revvity

INSTALLATION AND LICENSING MANUAL

Living Image® 4.8.2
Advanced Acquisition & Analysis Tools

For research use only.
Not for use in diagnostic procedures.

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1 Before You Begin

Requirements

1.1 Requirements

Hardware & Software Requirements

For optimum performance, Living Image 4.8.2 software requires hardware and software that meet or exceed the minimum requirements listed in Table 1.1.

NOTE: Living Image software only supports English operating systems.

Table 1.1 Minimum Analysis Workstation Requirements Without the 3D Multi-Modality Tools

Item	Specification
PC, Window 10 64-bit	■ 2GHz Quad Core (i5, i7) processor ■ 8GB RAM recommended for IVIS® Spectrum CT data analysis
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, OpenGL3.0 or later
Display	17 inch or larger

If you will be using the 3D Multi-Modality tools, the graphics card must meet the requirements in Table 1.2.

Table 1.2 Graphics Card Requirements for 3D Multi-Modality Tools

Item	Specification
OpenGL Version Requirement[1]	OpenGL 3.0 and above.
OpenGL Extension Requirement[1]	GL_EXT_Texture3D
Graphics Card Memory	Recommended: 1GB (Dedicated)

[1] If the appropriate license is not installed or the GPU does not meet these specifications, the 3D Multi-Modality tools will not appear in the tool palette.

1.2 Contact Information

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2 Installing Living Image Software On a PC

2.1 Installing the Software

> **NOTE:** Living Image 4.8.2 software can only be installed on a Windows 10 OS. Administrative privileges are required to install and configure Living Image 4.8.2 software on Windows operating systems.

Living Image software will be installed at the following location:

Application	Location
64-bit Application on Windows 10 64-bit OS	C:\Program Files\Caliper Life Sciences\Living Image

1. Go to the In Vivo Imaging Software Downloads page.

2. Under Living Image Software (IVIS Imaging Systems), click the setup file, for example, Windows x64 (64-bit), for the Living Image version you want to install. The installer file, in the form of LI<version>_WIN_64Bit_Install.zip, is downloaded to your Downloads directory.

3. After the download is complete:

    a. Navigate to the installer zip file using Windows Explorer.

    b. Unzip the file.

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

        The installation will begin.

4. Choose a language and click **OK** in the Welcome screen that appears (Figure 2.1).

    The Introduction screen appears.

    > **NOTE:** You must activate the permanent license after the software is installed. If the 3D Multi-Modality and DyCE tools were installed, a separate license for each must be activated. See *Activating a License* on page 8 for more details.

Figure 2.1 Welcome Screen

5. Review the introductory information and click **Next**.

6. Read the license agreement. To continue with the installation, accept the terms of the license agreement and click **Next**.

7. If you are installing the optional 3D Multi-Modality and/or DyCE tools, choose these options in the Choose Install Set screen (Figure 2.2). Click **Next**.

    The installation proceeds.

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

Figure 2.2 Choose Install Set Screen
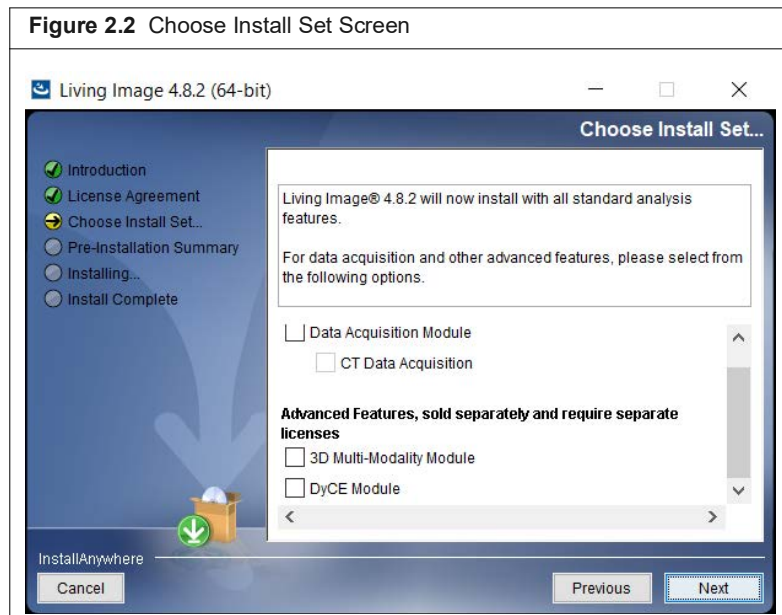
Living Image 4.8.2 software is now ready to install the standard analysis features.

