![PerkinElmer logo]

Living Image® Version 4.5 Software

Installation and Licensing Guide

CE

Contents

1 Before You Begin

Living Image® software can be installed from a CD-ROM or the PerkinElmer web site. Table 1.1 shows where to find particular installation instructions.

Table 1.1 Installation Types

Install From	Platform	See Page
CD	PC	3
	Macintosh	10
www.perkinelmer.com	PC	8
	Macintosh	14

1.1 Requirements

Hardware & Software Requirements

For optimum performance, Living Image® 4.5 software requires hardware and software that meet or exceed the following minimum requirements. If you will be using the 3D Multi-Modality tools, the graphics card must meet the requirements in Table 1.3 on page 2.

NOTE: Living Image software only supports English operating systems.

Table 1.2 Minimum Hardware Requirements Without the 3D Multi-Modality Tools

Item	Specification (PC or Macintosh)
Processor	Intel Core 2 Duo CPU or higher processor recommended
RAM recommended	4 GB or greater
Virtual memory	2 - 4 GB
Hard drive available space	Minimum: 300MB Recommended: 1 GB and above
Graphics card	256MB dedicated, OpenGL2.0 or later
Display	17 inch or larger

Table 1.3 Graphics Card Requirements for 3D Multi-Modality Tools

Item	Specification
OpenGL Version Requirement[1]	OpenGL 2.0 and above.
OpenGL Extension Requirement[1]	GL_EXT_Texture3D
Graphics Card Memory	Recommended: 1GB (Dedicated)
Consumer Graphics Cards (Desktop/ Mobile, Windows/Mac)	Supported: – NVIDIA® GeForce® 8 Series and above (8, 9, 100, 200, 300 and 400 series) – ATI Radeon™ HD 4000 Series and above (4000 and 5000 series) Recommended: – Desktop - NVIDIA GeForce GT 240 and above – Mobile - NVIDIA GeForce GT 230M and above
Workstation Graphics Cards (Desktop/ Mobile, Windows/Mac)	Supported: – NVIDIA® Quadro® NVS Series and Above (NVS & FX series) – ATI FireGL™ V5600 and Above (FireGL, FirePro & CrossFire series) Recommended: – Desktop - Quadro FX 1800 and above – Mobile - Quadro FX 880M and above

[1]If these specifications are not met, the 3D Multi-Modality tools will not appear in the tool palette.

Table 1.4 Minimum Software Requirements

Operating System	Requirement
Windows	Windows 7, SP1 64-bit; Windows 7, SP1 32-bit; Windows 8.1
Macintosh	Mac OS 10.7 to 10.10

1.2 Contact Information

PerkinElmer Health Sciences
940 Winter Street
Waltham, Massachusetts 02451 USA
www.PerkinElmer.com

Technical Support
Telephone: +1 (800) 762-4000 (US) or +1 (203) 425-4602
Fax: +1 (203) 944-4904
E-mail: global.techsupport@perkinelmer.com

Sales: CustomerCareUS@perkinelmer.com

2 Installing Living Image® Software On a PC

2.1 Installing Software From the CD-ROM

> **NOTE:** Living Image 4.5 software can only be installed on a Windows 7.1 with SP1 (32-bit or 64-bit) or Windows 8.1. Administrative privileges are required to install and configure Living Image 4.5 software on Windows operating systems.

Living Image software will be installed at the following locations:

Application	Location
32-bit application on Windows 7.1 32-bit OS	C:\Program Files\Caliper Life Sciences\Living Image
32-bit Application on Windows 7.1 64-bit OS	C:\Program Files (x86)\Caliper Life Sciences\Living Image
64-bit Application on Windows 7.1 64-bit OS	C:\Program Files\Caliper Life Sciences\Living Image
32-bit application on Windows 8.1 32-bit OS	C:\Program Files\Caliper Life Sciences\Living Image
32-bit Application on Windows 8.1 64-bit OS	C:\Program Files (x86)\Caliper Life Sciences\Living Image
64-bit Application on Windows 8.1 64-bit OS	C:\Program Files\Caliper Life Sciences\Living Image

The 32-bit application will work on a 32-bit or 64-bit operating system; however, the 64-bit application is recommended for a 64-bit operating system. Only the 32-bit application can be installed on a 32-bit operating system.

1. Insert the Living Image 4.5 software CD-ROM into the workstation computer.
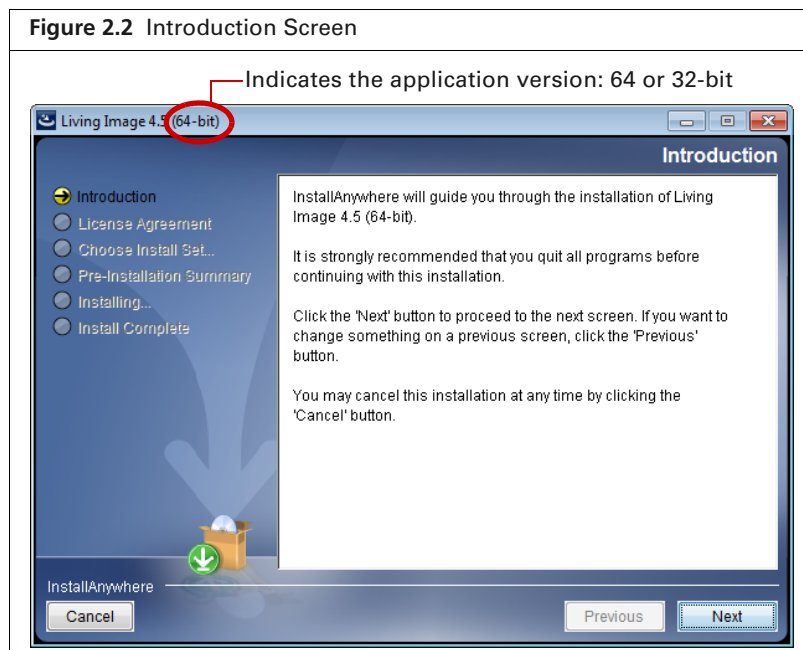
    The Welcome screen appears (Figure 2.1).

> **NOTE:** If the Welcome screen does not appear, use Windows Explorer to navigate to \Windows\directory on the installation CD/ROM. Right-click the Install.exe file and select "Run as administrator" from the shortcut menu, then enter the local administrator's user name and password.
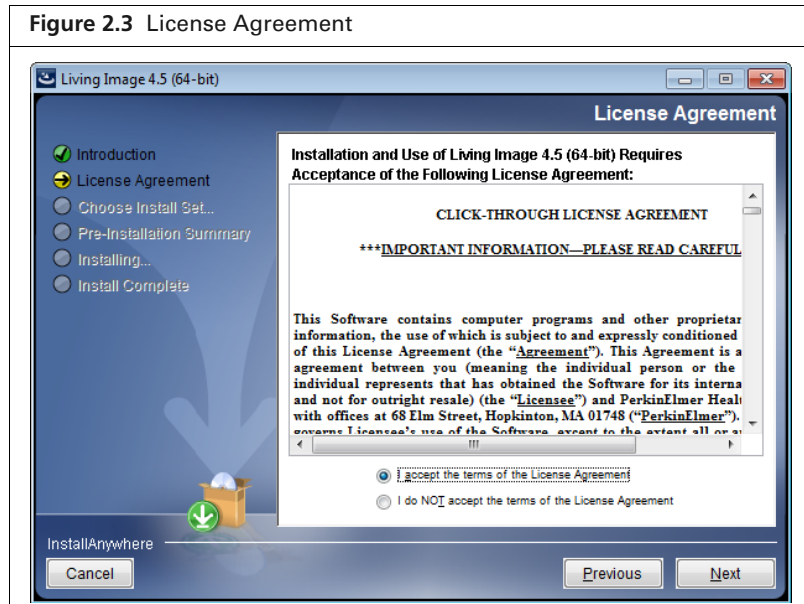
Figure 2.1 Welcome Screen

2. In the Welcome screen, choose a language and click **OK**.
   The Introduction screen appears (Figure 2.2).

Figure 2.2 Introduction Screen

Indicates the application version: 64 or 32-bit

3. Review the introductory information and click **Next**.
4. Read the license agreement that appears (Figure 2.3.)

Figure 2.3 License Agreement

5. To continue with the installation, accept the terms of the license agreement and click **Next**. The Choose Install Set screen appears (Figure 2.4).

