Execute the .run file to start the installation:

```
% ./2026.1.1.229.0_Radiant_lin.run
```

3. The Install Lattice Radiant Software 2026.1.1 page opens.
4. Click **Next** to go to the Select Installation Folder page.

5. The default destination folder is \$HOME/lsc/radiant/2026.1. Click **Browse** to change the destination folder.
6. Click **Next** to go to the Select Components page.
7. Choose the Radiant software components that you want to install by selecting or clearing each of the listed options.

The FPGAs product option has additional options for selecting the Lattice FPGA devices that you want to install. To set the additional options, select **FPGAs** and click the device.

Click **Next** to open the License Agreement page.

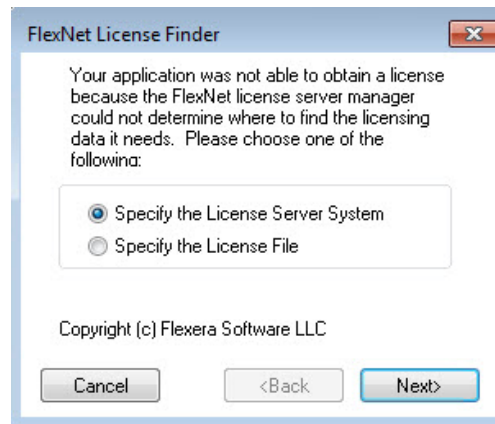
8. Read the license agreement. If you agree, click **I accept the license** to continue the installation process.
9. Click **Next** to go to the Installation Summary page and review the current settings. If everything is correct, select **Install** to start the installation.
10. In the Installation Wizard Complete dialog box, read the confirmation note and click **Finish**.

#### Note

Do not close the installation window. The window automatically closes once the installation is completed.

If you have never installed any Lattice Software before, the FlexNet License Finder dialog box will pop up to ask you for the license. Select the desired license option and click **Next** to complete the license installation.

**Figure 1: Flex License Finder**



## To Install the Radiant Software Using Console Mode

Go to Radiant software installers directory and execute the command in one line.

```
% cd <directory_with_RUN>
% ./2026.1.1.229.0_Radiant_lin.run --console --prefix
<install_path>
```

**Table 1: Installation Options**

| Option        | Description                                                                                                                                    |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| --prefix      | Specifies the installation directory. Can be a local or NFS-mounted drive. If NFS is selected, disk space requirements apply to the NFS drive. |
| --console     | Runs the installer in console mode.                                                                                                            |
| -v, --verbose | Verbose mode. Prints out more information.                                                                                                     |

## Setting the TMPDIR Environment Variable

During installation, Radiant creates temporary files that are stored in a directory defined by the **TMPDIR** environment variable.

By default, most Linux systems use **/tmp** for temporary storage. In some environments, such as systems with limited **/tmp** space or when using **tmpfs**, you may need to explicitly set **TMPDIR** to a different location. If **TMPDIR** is not set, the default temporary storage location is **/tmp**.

The installation process may require up to 6 GB of temporary storage. If the default **/tmp** directory does not have enough space, the installation may fail or encounter errors.

When installing on systems with NFS-mounted directories or restricted temporary storage, make sure the chosen directory has sufficient free space.

### Set TMPDIR if:

- ▶ You encounter errors related to insufficient space in **/tmp**.
- ▶ You are installing on a system with a limited or memory-backed **/tmp**.
- ▶ You want to direct temporary files to a specific location with more available space.

### To set TMPDIR:

Before running the installer, set the TMPDIR environment variable to a directory with at least 6 GB of free space. For example:

```
export TMPDIR=/path/to/tempdir
```

To verify available space:

```
df -h /path/to/tempdir
```

After installation, you can unset the variable or close the terminal session to revert to the default behavior.

## System Library Dependencies

The Radiant software package depends on a set of packages that provide 64-bit system libraries. Some of these packages may depend on lower level packages, or indirect dependencies. To fulfill this dependency, these packages must be installed before Radiant software can be installed.

The following are the packages 2026.1.1.229.0\_Radiant\_lin.run depends on. This list does not include packages that are included with Radiant software 2026.1.1.

## Installing System Library Packages on a Red Hat 64-bit Operating System

Check which packages are already present on your system by entering the following command and confirming that the named package appears in the results.

```
rpm -qa | grep <package name>
```

The command to install package:

```
sudo yum install <package name>
```

### Installing system library packages manually

You can type the following command to determine the required libraries.

```
% ./bin/lin64/check_systemlibrary_radiant.csh
```

If you wish to install system library packages manually, the following is a list of commands to install required libraries:

```
sudo yum install glibc-2.17
```

```
sudo yum install libjpeg
sudo yum install libieee1284
sudo yum install libusb-0.1.4
sudo yum install libX11
sudo yum install libICE
sudo yum install libSM
sudo yum install libXt
sudo yum install libXext
sudo yum install libXrender
sudo yum install libXi
sudo yum install libXft
sudo yum install libxslt
sudo yum install libXrandr
sudo yum install libXfixes
sudo yum install libXdamage
sudo yum install libXcursor
sudo yum install libXcomposite
sudo yum install libGL
sudo yum install libXinerama
sudo yum install libXScrnSaver
sudo yum install libxcb
sudo yum install libxcbcommon
sudo yum install libxcbcommon-x11
sudo yum install libXau
sudo yum install libXv
sudo yum install libnsl
sudo yum install xcb-util-wm
sudo yum install xcb-util-image
sudo yum install xcb-util-keysyms
sudo yum install xcb-util-renderutil
sudo yum install nss-softokn-freebl
sudo yum install atk
sudo yum install cairo
sudo yum install nss
sudo yum install pango
sudo yum install mesa-dri-drivers
sudo yum install pulseaudio
sudo yum install gstreamer1
sudo yum install cdparanoia-libs
sudo yum install opus
sudo yum install libtheora
sudo yum install iso-codes
sudo yum install libvisual
sudo yum install libglvnd-glx
sudo yum install libglvnd
sudo yum install gstreamer1-plugins-base
sudo yum install libX11-devel
sudo yum install libXext-devel
sudo yum install libXfixes-devel
sudo yum install libXdamage-devel
sudo yum install mesa-libGL-devel
sudo yum install nss-tools
sudo yum install nss-devel
sudo yum install nss-softokn
sudo yum install nss-util-devel
sudo yum install nss-softokn-freebl-devel
sudo yum install nss-softokn-devel
sudo yum install libxcb-devel
sudo yum install libxcbcommon-devel
```

```
sudo yum install libXau-devel
sudo yum install libglvnd-opengl
sudo yum install libglvnd-egl
sudo yum install libglvnd-devel
sudo yum install libglvnd-core-devel
sudo yum install mesa-libEGL
sudo yum install libxkbfile
sudo yum install xcb-util-cursor
sudo yum install libXtst
sudo yum install libusbx
```