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.

8. Click **Next**

9. Confirm that the installation information is correct (Figure 2.3), then click **Install**.

   If the Living Image 4.8.2 installer detects the Living Image 3.x application (analysis or acquisition version), you will be prompted to confirm uninstallation of the earlier version.

   Click **Yes** in the confirmation message to uninstall the Living Image 3.x software and install the Living Image 4.8.2 software. Click **No** to terminate the installation program.

Figure 2.3 Pre-installation Summary Screen
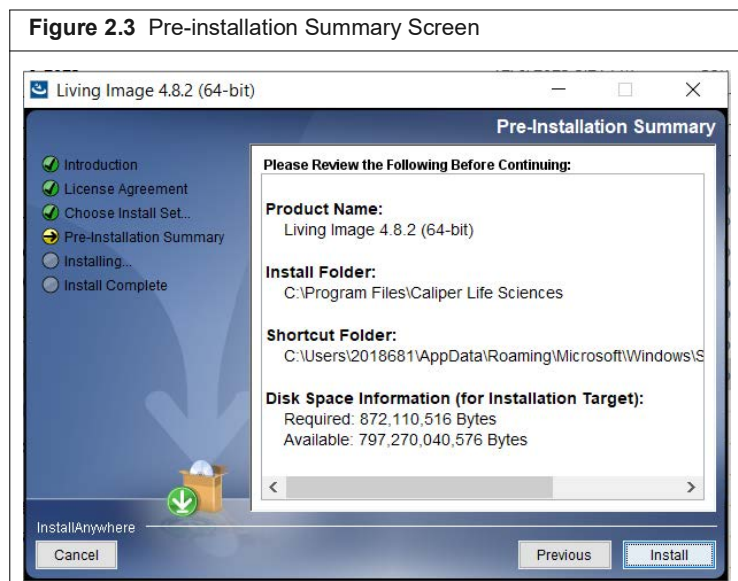
NOTE: If older Living Image software is installed on the acquisition computer, the Living Image 4.8.2 installer will uninstall the old software and copy all essential acquisition calibration files (CameraInfo.txt, CameraLog.txt, Background folder, LI_AutoBkgList.csv, Emfilters folder, FLReference folder, SLReference folder, CCDCal folder, if such exists) to the Living Image 4.8.2 directory.

NOTE: If the message shown in Figure 2.4 appears, click **OK**. The installation will proceed.

Figure 2.4 Launch AnyWhere Error Message
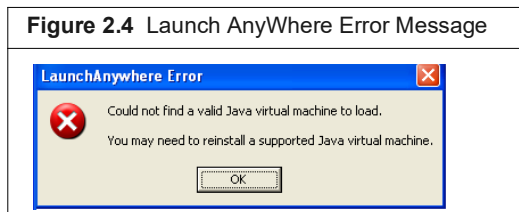
10. Click **Done** in the Install Complete screen after the installation is finished.

When you see the message "System must be rebooted to complete the configuration", reboot the computer right away or at a later time.

11. After successful installation on an acquisition computer, start the Living Image 4.8.2 software and verify that you can initialize the IVIS Imaging System. If you are unable to initialize the imaging system, contact Revvity 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 *Activating a License* on page 8 for more information.