Figure 2.4 Choose Install Set Screen
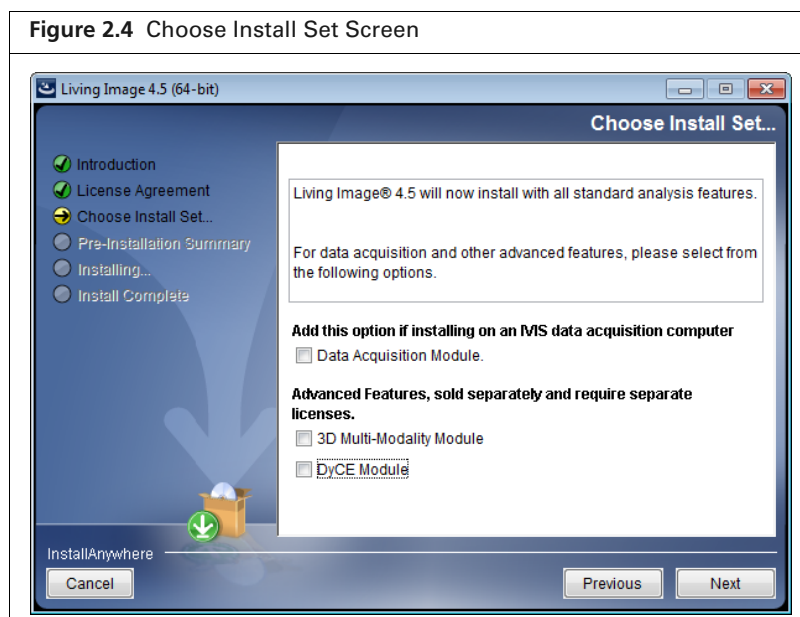
Living Image 4.5 is now ready to install the standard analysis features.

Data Acquisition Module - Choose this option if you are installing the software on an acquisition workstation.

3D Multi-Modality Module - Choose this option to install the 3D Multi-Modality tools.

**DyCE Module** - Choose this option to install the DyCE tools.

> **NOTE:** The 3D Multi-Modality tools and the DyCE tools each require a separate license.

6. Click **Next**

7. In the Pre-Installation Summary screen (Figure 2.5), confirm that the installation information is correct, then click **Install**.

   If the Living Image 4.5 installer detects the Living Image 3.x application (analysis or acquisition version), you are prompted to confirm uninstallation of the earlier version (Figure 2.6).

   Click **Yes** in the confirmation message to uninstall the Living Image 3.x software and install the Living Image 4.5 software. Click **No** to terminate the installation program.

Figure 2.5 Pre-installation Summary Screen
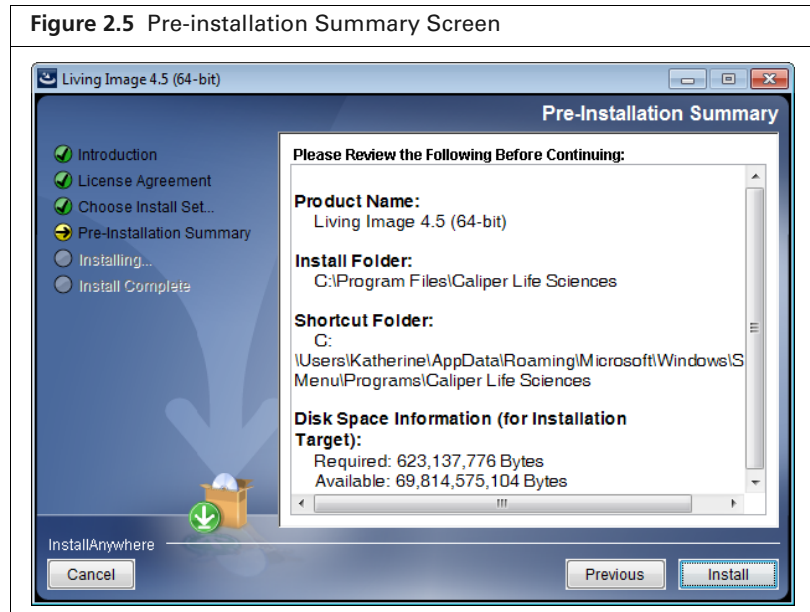

🖉 **NOTE:** If older Living Image software is installed on the acquisition computer, the Living Image 4.5 installer will uninstall the old software and copy all essential acquisition calibration files (CameraInfo.txt, CameraLog.txt, Background folder, LI_AutoBkgList.csv, Emfilters folder, FLReference folder, SLReference folder, CCDCal folder, if such exists) to the Living Image 4.5 directory.
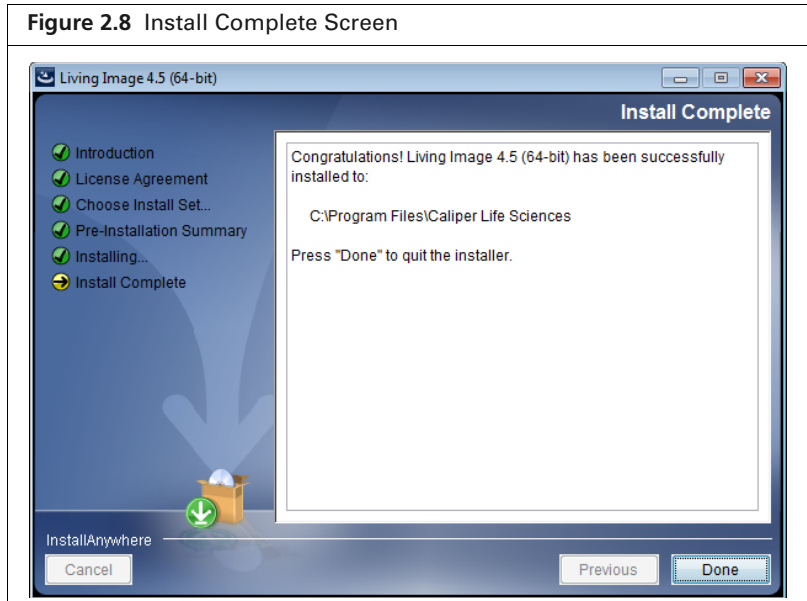

Figure 2.6 Confirmation Message to Uninstall Older Living Image Software

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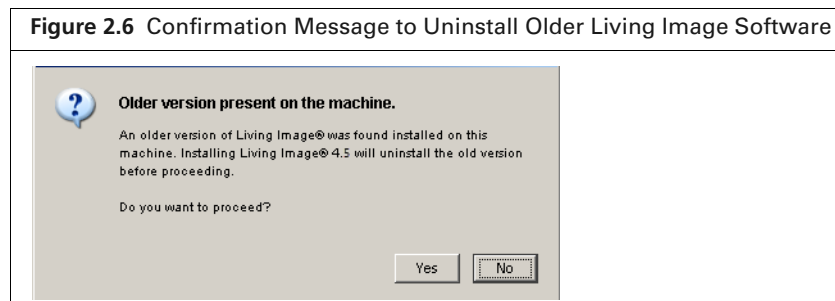
🖉 **NOTE:** If the message shown in Figure 2.7 appears, click **OK**. The installation will proceed without any problems.