## Installing System Library Packages on Ubuntu 64-bit Operating System

Check which packages are already present on your system by entering the following command and confirming that the named package appears in the results.

```
dpkg -l | grep <package name>
```

The command to install package:

```
sudo apt-get install <package name>
```

### Installing system library packages manually

You can type the following command to determine the required libraries.

```
% ./bin/linux64/check_systemlibrary_radiant.bash
```

If you wish to install system library packages manually, the following is a list of required libraries:

```
atk
cairo
pango
pulseaudio
libc6
libjpeg-dev
libieee1284-3
libusb-0.1.4
libnss3
libice
libgl
libgl1
libglx0
libgl-mesa-glx
libsm
libxt
libxtst6
libdbus-1-3
libxext
libxrender
libxi
```

```
libxft
libxslt
libxrandr
libxfixes
libxdamage
libxcursor
libxcomposite
libxinerama
libxss1
libxcb-image0
libxcb-keysyms1
libxcb-render-util0
libxcb-xkb1
libxcb-shape0
libxcb-xinput0
libxcb-xinerama0
libxkbcommon0
libxkbcommon-x11-0
libxcb-icccm4
libx11
libgl1-mesa-dri
libgstreamer1.0-0
libxv1
cdparanoia
opus
libtheora
iso-codes
libvisual
gstreamer1.0-plugins-base
curl
libcurl3-gnutls:amd64
libcurl4:amd64
python3-pycurl
libopengl0
libegl1
libxkbfile1
libxcb-cursor0
libxcb-randr0
```

## Installing Stand-alone Tools

This section describes how to install Radiant software tools including Stand-Alone Reveal Analyzer and Stand-Alone Programmer.

### Installing Stand-Alone Reveal Analyzer

Reveal Analyzer is included in the Radiant software installation, but can be used without installing the Radiant software. Use one of the following files to install the stand-alone version of Radiant Reveal Analyzer:

- ▶ 2026.1.1.229.0\_Radiant\_Reveal\_lin.run for 64-bit systems.

#### To install the stand-alone Reveal Analyzer:

1. Close all applications before starting installation
2. Go to Radiant software installers directory and execute the Radiant Reveal run file.  

```
% cd <directory_with_RUN>  
% ./2026.1.1.229.0_Radiant_Reveal_lin.run
```
3. The Welcome To Lattice Radiant Reveal setup dialog box opens.
4. Click **Next** to open the Installation Folder dialog box.
5. The default destination folder is /home/lattice/lsc/reveal/radiant/2026.1. Click **Browse** to change the destination folder.
6. Click **Next** to open the Select Components dialog box.
7. Click **Next** to open the License Agreement dialog box.
8. Read the license agreement. If you agree, click **I accept the license** to continue the installation process.

9. Click **Next** to Ready to Install dialog box. Review the destination folder and components selected. If everything is correct, select **Install** to start the installation.
10. In the Installation Wizard Complete dialog box, read the note and click **Finish**.

## Installing Stand-Alone Radiant Programmer

Radiant Programmer is included in the Radiant software installation and consists of four tools:

- ▶ Radiant Programmer
- ▶ Deployment Tool
- ▶ Download Debugger
- ▶ Programming File Utility

If you want to use Radiant Programmer, Deployment Tool, Download Debugger, or Programming File Utility, without installing Radiant software, use one of the following files to install the stand-alone Radiant Programmer:

- ▶ 2026.1.1.229.0\_Radiant\_Programmer\_lin.run for 64-bit systems.

### To install the stand-alone Radiant Programmer:

1. Close all applications before starting installation
2. Go to Radiant software installers directory and execute the Radiant Programmer run file.  

```
% cd <directory_with_RUN>
% ./2026.1.1.229.0_Radiant_Programmer_lin.run
```
3. The Welcome To Lattice Radiant Programmer setup dialog box opens.
4. Click **Next** to open the Installation Folder dialog box.
5. The default destination folder is /home/lattice/lscd/programmer/radiant/2026.1. Click **Browse** to change the destination folder.
6. Click **Next** to open the Select Components dialog box.
7. Click **Next** to open the License Agreement dialog box.
8. Read the license agreement. If you agree, click **I accept the license** to continue the installation process.
9. Click **Next** to Ready to Install dialog box. Review the destination folder and components selected. If everything is correct, select **Install** to start the installation.
10. In the Installation Wizard Complete dialog box, read the note and click **Finish**.

# Installing Stand-Alone Power Estimator

Power Calculator is included in the Radiant software installation, but can be used without installing the Radiant software. Use one of the following files to install the stand-alone version of Radiant Power Estimator:

- ▶ 2026.1.1.229.0\_Radiant\_PowerEstimator\_lin.run for 64-bit systems.

## To install the stand-alone Power Estimator:

1. Close all applications before starting installation
2. Go to Radiant software installers directory and execute the Radiant Power Estimator run file.  

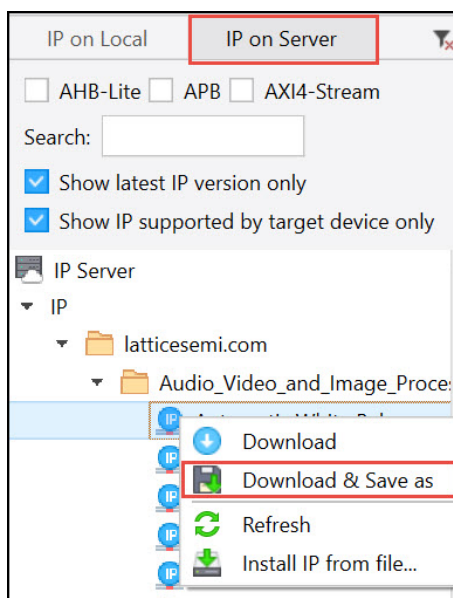
```
% cd <directory_with_RUN>  
% ./2026.1.1.229.0_Radiant_PowerEstimator_lin.run
```
3. The Welcome To Lattice Radiant Power Estimator setup dialog box opens.
4. Click **Next** to open the Installation Folder dialog box.
5. The default destination folder is /home/lattice/lscv/powerestimator/radiant/2026.1. Click **Browse** to change the destination folder.
6. Click **Next** to open the Select Components dialog box.
7. Click **Next** to open the License Agreement dialog box.
8. Read the license agreement. If you agree, click **I accept the license** to continue the installation process.
9. Click **Next** to Ready to Install dialog box. Review the destination folder and components selected. If everything is correct, select **Install** to start the installation.
10. In the Installation Wizard Complete dialog box, read the note and click **Finish**.