Figure 2.7 Launch AnyWhere Error Message
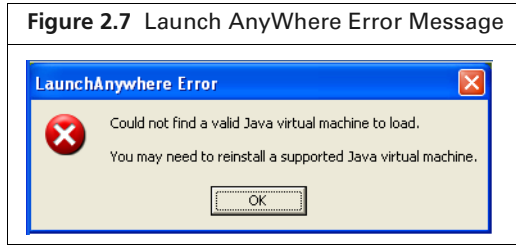
8. Click **Done** when the installation is finished (Figure 2.8).

Figure 2.8 Install Complete Screen

9. After successful installation on an acquisition computer, start the Living Image 4.5 software and verify that you can initialize the IVIS® Imaging System. If you are unable to initialize the imaging system, contact PerkinElmer technical support (see page 2).

> **NOTE:** After installing Living Image® software, you must activate the permanent license. If the 3D Multi-Modality and DyCE tools were installed, a separate license for each must be activated. See page 17 for more information.

2.2 Troubleshooting Installation

If the error message shown in Figure 2.9 appears, it indicates that the installation cannot proceed due to limited user privileges. Click **OK** in the message to cancel the installation.

Figure 2.9 Error Message
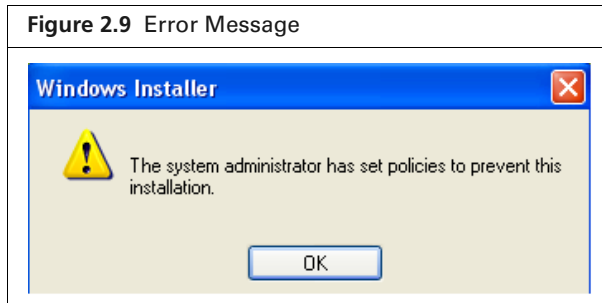
To resolve this issue:

- Login with the Administrator user account and start the installation.
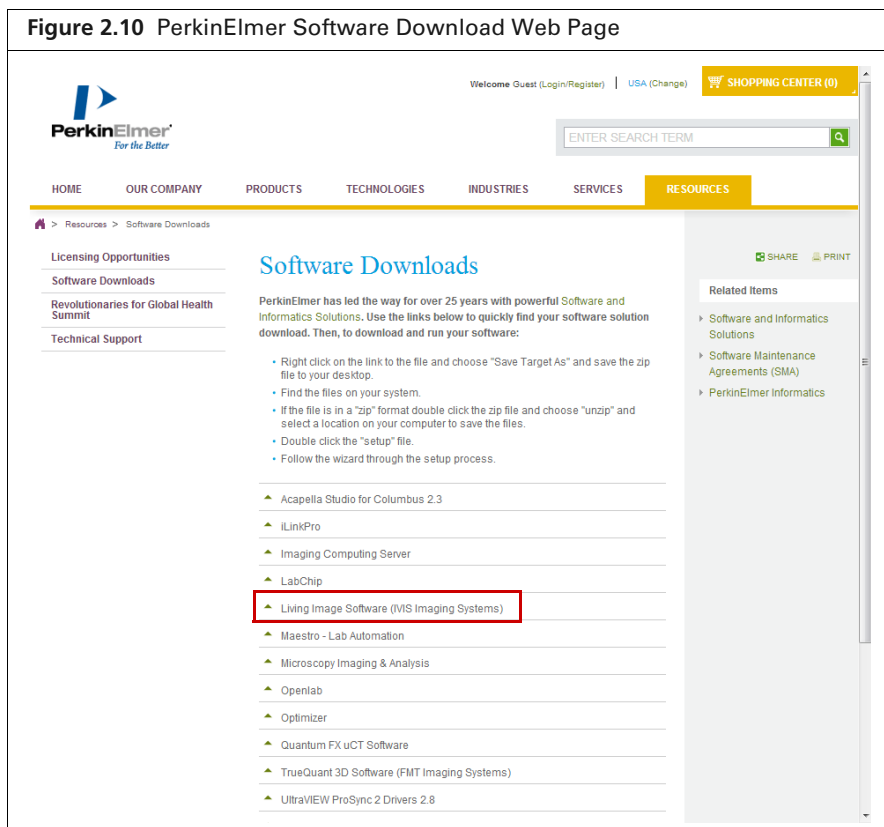
OR

- Right-click the Install.exe file and select "Run as administrator" from the shortcut menu, then enter the local administrator's user name and password.

If installation does not proceed, please contact your IT department.

2.3 Installing Software From the Internet

1. Go to the download URL: http://www.perkinelmer.com/resources/software-downloads.xhtml.

Figure 2.10 PerkinElmer Software Download Web Page

2. Click "Living Image Software (IVIS Imaging Systems)" on the download page and select a setup file (for example, "Windows x64 (64-bit)").

3. Click **Run** in the dialog box after the download is complete.

Figure 2.11 File Download Dialog Box
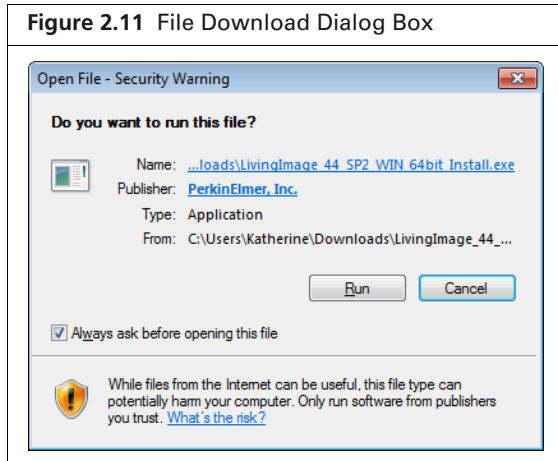
4. Choose a language and click **OK** in the Welcome screen that appears (Figure 2.1 on page 4). Follow step 3 to step 9 in *Installing Software From the CD-ROM* on page 3 to continue the installation.

   NOTE: After you install the software, you must activate the permanent license. See page 17 for more details.

3 Installing Living Image® Software On a Macintosh

3.1 Installing Software From the CD-ROM

> ✎ **NOTE:** Living Image® 4.5 software requires Mac OS X 10.6 or later.

1. Insert the Living Image 4.5 software CD-ROM into the workstation computer.
   The Welcome screen appears.

Figure 3.1 Welcome Screen

2. In the Welcome screen, choose a language and click **OK**.
   The Introduction screen appears (Figure 3.2).
3. Review the introductory information that appears and click **Next**.