## Downloading a Soft IP from IP Catalog

From the IP on Server tab of IP Catalog, you can download and save an IP package to a folder in your local machine or network. This is especially helpful when you need to share an .IPK file in facilities without internet access.

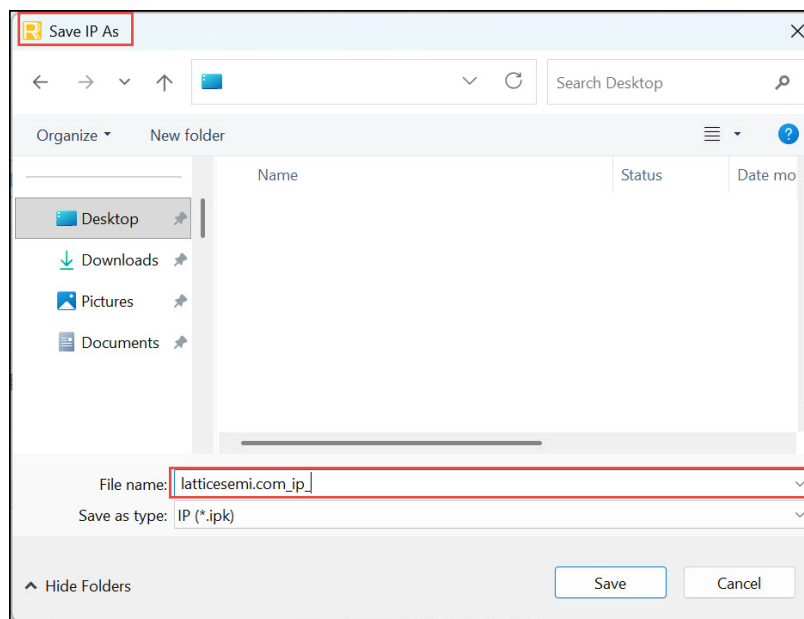
### To download and save a Soft IP:

1. In the **IP on Server** tab of **IP Catalog**, right-click the IP and select **Download & Save as**.



The **Save IP As** dialog box opens.

2. Select or create a location for the IP.
3. If preferred, give the IP a new name in the “File name” box.



4. Click **Save**.

# Installing and Configuring USB Cables

This section provides information on USB cable installation and configuration. These instructions are applicable for 64-bit Linux/Ubuntu/CentOS systems.

## Lattice USB Download Cable Configuration

Radiant Programmer software can directly access USB devices using libusb, which accesses the USB file system.

To verify that you have the USB library installed:

1. Plug in the USB cable.
2. In the command line, type:

```
$ lsusb
```

### Lattice USB2A

You should see an entry similar to the following:

```
> Bus 001 Device 004: ID 1134:8001
```

### HW-USBN-2B (FTDI)

You should see an entry similar to the following:

```
> Bus 001 Device 003: ID 0403:6010 Future Technology Devices  
International, Ltd FT2232C/D/H Dual UART/FIFO IC
```

3. If you get an error after you enter `lsusb`, you might not have libusb installed. To install libusb, go to:

<http://libusb.sourceforge.net/>

The recommended version to install is libusb-0.1.4-3.el7.x86\_64.rpm

4. Unplug the USB cable.

**Note**

The USB cable must be disconnected from the PC when performing the installations. You must have root access and be able to log in as a super user.

---

## Giving Lattice USB2A Drivers Read/Write Permission to Selected Individuals

1. Plug in the USB cable.
2. In the command line, type:

```
% lsusb
```

You should see an entry similar to the following:

```
> Bus 001 Device 004: ID 1134:8001
```

3. This means the USB2A is in Bus 001 and device 004. Go to the directory

```
% cd /dev/bus/usb/001
```

4. Grant execute permissions to the device. On the command line, type:

```
% sudo chmod 777 004
```

## Giving HW-USBN-2B (FTDI) USB Drivers Read/Write Permission to Selected Individuals

1. Plug in the USB cable.
2. In the command line, type:

```
% /lsusb
```

You should see an entry similar to the following:

```
> Bus 001 Device 003: ID 0403:6010 Future Technology Devices  
International, Ltd FT2232C/D/H Dual UART/FIFO IC
```

3. This mean the FTDI chip is in Bus 001 and device 003. Go to the directory

```
% cd /dev/bus/usb/001
```

4. Grant execute permissions to the device. On the command line, type:

```
% sudo chmod 777 003
```

5. Unload the ftdi\_sio driver if it is attached to your device.

```
% sudo /sbin/rmmod ftdi_sio
```

6. Unload the usbserial driver if it is attached to your device.

```
% sudo /sbin/rmmod usbserial
```

**Note**

If you got error "rmmod: ERROR: Module usbserial is builtin." when running command "sudo /sbin/rmmod usbserial" on RedHat OS, please ignore it and go on.

## Driver Setup for Lattice USB2A and HW-USBN-2B (FTDI) USB Download Cable on Red Hat Enterprise Linux 8

### Automated UDEV Method Configuration:

1. Create an entry called "plugdev" in the /etc/group file, and then add anyone logging into the system into that group. Make sure /usr/bin/id shows you as a member of the plugdev group. Log out if required.  
Example:

```
plugdev:x:501:username
```

2. Type the following command to execute the script:

```
% sudo <install_path>/data/vmdata/udevsetup_rh7_8
```

**Notice**

1. Finish creating "plugdev", please reboot. If "plugdev" existing on /etc/group, please go to step 2.
2. Type "id" on Linux command line, check if the "plugdev" existing.

### Manual UDEV Method Configuration:

1. Find your username which is given in /etc/group file. Log out if required.  
Example:

```
username:x:1000:username
```

2. Create a working file called 10-local.rules.
3. Add the following information to the 10-local.rules file:

```
# Lattice
SUBSYSTEM=="usb", ACTION=="add", ATTRS{idVendor}=="1134", ATTRS{idProduct}=="8001", \
    MODE="0666", GROUP="username", SYMLINK+="lattice-%n"

# FTDI
SUBSYSTEM=="usb", ACTION=="add", ATTRS{idVendor}=="0403", ATTRS{idProduct}=="6010", \
    MODE="0666", GROUP="username", SYMLINK+="ftdi-%n"
SUBSYSTEM=="usb", ATTRS{idVendor}=="0403", ATTRS{idProduct}=="6010", \
    RUN+="/bin/sh -c 'basename %p > /sys/bus/usb/drivers/ftdi_sio/unbind'"

SUBSYSTEM=="usb", ACTION=="add", ATTRS{idVendor}=="0403", ATTRS{idProduct}=="6011", \
    MODE="0666", GROUP="username", SYMLINK+="ftdi-%n"
SUBSYSTEM=="usb", ATTRS{idVendor}=="0403", ATTRS{idProduct}=="6011", \
    RUN+="/bin/sh -c 'basename %p > /sys/bus/usb/drivers/ftdi_sio/unbind'"
```