Figure 3.2 Introduction Screen
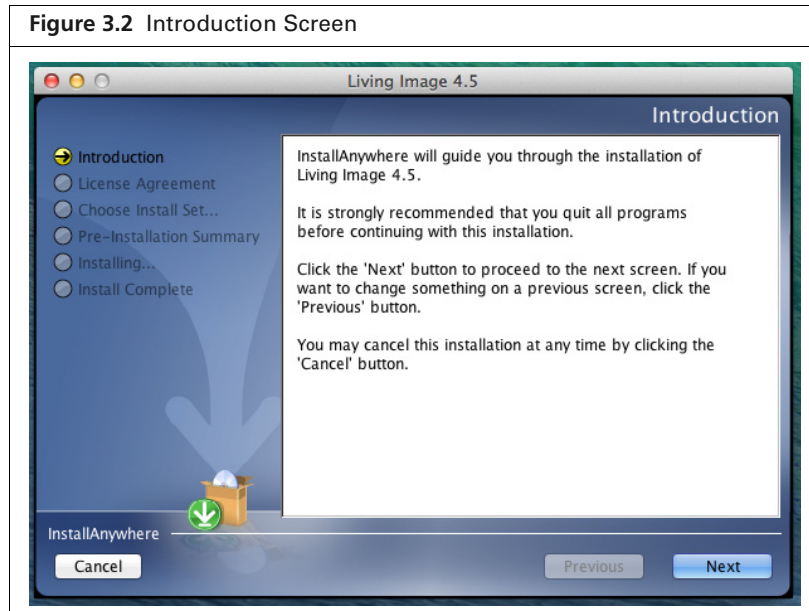
4. Read the license agreement. To continue with the installation, accept the terms of the license agreement and click **Next**.

Figure 3.3 License Agreement

🖉   **NOTE:** Only the analysis features of Living Image® software can be installed on a Macintosh.

5. If you are installing the optional 3D Multi-Modality and/or DyCE tools, choose these options in the Choose Install Set screen. Click **Next**.

The installation proceeds.

🖉   **NOTE:** The 3D Multi-Modality and the DyCE tools each require a separate license.

Figure 3.4 Choose Install Set Screen
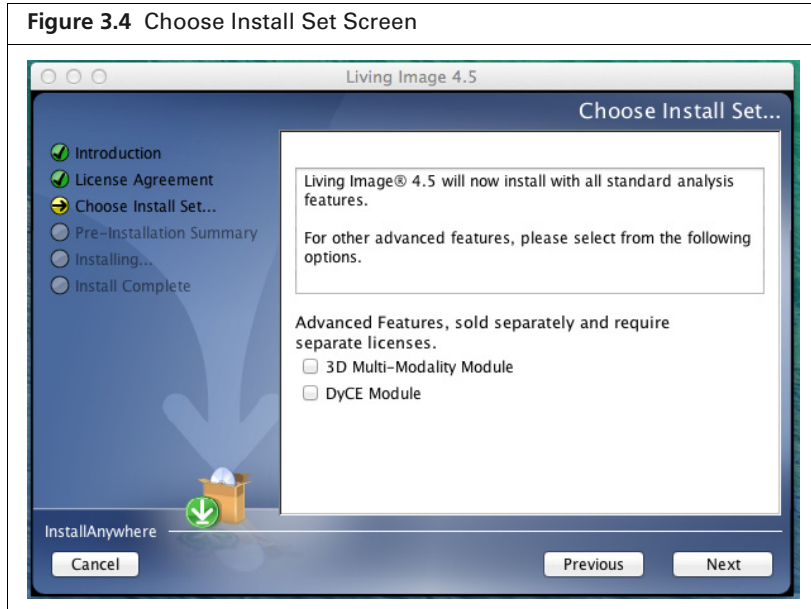
6. In the Pre-Installation Summary screen, confirm that the installation information is correct, then click **Install**.

The installation proceeds.

Figure 3.5 Pre-installation Summary Screen
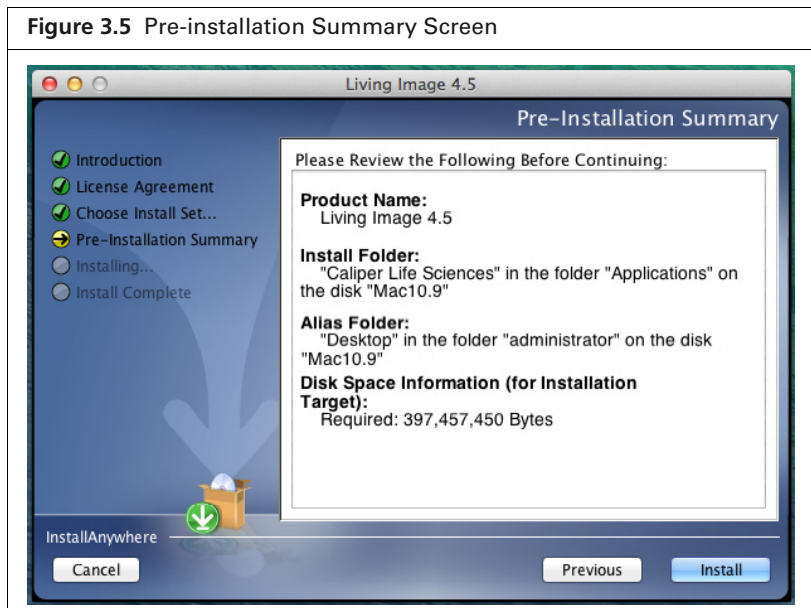
7. After the installation is finished, click **Done** in the Install Complete screen.

Figure 3.6 Install Complete Screen
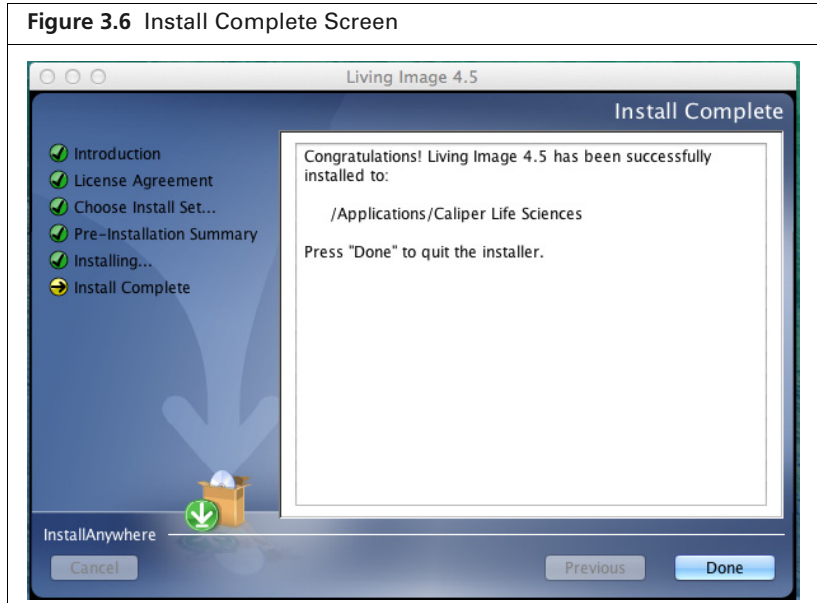
8. Enter your user name and password in the Authenticate dialog box that appears and click **OK**.

Figure 3.7 Authentication Dialog Box

> 📝 **NOTE:** After installing Living Image® software, you must activate the permanent license. If the 3D Multi-Modality and DyCE tools were installed, a separate license for each must be activated. See page 17 for more information.