### Notes

---

1. Replace the username with your username in above rules.
  2. Each SUBSYSTEM entry must be a single line or a split line using the “\” line continuation character.
- 

4. Copy the file into the /etc/udev/rules.d/10-local.rules directory. If a file by this name already exists, simply append the working file to it.  
Example:

```
% sudo cp 10-local.rules /etc/udev/rules.d/
```

Or, if the file already exists:

```
% sudo cat 10-local.rules >>/etc/udev/rules.d/10-local.rules
```

5. Give permission to 10-local.rules as follows :

```
% sudo chmod 755 10-local.rules
```

6. Now reload the udev rules by adding the following:

```
% sudo udevadm control --reload-rules
```

7. Plug in the USB cable.

## Driver Setup for Lattice USB2A and HW-USBN-2B (FTDI) USB Download Cable on Ubuntu 18.04/20.04 LTS

### Note

---

User needs to download and install libusb-0.1.4 first in Ubuntu 18.04.

---

### Automated UDEV Method Configuration

1. Create an entry called “plugdev” in the /etc/group file, and then add anyone logging into the system into that group. Make sure /usr/bin/id shows you as a member of the plugdev group. Log out if required.  
Example:

```
plugdev:x:501:username
```

2. Type the following command to execute the script:

```
% sudo <install_path>/data/vmdata/udevsetup_ubuntu
```

The script should terminate with a “Setup successful” output

### Manual UDEV Method Configuration:

1. Create an entry called “plugdev” in the /etc/group file, and then add anyone logging into the system into that group. Make sure /usr/bin/id shows you as a member of the plugdev group. Log out if required.  
Example:

```
plugdev:x:501:username
```

2. In the /etc/udev/rules.d/ directory, change the permission of the 70-persistent-net.rules file

```
% sudo chmod 755 /etc/udev/rules.d/ 70-persistent-net.rules
```

If the file does not exist, create a working file called 70-persistent-net.rules.

3. Add the following information to the 70-persistent-net.rules:

```
# Lattice
SUBSYSTEM=="usb", ACTION=="add", ATTRS{idVendor}=="1134", ATTRS{idProduct}=="8001", \
    MODE="0666", GROUP="plugdev", SYMLINK+="lattice-%n"

# FTDI
SUBSYSTEM=="usb", ACTION=="add", ATTRS{idVendor}=="0403", ATTRS{idProduct}=="6010", \
    MODE="0666", GROUP="plugdev", SYMLINK+="ftdi-%n"
SUBSYSTEM=="usb", ATTRS{idVendor}=="0403", ATTRS{idProduct}=="6010", \
    RUN+="/bin/sh -c 'basename %p > /sys/bus/usb/drivers/ftdi_sio/unbind'"

SUBSYSTEM=="usb", ACTION=="add", ATTRS{idVendor}=="0403", ATTRS{idProduct}=="6011", \
    MODE="0666", GROUP="plugdev", SYMLINK+="ftdi-%n"
SUBSYSTEM=="usb", ATTRS{idVendor}=="0403", ATTRS{idProduct}=="6011", \
    RUN+="/bin/sh -c 'basename %p > /sys/bus/usb/drivers/ftdi_sio/unbind'"
```

---

#### Note:

Each SUBSYSTEM entry must be a single line, or split using the “\” line continuation character.

---

4. Save and close the file. Make the new UDEV settings active, as follows:

```
% sudo udevadm control --reload-rules
% sudo udevadm trigger
```

5. Plug in the USB cable.

## Licensing Radiant Software

Lattice Radiant licensing is based on FlexNet Publisher technology. The examples in this guide focus on common Lattice licensing scenarios. For advanced license server administration, vendor daemon configuration, redundant servers, options files, port management, and troubleshooting, refer to the official [FlexNet Publisher License Administration Guide](#).

The Radiant software development tool is licensed software. To launch the tool, you must configure a FlexLM license. The license can be either node-locked to the local machine or acquired from a license server accessible from a LAN or WiFi connection. The default location of the license file is `<install_path>/license/license.lic` or `license.dat`. If this location is changed, you must set the `LATTICE_LICENSE_FILE` environment variable to include the new path name.

The following environment user variables can be configured.

- ▶ **LATTICE\_LICENSE\_FILE** – A variable for the license file setting.
- ▶ **SALT\_LICENSE\_SERVER** – A variable required for launching QuestaSim's `latticeqsim` feature.
- ▶ **MGLS\_LICENSE\_FILE** – A variable required for launching ModelSim's `latticecmsim` feature.

**Notes:**

- ▶ Radiant software permits the creation of configuration bitstreams for all of Lattice Semiconductor's FPGAs. However, a license is required for some devices.
- ▶ To use the included QuestaSim Lattice OEM simulator, you need a license with the `latticeqsim` license feature. The licenses generated for use with the ModelSim Lattice OEM simulator have the `latticemsim` license feature and must be updated to the new feature to use QuestaSim Lattice OEM. To start QuestaSim, set the environment variables `LATTICE_LICENSE_FILE`, `SALT_LICENSE_SERVER` and `MGLS_LICENSE_FILE`.
- ▶ To change the `LATTICE_LICENSE_FILE` variable, you may need to edit the `.cshrc` or `.bashrc` configuration file located in your home directory

License your software early to avoid any down time.

# Obtaining, Activating, and Installing Radiant Software License

The following procedures cover obtaining, activating, and installing a license for Radiant software.

To obtain the license file for Radiant software:

1. Log in to your Lattice account at [latticesemi.com](https://latticesemi.com).
2. Go to **Support > Software Licensing > Licensing Support Center**.

Click **Visit the Portal**.

3. In the License & Delivery Portal, go to **Activation & Entitlements > Register for Evaluation or Free Licenses**.

---

## Note

If you purchased a subscription license, it will appear in the Entitlements page.

---

4. Select the license to register and click **Register**.

To set up and activate the Radiant license:

1. In the License & Delivery Portal, go to **Activation & Entitlements > View Entitlements**. Subscription licenses appear here without a separate registration step.
2. Select the license to activate and click **Action > Activate**.
3. Enter your ship-to email address and click **Next**.
4. Add or select a host and set the host type to **ETHERNET**.
5. Click **Generate**.

The activated license is displayed in License Summary.

To install the Radiant license file:

1. Select **View > Save to File or Email license**.
2. Place the .lic file in the directory specified during installation.

Visit the [Lattice FPGA Tools Licensing Portal Guide](#) for more information.

# Obtaining, Activating, and Installing Third-Party Software Licenses

The following procedures cover obtaining, activating, and installing licenses for Siemens QuestaSim Lattice FPGA Edition, Siemens ModelSim Lattice FPGA Edition, and Synopsys SynplifyPro Lattice FPGA Edition.

To obtain the license file for QuestaSim, ModelSim, or SynplifyPro:

1. Log in to your Lattice account at [latticesemi.com](https://latticesemi.com).
2. Go to **Support > Software Licensing > Licensing Support Center**.  
Click **Visit the Portal**.
3. In the License & Delivery Portal, go to **Activation & Entitlements > Register for Evaluation or Free Licenses**.

## Note

---

If you purchased a subscription license, it will appear in the Entitlements page.

---

4. Select one of the following licenses (node-locked or floating) and click **Register**:
  - ▶ **Siemens QuestaSim Lattice FPGA Edition**
  - ▶ **Siemens ModelSim Lattice FPGA Edition**
  - ▶ **Synopsys SynplifyPro Lattice FPGA Edition**

To set up and activate the licenses:

1. In the License & Delivery Portal, go to **Activation & Entitlements > View Entitlements**. Subscription licenses appear here without a separate registration step.
2. Select the license to activate and click **Actions > Activate**.
3. Enter your ship-to email address and click **Next**.
4. Add or select a host and set the host type to **ETHERNET**.
5. Click **Generate**.

The activated license is displayed in License Summary.

To install the Radiant license file:

1. Select **View > Save to File or Email license**.
2. Place the .lic file in the directory specified during installation.

Visit the [Lattice FPGA Tools Licensing Portal Guide](#) for more information.

## Consolidating Lattice and Third-Party Tool Licenses

To consolidate Radiant and third-party tool licenses (QuestaSim, ModelSim and SynplifyPro):

1. In the License & Delivery Portal, go to **Licenses > View Licenses**.
2. Select the licenses to consolidate. Only licenses sharing the same host ID can be consolidated.
3. Click **Action > Consolidate**.
4. In the Consolidated Licenses page, select the recently consolidated license.
5. Click **Action > Save to file** or **Email license**.

The license you receive is based on the identification of your network interface card (NIC). The NIC ID or equivalent is the 12-character hexadecimal physical address. Determine the host ID of your license server or dedicated machine by using the `lmutil lmhostid` command to return the exact host ID that FlexNet recognizes for licensing.

## Setting Up a Node-locked License

The following procedure covers configuring a node-locked license on your local machine.

To configure a node-locked license:

1. Save the .lic file to your software install folder (for example, `<sw_install>\license\license.lic` or `license.dat`).
2. Point your environment variable to that file: `LATTICE_LICENSE_FILE = <sw_install>\license\license.lic` or `license.dat`.
3. Open the Radiant tool. The tool opens once the license check succeeds.

# Determining Host ID

The host ID is the 12-character hexadecimal physical address of your network interface card (NIC) and is required when generating a node-locked or floating license. It can be determined using one of the methods in this section.

## Method 1 (Recommended): `lmutil`

To determine the host ID using `lmutil`:

1. Open Command Prompt and navigate to the FlexNet utilities folder:

```
cd C:\lsc\ radiant\2026.1\isfpfga\bin\lin64
```

2. Run the following command:

```
lmutil lmhostid -ether
```

Example output:

```
C:\> lmutil lmhostid -ether
lmutil - Copyright (c) 1989-2025 Flexera. All Rights Reserved.
The FlexNet host ID of this machine is "A1B2C3D4E5F6"
```

## Note

In case FlexNet has identified multiple valid MAC addresses, use *one of the returned IDs* when generating a node-locked or floating license.

## Method 2: Using Network Adapter Information

To determine the host ID using network adapter information:

1. Open Command Prompt and run either of the following:

```
▶ ip addr
```

```
▶ ip link
```

2. Locate an active network adapter in the output.
3. Note the `link/ether` value.

Example output:

```
2: eno1: <BROADCAST,MULTICAST,UP,LOWER_UP>
    link/ether 3c:52:82:ab:cd:ef brd ff:ff:ff:ff:ff:ff
```

## Note

Use this method only if the `lmutil` utility is unavailable.

Example host ID to be entered in the portal:

| Source                              | Value             |
|-------------------------------------|-------------------|
| link/ether from ip addr or ip link  | 3C-52-82-AB-CD-EF |
| Host ID entered in licensing portal | 3C5282ABCDEF      |
| Host Type                           | ETHERNET          |

# License File Format Compatibility

Lattice Radiant supports license files generated from both legacy licensing systems and the current Lattice Licensing Portal powered by FlexNet Operations (FNO). Depending on when a license was generated, its format may differ from examples shown in older installation guides.

| Legacy License                | Current License         | Description                                                                                                                          |
|-------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| .dat                          | .lic                    | Use filename as provided when saving. Either extension is supported.                                                                 |
| SERVER nodename               | SERVER this_host        | this_host is a FlexNet placeholder meaning 'the current machine'. Replace with the actual server hostname if hosting remotely.       |
| DAEMON lattice<br>daemon_path | VENDOR lattice          | Modify the license file to add the path to the vendor daemon (for example, VENDOR lattice <install_path>/ispfpga/bin/lin64/lattice). |
| FEATURE                       | INCREMENT               | New licenses from licensing portal use INCREMENT statements.                                                                         |
| No USE_SERVER line            | USE_SERVER line present | Directs client requests to the license server.                                                                                       |
| TS_OK                         | TS_OK (no change)       | Enables remote desktop connection using a node-locked license.                                                                       |

Both legacy and current license file syntax are supported. For advanced FlexNet Publisher administration, including vendor daemon configuration, redundant servers, options files, and troubleshooting, refer to the official [FlexNet Publisher License Administration Guide](#).

# Floating License File Components

This section summarizes the key components of a Radiant floating license file and the differences between legacy and current formats.

## SERVER Line

A SERVER line identifies the license server host, host ID, and optional TCP/IP port.

Legacy license syntax example:

```
SERVER nodename 001122334455 7788
```

Current license syntax example:

```
SERVER this_host 001122334455 7788
```

The hostname field may be modified if required by local IT policies. Administrators may optionally replace `this_host` with `hostname` or `localhost` if preferred for their environment.

## DAEMON (Legacy) and VENDOR (Current) Lines

The vendor daemon is responsible for serving and managing Lattice licenses.

Legacy DAEMON Syntax:

Older floating licenses typically use a DAEMON statement:

```
DAEMON lattice daemon_path
```

Example after editing:

```
DAEMON lattice <install_path>/ispfpga/bin/lin64/lattice
```

In legacy licenses, administrators must replace `daemon_path` with the actual location of the Lattice vendor daemon before starting the license server.

Current VENDOR Syntax:

Current licenses generated by the Lattice Licensing Portal use a VENDOR statement:

```
VENDOR lattice
```

The FlexNet Publisher `VENDOR` statement identifies the vendor daemon responsible for serving licenses. The daemon path is optional and may be omitted when the license manager can automatically locate the vendor daemon.