3.2 Installing Software From the Internet

1. Go to the download URL: http://www.perkinelmer.com/resources/software-downloads.xhtml.

**Figure 3.8** PerkinElmer Software Download Web Page
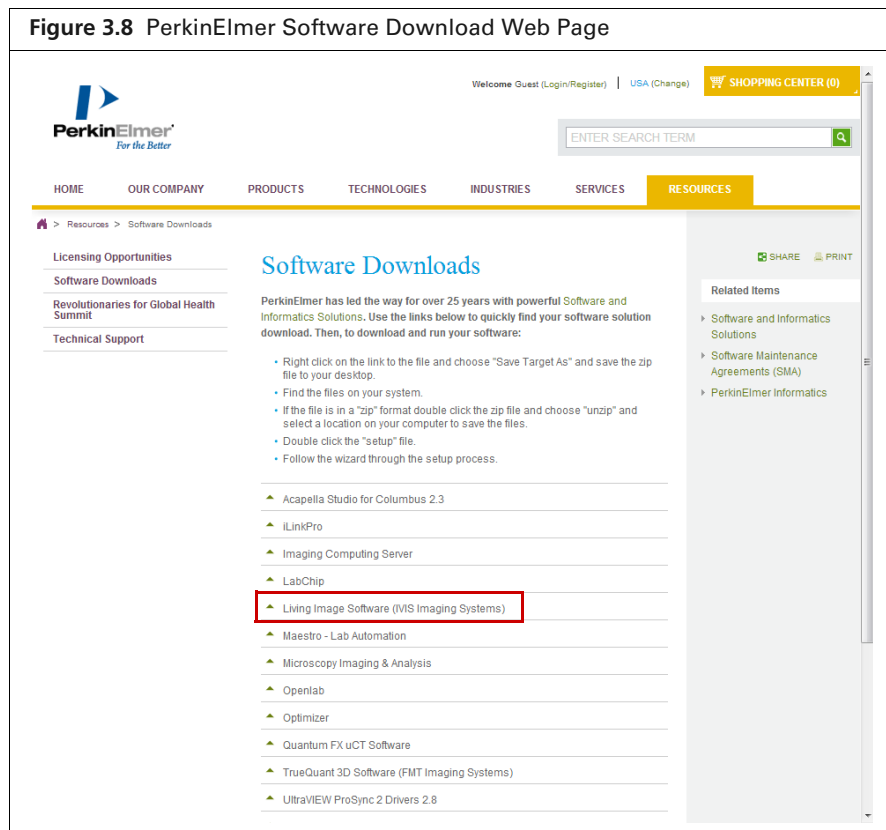
2. Click "Living Image Software (IVIS Imaging Systems)" on the download page and select LI_<version>_MAC_Install.zip. Click OK in the download prompt that appears (Figure 3.9). The File Download dialog box appears.

Figure 3.9 Confirm and Begin Download
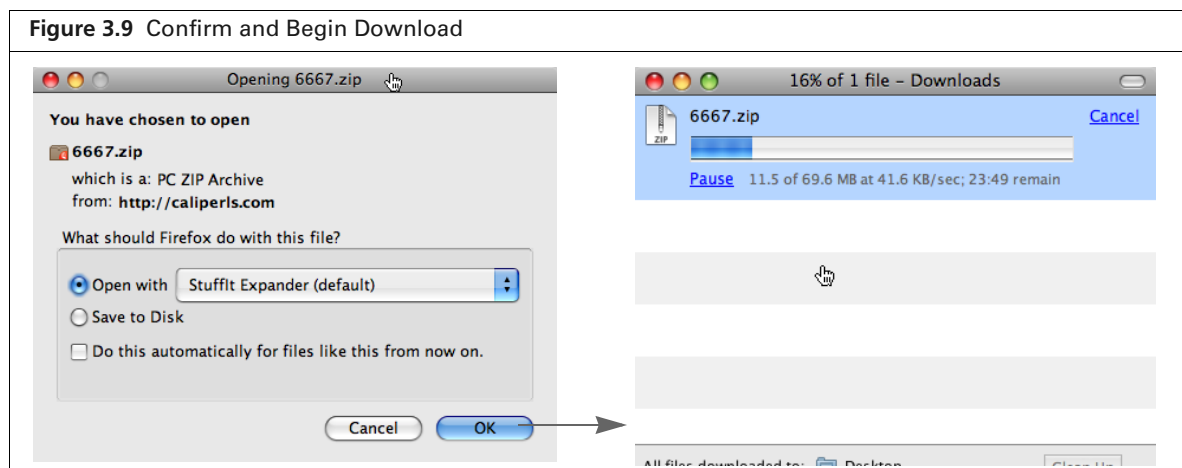
3. Double-click the .zip file ▮. (In this example, the file was saved to the desktop.) The install icon ▮ appears on the desktop.

Figure 3.10 Macintosh Desktop
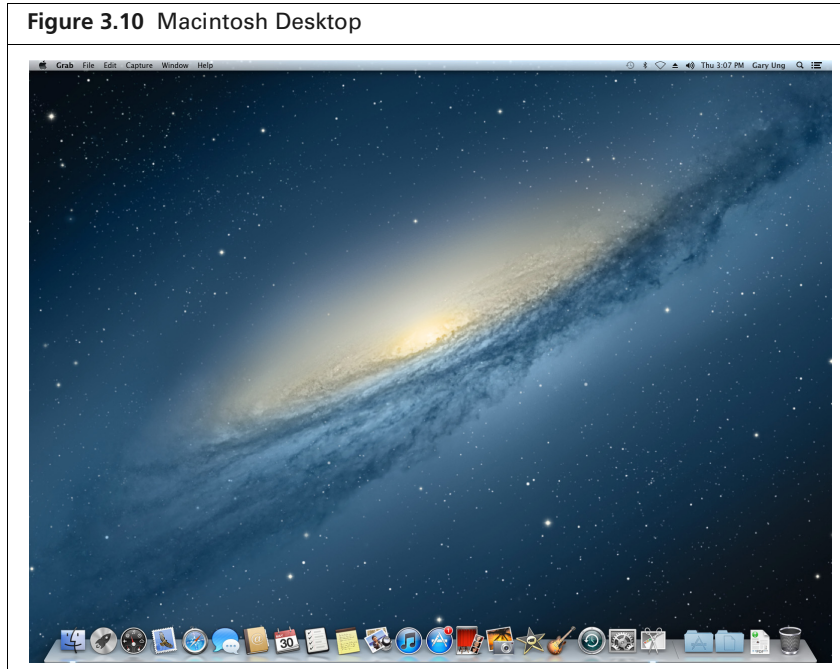
4. Double-click the install icon ![icon].

5. For all Mac OS, except Mac OS X 10.8 (Mountain Lion), follow step 3 to step 8 on page 10 to 13.

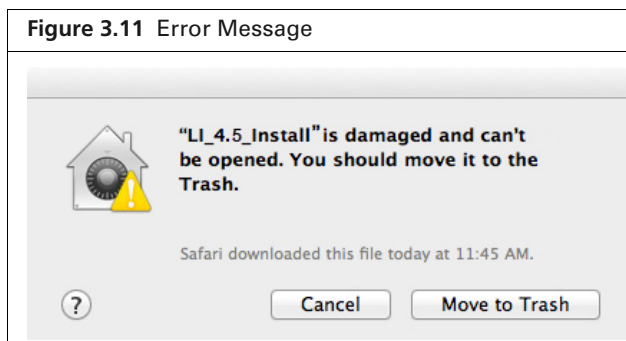> ![pencil icon] **NOTE:** After you install the software, you must activate the permanent license. See page 17 for more details on activating a license.