For Linux floating license installation, specify the vendor daemon path:

```
SERVER this_host 001122334455 7788
VENDOR lattice <install_path>/ispfpga/bin/lin64/lattice
USE_SERVER
```

## USE\_SERVER Line

The `USE_SERVER` directive instructs client applications to check out licenses directly from the license server, rather than reading the license file locally. It is present in current floating licenses and is not required in legacy licenses.

```
USE_SERVER
```

## FEATURE and INCREMENT Lines

`FEATURE` and `INCREMENT` statements describe license functionality and appear in both node-locked and floating licenses.

### ► FEATURE (Legacy)

Legacy licenses use the `FEATURE` statement:

```
FEATURE LSC_RADIANT lattice ...
```

The FlexNet vendor daemon processes only the first `FEATURE` line for a given feature name. Additional `FEATURE` lines for the same feature do not increase available license counts.

### ► INCREMENT (Current)

Current licenses generated by the Lattice Licensing Portal use the `INCREMENT` statement:

```
INCREMENT LSC_RADIANT lattice ...
```

`INCREMENT` lines are additive and may be combined into a larger license pool, allowing multiple entitlements for the same feature to contribute additional concurrent seats.

## Setting Up a Floating License

A floating license server allows multiple client machines to share a pool of Radiant licenses. The server runs two processes: `lmgrd` (the license manager daemon) and `lattice` (the Lattice vendor daemon). To enable a floating license, you must have a license server set up on a Windows or Linux server to monitor your Radiant software license. Each client PC must have the `LATTICE_LICENSE_FILE` variable set to point to the license file on the server.

Radiant software uses the following network communication ports (TCP/IP socket ports):

| Port | Usage                                                                                            |
|------|--------------------------------------------------------------------------------------------------|
| 80   | Standard HTTP port used for software updates, IP and reference design downloads, and message IDs |
| 7788 | Default FlexLM port in legacy license file syntax; configurable by editing the SERVER line       |

Before starting the server setup, verify that TCP/IP is installed and client machines can communicate with the server by name. Open Command Prompt and run:

```
ping <hostname>
```

# License Management Files

The following table lists the license management files for 64-bit systems.

- ▶ `lmgrd.exe`, `lmutil.exe`, and `lattice.exe` are located at:  
`<install_path>\ispfpga\bin\lin64`
- ▶ `saltd.exe` is located at:  
`<install_path>\questasim\license_server`

| Filename                                   | Version   | Description                                                                                                                                                                                                                         |
|--------------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <code>lmgrd.exe</code>                     | 11.19.4.1 | FlexNet Publisher license server manager. Starts and manages the Lattice vendor daemon and serves floating licenses to clients.                                                                                                     |
| <code>lmutil.exe</code>                    | 11.19.4.1 | FlexNet Publisher utility used for license administration, diagnostics, status reporting, and troubleshooting. Includes <code>lmstat</code> , <code>lmhostid</code> , and <code>lmdiag</code> .                                     |
| <code>lattice.exe</code>                   | 11.19.4.1 | Lattice vendor daemon that manages license checkout and enforcement for Lattice software features.                                                                                                                                  |
| <code>saltd.exe</code>                     | 11.19.0.1 | Siemens QuestaSim Lattice Edition vendor daemon used for the <code>latticeqsim</code> feature. Version may vary by QuestaSim release. Refer to the QuestaSim Lattice Edition release notes included with the software installation. |
| <code>lmtools.exe</code><br>(Windows only) | 11.19.4.1 | Windows-only graphical utility for configuring, starting, stopping, monitoring, and troubleshooting FlexNet license servers.                                                                                                        |

# Editing the Radiant License File

The license file you received may be in either legacy or current format. Identify your format below and follow the appropriate editing instructions.

## Legacy Format

```
SERVER nodename 001122334455 7788
DAEMON lattice daemon_path
```

```
FEATURE LSC_RADIANT lattice ...
```

## Note

---

The `FEATURE` line requires no editing. It is shown here for reference only. Your license file will contain the complete feature string as generated by the Lattice Licensing Portal.

---

Required edits:

- ▶ Replace `nodename` with the license server hostname.
- ▶ Replace `daemon_path` with the full path to the Lattice vendor daemon.

After editing:

```
SERVER L-PF1KDFY9 001122334455 7788
DAEMON lattice <install_path>/ispfpga/bin/lin64/lattice.exe
```

## Current Format

```
SERVER this_host 001122334455
VENDOR lattice
USE_SERVER
```

```
INCREMENT LSC_RADIANT lattice ...
```

Required edit:

- ▶ Add the vendor daemon path with the full path to the Lattice vendor daemon.

Optional edit:

- ▶ Add a TCP/IP port number to the `SERVER` line.

After editing:

```
SERVER this_host 001122334455 7788
VENDOR lattice <install_path>/ispfpga/bin/lin64/lattice
```

## Note

---

Administrators may optionally replace `this_host` with the actual server hostname or `localhost`.

---

# Editing the QuestaSim Lattice Edition License File

Edit the `DAEMON` line in your QuestaSim/ModelSim license file, replacing the placeholders with the actual server hostname and vendor daemon path.

The path to the QuestaSim Lattice Edition vendor daemon is:

```
<install_path>/questasim/license_server/saltd
```

Before editing:

```
SERVER put_server_name_here 00D49E21869E 1717
DAEMON mgcld path_to_mgcld
INCREMENT latticeqsim mgcld 2026.10 29-sep-2026 1
DF2C3F6A6DB0756869D1 \
    VENDOR_STRING=A0A024BF ISSUER="ModelSIM/Questa Lattice"
SN=1115097116 \
    SIGN2="00B6 621F 9744 F50C A32B 92F4 8A83 EA41 65D3 19AC
FA8F 0E59 \
    5FA6 AAE6 5F0E 1E54 137A 04DF 44BC 542E E1FC 6370 7002 8FD4
3FDF 1298 \
    75EB 73AA CDC1 8A58"
```

Required edits:

- ▶ Replace `put_server_name_here` with the license server hostname.
- ▶ Replace `DAEMON mgcld path_to_mgcld` with `DAEMON saltd` followed by the full path to `saltd.exe`.

After editing:

```
SERVER L-PF1KDFY9 00D49E21869E 1717
DAEMON saltd <install_path>/questasim/license_server/saltd.exe
INCREMENT latticeqsim mgcld 2026.10 29-sep-2026 1
DF2C3F6A6DB0756869D1 \
    VENDOR_STRING=A0A024BF ISSUER="ModelSIM/Questa Lattice"
SN=1115097116 \
    SIGN2="00B6 621F 9744 F50C A32B 92F4 8A83 EA41 65D3 19AC
FA8F 0E59 \
    5FA6 AAE6 5F0E 1E54 137A 04DF 44BC 542E E1FC 6370 7002 8FD4
3FDF 1298 \
    75EB 73AA CDC1 8A58"
```

## Running the Radiant Software

### Running Radiant Software from the GUI

Radiant software 2026.1.1 has a graphical user interface (GUI). When you run the Radiant software 2026.1.1 executable file, the software automatically performs the environment setup.