6. For Mac OS X 10.8 (Mountain Lion) only:

> ![pencil icon] **NOTE:** Administrator privileges are required to perform the following steps.

   **a.** Click "Cancel" in the error message that appears (Figure 3.11)

Figure 3.11 Error Message

   b. Go to System Preferences and click Security & Privacy (Figure 3.12).

Figure 3.12 System Preferences

c. In the General tab of Security & Privacy:

1) Click the lock icon (Figure 3.13).

2) Choose the Anywhere option.

3) Click the lock icon.

Figure 3.13 Security & Privacy – General Tab

Click to unlock or lock settings.
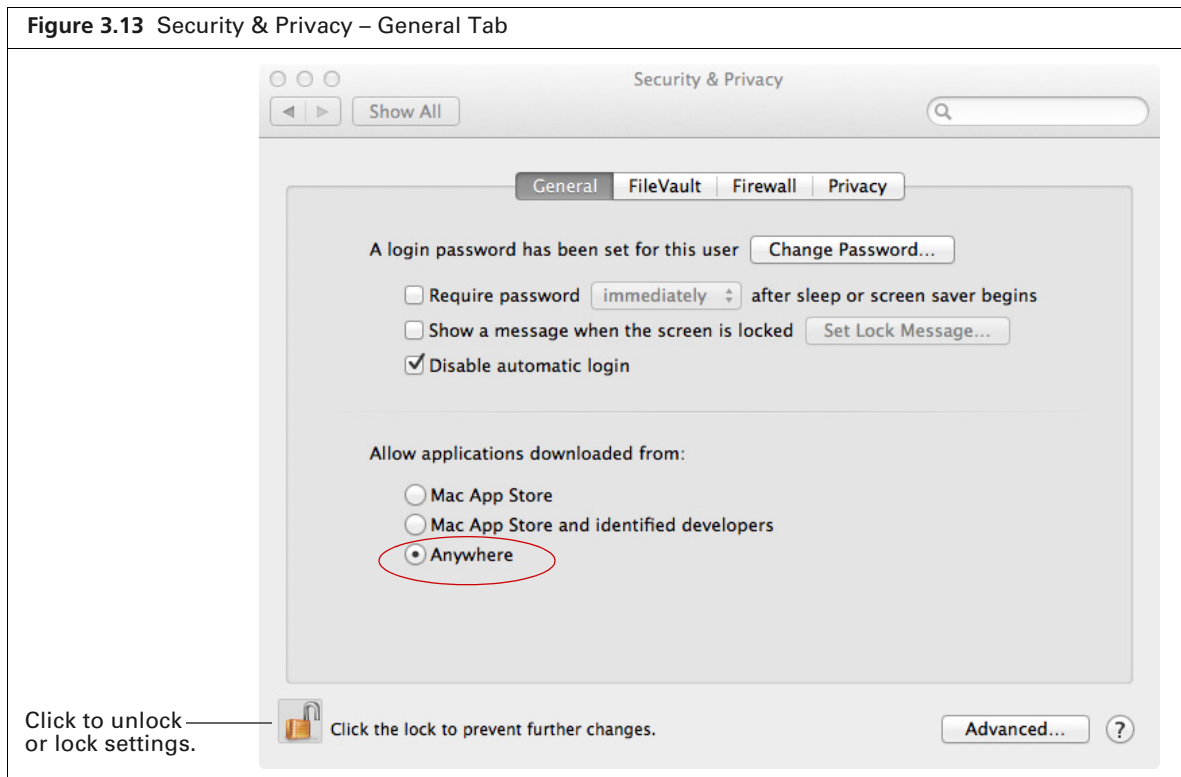
d. Double-click the install icon.

e. Follow step 3 to step 8 on page 10 to 13.

4 Activating a License

The Living Image® software is licensed to individual workstations. The software provided with an IVIS® Imaging System includes a five seat license that permits you to install the software for data analysis on up to five workstations. After the software is installed, you have 30 days to activate the permanent license.

The 3D Multi-Modality Tools plug-in and the DyCE plug-in each require a separate license.

There are two ways to activate a license:

- Internet activation - Activates the license over the Internet
- Manual activation - For workstations not on a network

NOTE: A license from Living Image 3.x cannot be transferred to Living Image 4.5.

4.1 Activating a License Over the Internet

1. Start the Living Image software (double-click the ![icon] icon on the desktop).

   The main window appears and shows the number of days that remain to activate a license for the Living Image software and the 3D Multi-Modality Tools and/or DyCE plug-in (if the3D Multi-Modality and/or DyCE tools were selected during installation).

2. Click **Activate License** (Figure 4.1).

Figure 4.1 License Activation Using Internet
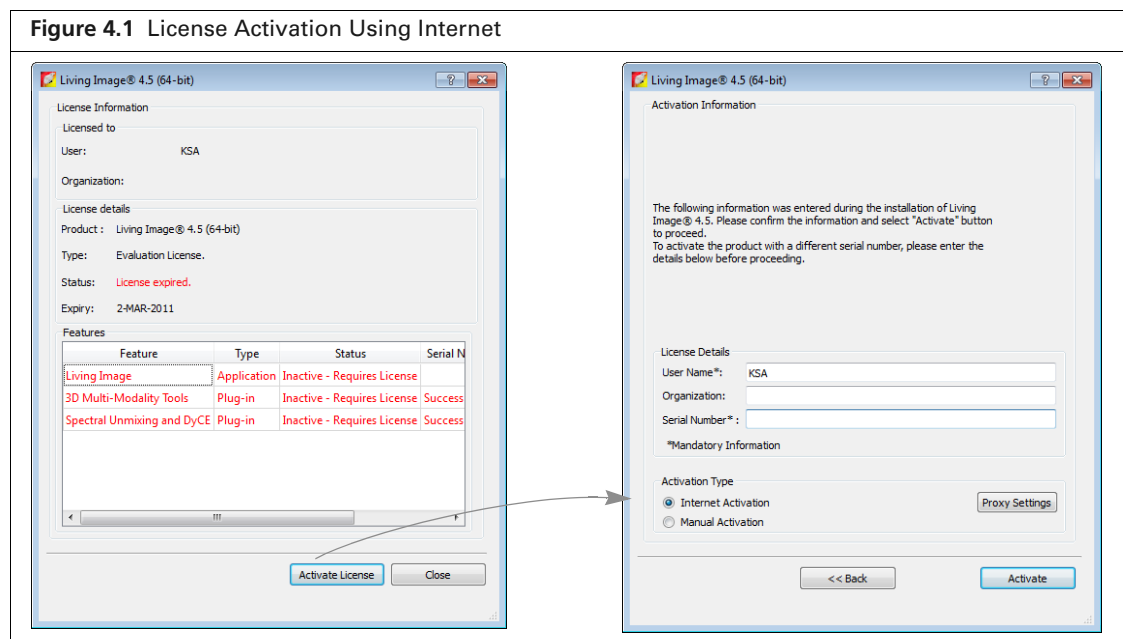
> **NOTE:** To evaluate the software without activating a license, click **Evaluate**.
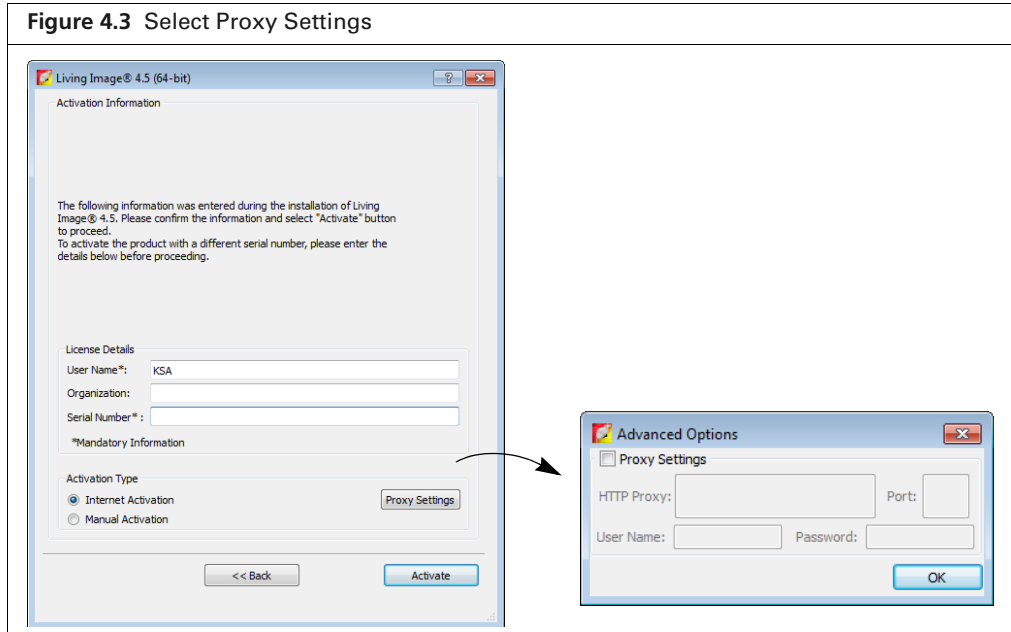
3. In the dialog box that appears, enter your user name, organization name.