#### To start the Lattice Radiant Software GUI:

1. Set up the license as follows:

If your license file (license.dat) is not under `<install_path>/2026.1/license`, you must set the `LATTICE_LICENSE_FILE` variable to the location of your license file. For example:

For CSH users:

```
% setenv LATTICE_LICENSE_FILE $LATTICE_LICENSE_FILE (/
<license_directory>/license.dat)
```

For BASH users:

```
% export LATTICE_LICENSE_FILE=$LATTICE_LICENSE_FILE:/
<license_directory>/license.dat
```

2. Run the Radiant software executable file in the command line as follows:

```
% <install_path>/bin/lin64/radiant &
```

With the Radiant software script, you can also run the following tools in stand-alone mode.

To invoke stand-alone Reveal Analyzer, run:

```
% revealrva
```

Refer to the Radiant software online Help for more information about the Radiant software GUI.

## Finding the Installation History

The Radiant software records a log of your installation history. You can find the history in the Radiant software main window.

**To view the installation history:**

1. Open the Radiant software GUI.
2. Choose **Help > About Lattice Radiant Software**.

## Running Radiant Software from the Command Line

There are two ways to run the Radiant software from the command line:

- ▶ Through Radiant Tcl Console.
- ▶ By running executable files directly.

## Running Stand-Alone Radiant Tcl Console

Radiant software development environment includes Tcl Console, which allows you to run scripts for automating common tasks. Tcl Console is also available outside of the user interface in order to run custom scripts. To launch the stand-alone Tcl Console, enter the following on a command line:

```
% <install_path>/bin/lin64/radiantc
```

These commands configure the environment allowing all of the underlying design tools to be run. Refer to the online Help for more information about the command line.

## Running Using CSH or BASH Interpreters

BASH users must run the following commands:

```
% export bindir=<install_path>/bin/lin64  
% source $bindir/radiant_env
```

Next, you can run the executable files directly. For example, you can invoke the Radiant software GUI by using:

```
% <install_path>/bin/lin64/radiant &
```

Or, you can run Power Calculator by running:

```
% <install_path>/bin/lin64/pwcmain &
```

## Running Synplify Pro for Lattice

To run Synplify Pro for Lattice, do the following:

1. Open the Radiant software GUI.
2. Open any project to enable the commands on the Tools menu.
3. Choose **Tools > Synplify Pro for Lattice**.

## Running Stand-Alone Radiant Reveal Analyzer

After the installation, you can invoke the stand-alone Radiant Reveal Analyzer in the command line:

```
% <install_path>/bin/lin64/revealrva &
```

## Running Stand-Alone Radiant Power Estimator

After the installation, you can invoke the stand-alone Radiant Power Estimator in the command line:

```
% <install_path>/bin/lin64/powercal est &
```

## Running Stand-Alone Radiant Programmer

After the installation, you can invoke the stand-alone Radiant Programmer in the command line:

```
% <install_path>/programmer/bin/lin64/programmer &
```

## Running Stand-Alone Deployment Tool

After Programmer installation, you can invoke the stand-alone Deployment Tool in the command line:

```
% <install_path>/programmer/bin/lin64/deployment &
```

## Running Stand-Alone Debugger

After Programmer installation, you can invoke the stand-alone Debugger in the command line:

Running Download Debugger on 64-bit systems:

```
% <install_path>/programmer/bin/lin64/debugger &
```

## Running Stand-Alone Programming File Utility

After the installation, you can invoke the stand-alone Programming File Utility in the command line:

```
% <install_path>/programmer/bin/lin64/fileutility &
```

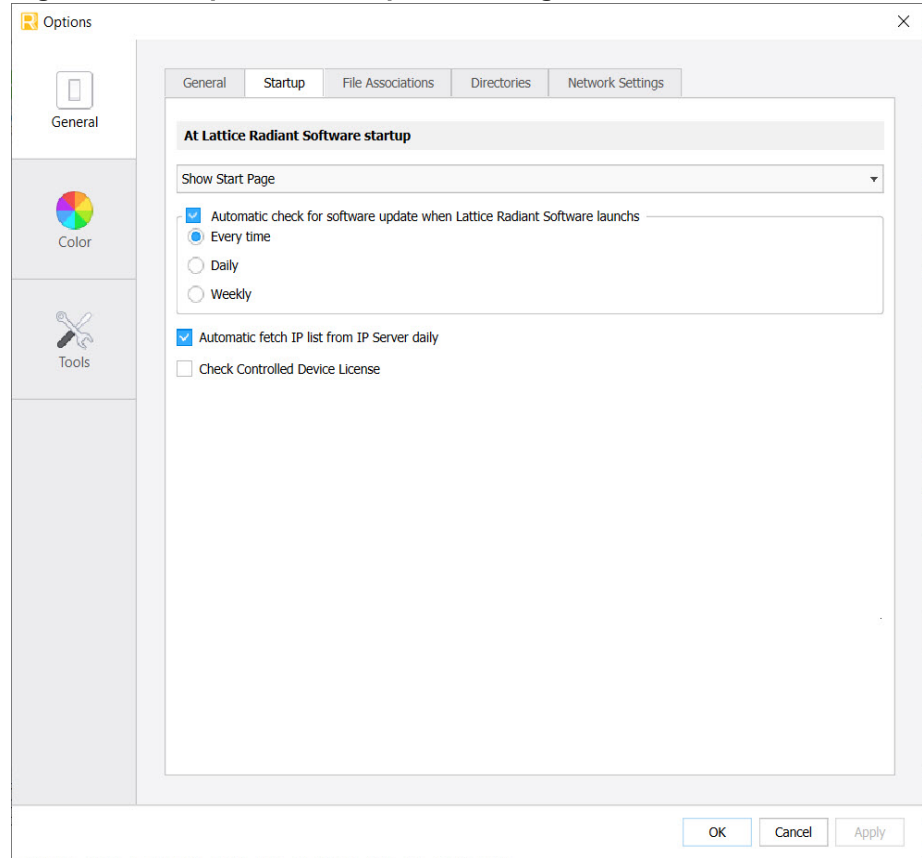
## Updating Lattice Radiant Software

After you have registered and licensed your installation, check the Lattice Semiconductor Web site for new software updates, device support, and enhancements. Make sure that you have the latest software by checking for updates regularly.