4. To activate the Living Image license, enter the serial number for the software application.

    To activate the 3D Multi-Modality Tools license, enter the serial number for the 3D Multi-Modality tools plug-in.

    To activate the DyCE tools license, enter the serial number for the DyCE tools plug-in.

5. Choose the Internet Activation option and click **Activate**

    You will be notified of a successful activation.

Figure 4.2 Notification of Successful Activation of Living Image Software
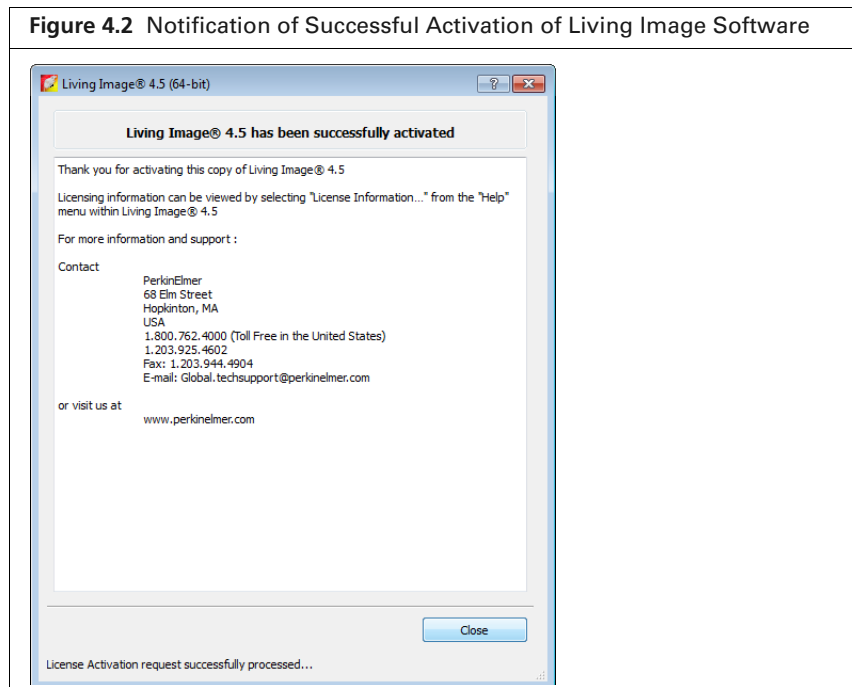
Specifying Proxy Settings

By default, the activation connects directly to the license server on port 443. If a proxy server is used at your location, specify the proxy settings.

1. Click **Proxy Settings**.

2. In the dialog box that appears, put a check mark next to Proxy Settings and enter the values for the proxy server. Contact your IT department for details about the correct proxy server settings.

Figure 4.3 Select Proxy Settings

4.2 Manually Activating a License

For manual activation, generate a machine ID file and e-mail it to PerkinElmer technical support. You will receive a license file by e-mail that can be manually activated.

1. Start the Living Image software (double-click the ⬜ icon on the desktop).

The main window appears and shows the number of days that remain to activate the license.

2. Click **Activate License**.

3. In the dialog box that appears, enter your user name, organization name, and software serial number.

4. Choose the Manual Activation option and click **Activate.**

5. In the dialog box that appears:

  a. Click **Save to file**.

  a. Select a directory for the file and click **Save**.

6. E-mail the machine ID file to global.techsupport@perkinelmer.com.

Figure 4.4 Manual License Activation
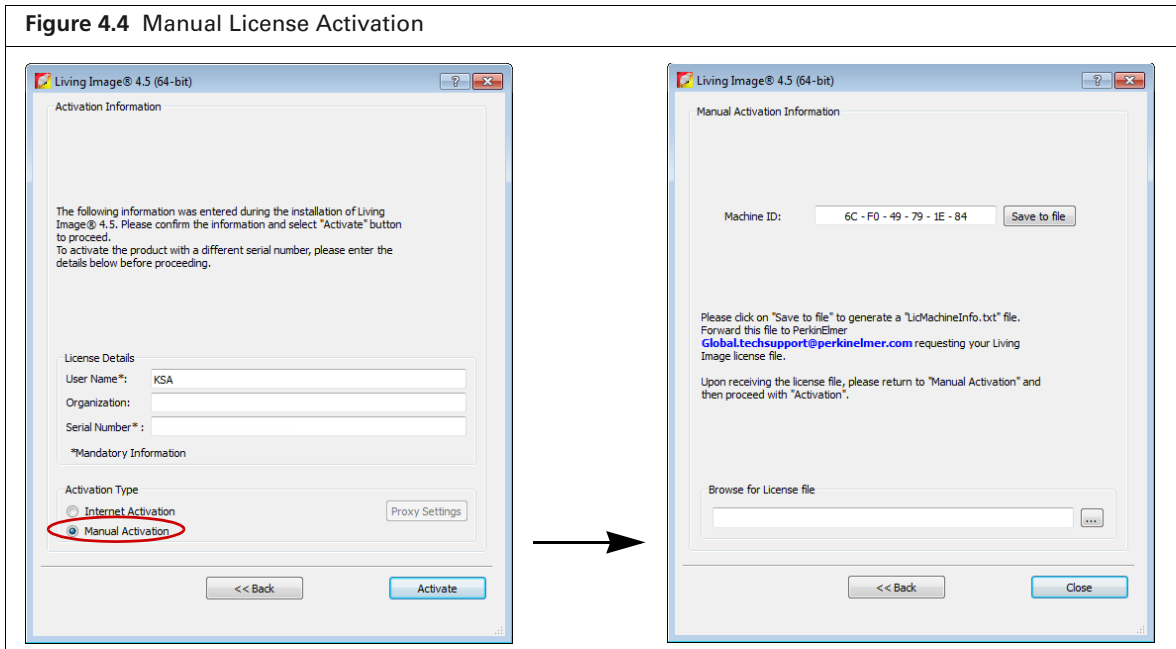
7. After you receive the license file from PerkinElmer technical support, click the **Browse** button ⊡ and navigate to the license file.