### To activate UPDATE:

1. To enable automatically check for software update when Radiant software is launched, if you do not see Update window pops up. In Start page do as follows:
  - ▶ Select the **Startup** tab of the Options dialog box in Tools, click “Automatically check for software update when Lattice Radiant Software launches” and choose how often it will check.

**Figure 1: Startup Tab of the Options Dialog box**

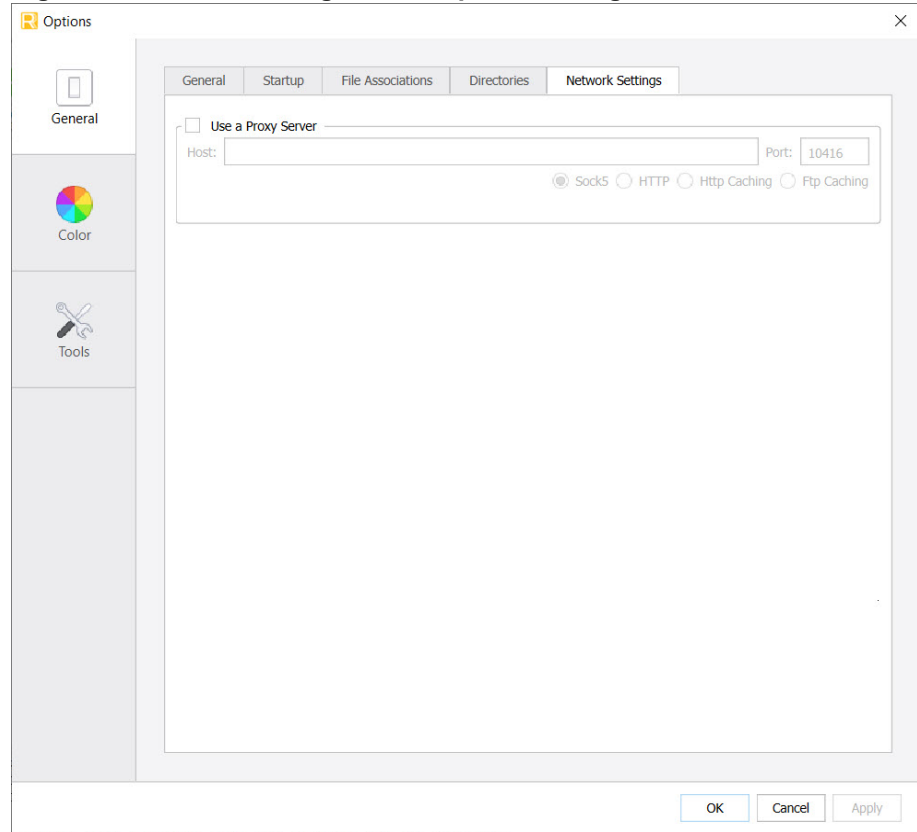


When Radiant software is launched, it will connect to the Internet automatically to check for updates.

## Changing the Network Setting

To enable automatic checking, you must indicate how your computer accesses the Internet.

**Figure 2: Network Settings of the Options dialog box**



**To change the Internet connection settings:**

1. Select the **Network Setting** tab of the Options dialog box in Tools.
2. Select the **Use a Proxy Server** option if you must go through a proxy server before connecting to the Internet. The proxy server prevents outsiders from breaking into your organization's private network. Ask your system administrator for the URL address and port assignment. This option is turned on by default.

If you use direct Internet access, do not select the **Use a Proxy Server** option on this tab.

## Installing Updates

When you use the Auto Check feature, UPDATE notifies you whenever an update version of Radiant software becomes available. You receive notification when you open the Radiant software main window.

### To check and install the recommended update:

- ▶ Launch Radiant software and the UPDATE software goes online to check for an update. If one is available, the Radiant software update version will be displayed in the **Available update versions** field.
- ▶ Click **Download** to save the update to a directory and install it later.
- ▶ Click **Install** to download and install the selected update version (as the version number specified in the **Available update versions** field) right away.

### To install a downloaded update:

1. Close all Radiant tools.
2. Go to the location where you saved the update version.

Run the update file and follow the on-screen instructions.

### Note

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You can run multiple versions of Lattice software. The Radiant software enables you to run FPGA designs on platforms on which the Radiant software and previous Lattice Diamond/iCEcube are installed.

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## Revision History

The following table gives the revision history for this document.

| Date       | Version | Description                                                                                                                                                  |
|------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10/08/2026 | 2.9     | Update for Radiant software 2026.1.1                                                                                                                         |
| 06/26/2026 | 2.8     | Update for Radiant software 2026.1.                                                                                                                          |
| 04/20/2026 | 2.7     | Update for Radiant software 2025.2.1.                                                                                                                        |
| 12/11/2025 | 2.6     | Update for Radiant software 2025.2.                                                                                                                          |
| 06/26/2025 | 2.5     | Update for Radiant software 2025.1.                                                                                                                          |
| 12/20/2024 | 2.4     | Update for Radiant software 2024.2.                                                                                                                          |
| 07/06/2024 | 2.3     | <ul style="list-style-type: none"> <li>▶ Update for Radiant software 2024.1.</li> <li>▶ Added Questa.</li> </ul>                                             |
| 11/28/2023 | 2.2     | Update for Radiant software 2023.2                                                                                                                           |
| 06/26/2023 | 2.1     | <ul style="list-style-type: none"> <li>▶ Update for Radiant software 2023.1.</li> <li>▶ Added System Library Packages on both Red Hat and Ubuntu.</li> </ul> |
| 12/01/2022 | 2.0     | Update for Radiant software 2022.1.                                                                                                                          |
| 08/09/2022 | 1.9     | Update for Radiant software 3.2.                                                                                                                             |
| 12/06/2021 | 1.8     | Update for Radiant software 3.1.                                                                                                                             |
| 05/05/2021 | 1.7     | Updates for Ubuntu system library.                                                                                                                           |
| 12/07/2020 | 1.6     | Updates for ModelSim floating license.                                                                                                                       |
| 11/03/2020 | 1.5     | Add ModelSim and update for Radiant software 2.2.                                                                                                            |
| 6/03/2020  | 1.4     | Update for Radiant software 2.1.                                                                                                                             |
| 12/2/2019  | 1.3     | Update for Radiant software 2.0.                                                                                                                             |

| Date       | Version | Description                                                                                                                                                      |
|------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 09/24/2019 | 1.2     | Add CrossLink-NX.                                                                                                                                                |
| 04/12/2019 | 1.1     | <ul style="list-style-type: none"><li>▶ Update for Radiant software 1.1</li><li>▶ Add Stand-Alone Radiant Power Estimator.</li><li>▶ Update hypertext.</li></ul> |
| 02/13/2018 | 1.0     | Initial Release.                                                                                                                                                 |