Figure 4.5 Browse to License File
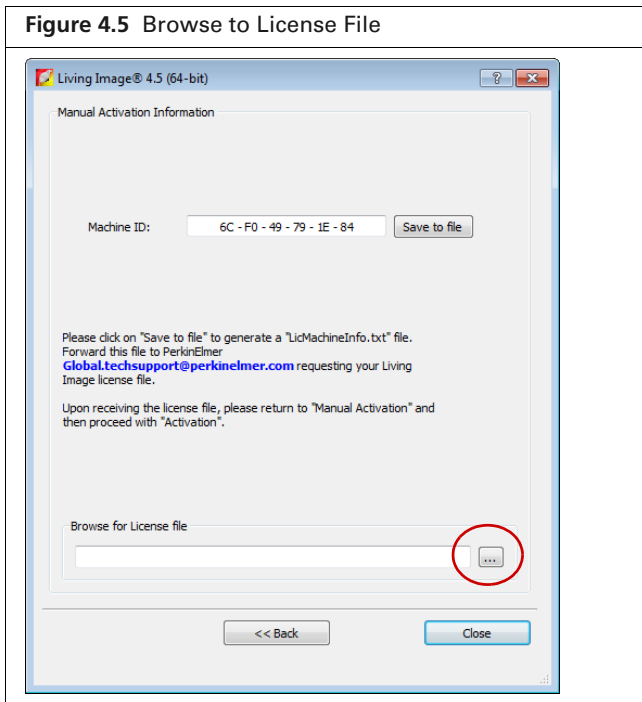
8. Click **Close**.

The license is activated.

Editing a License File

Sometimes it may be necessary to edit a license file for renewal or repair purposes.

To edit a license file:

1. Open the license information dialog box (select **Help → License Information** on the menu bar).

2. Right-click the serial number of the file license and select **Edit File-Based Licenses** from the shortcut menu.

Figure 4.6 License Information
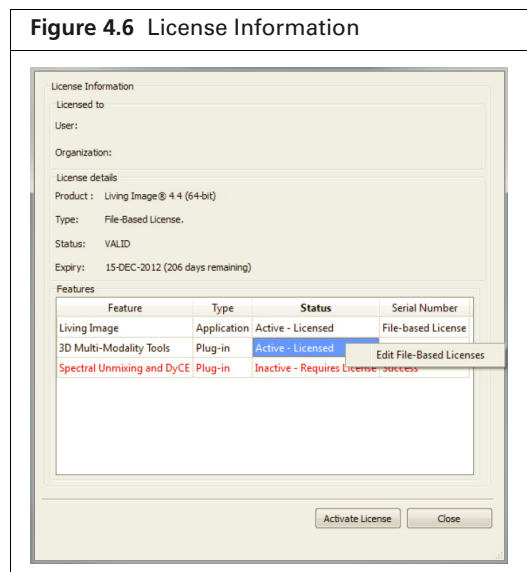
3. In the dialog box that appears, use the Add or Delete buttons ➕✖ to edit the license configuration.

**Figure 4.7** Edit License Configuration
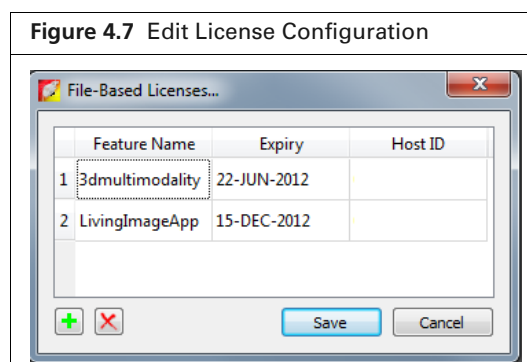
4. Click **Save**.

5. Restart the Living Image software.

4.3 Returning a License

You can return a license so that it is available for use on another workstation. If you have renewed a license, you must return the old license before you can activate the new license.

To return a license:

1. Select **Help → License Information** on the menu bar.

2. In the dialog box that appears, click **Return License** and click **Close**.

Figure 4.8 Return a License
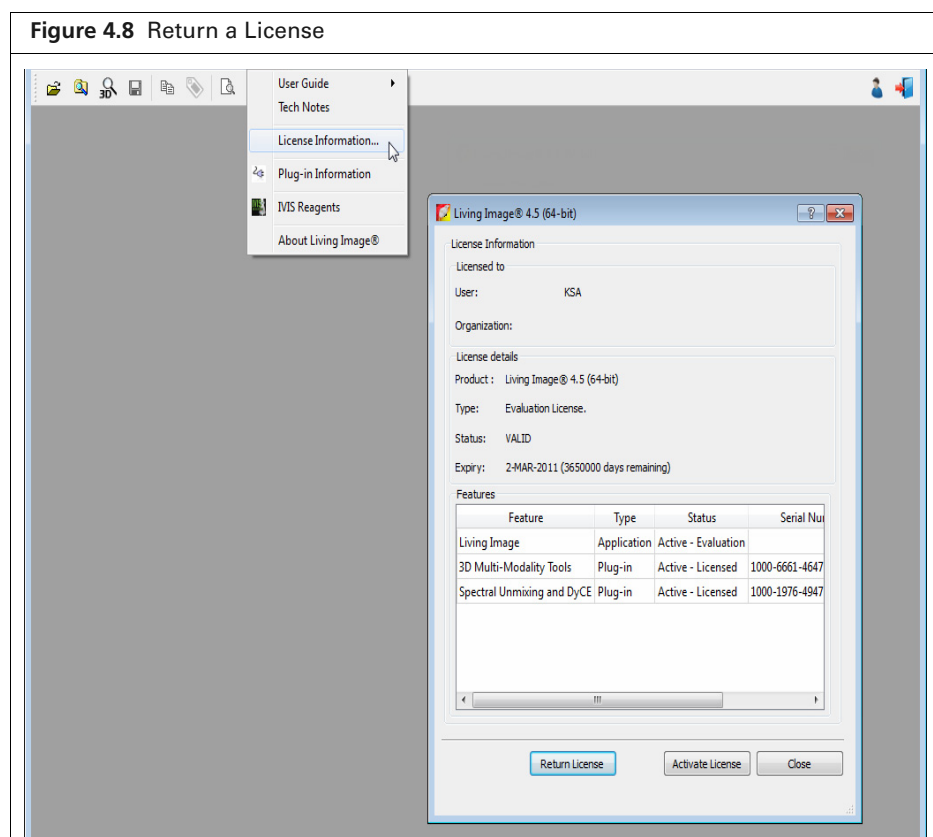
4.4 Troubleshooting Licensing Error Messages

Table 4.1 Licensing Error Messages

Error Message	Possible Causes	Solutions
Unable to send application activation to remote server.	The workstation is unable to reach the PerkinElmer Licensing server on the Internet on port 443. This may be because the workstation is not connected to a network or the network firewall is preventing communication on port 443.	1. Verify that the workstation can connect to the Internet. 2. Check the local firewall policies of the IT group responsible for the network.
The activation of the fulfillment is denied by the activation policy because max extra acts exceeded #9679-7028.	The maximum number of seats available on the license have been activated.	1. Return a Living Image 4.5 license from another workstation. 2. Acquire additional license seats from PerkinElmer .