12. On PCs with dual video systems, set Living Image to run using the GPC. Follow the instructions in the release notes, which were installed with the Living Image installation.

2.2 Troubleshooting Installation

If the error message shown in Figure 2.5 appears, it indicates that the installation cannot proceed due to limited user privileges. Click **OK** in the message to cancel the installation.

Figure 2.5 Error Message
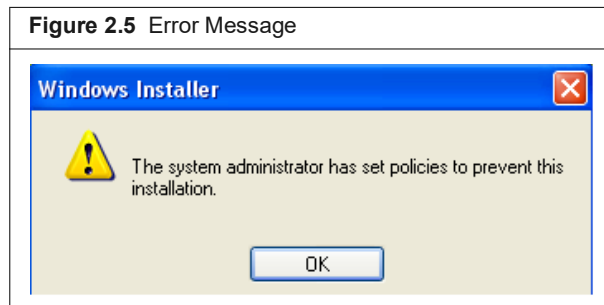
To resolve this issue:

■ 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.

3 Activating a License

Living Image software is licensed to individual workstations. The software provided with an IVIS Imaging System includes a five seat license that permits installation of 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 online
- Manual activation - For workstations not on a network

NOTE: A license from Living Image 3.x cannot be transferred to Living Image 4.8.2 software.

3.1 Activating a License Online

Many IT departments prevent software from reaching out to servers on the Internet. If this is the case, and you can't configure a proxy, the license activation will fail with connection errors. If network activation fails, follow the instructions in *Manually Activating a License* on page 10.

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 a license for Living Image software, 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 3.1).

Figure 3.1 License Activation Using Internet
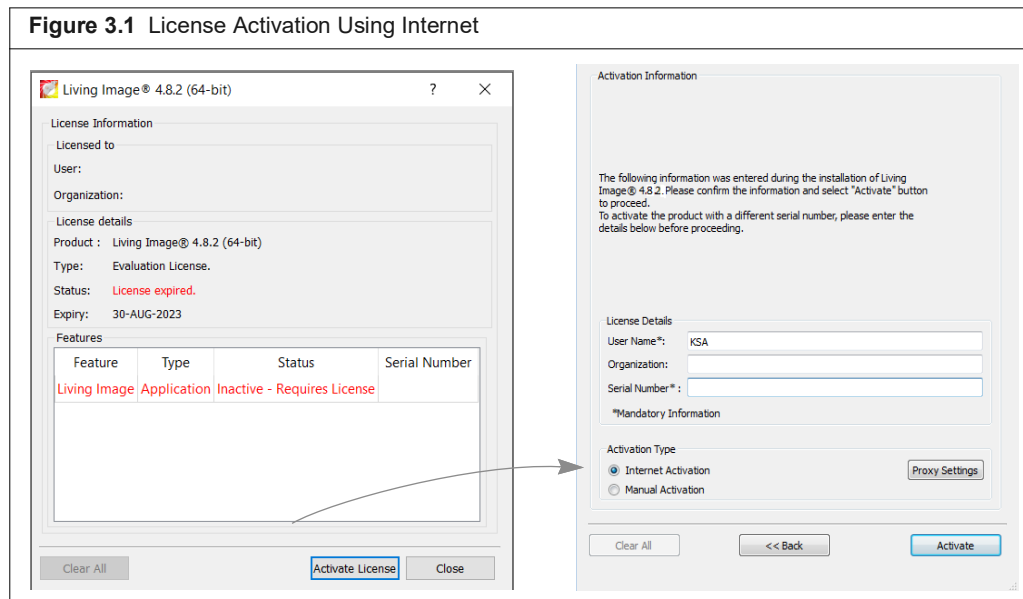
3. In the dialog box that appears (Figure 3.1):

   a. Enter the license serial number for the software application (Living Image, 3D Multi-Modality Tools, or DyCE Tools).

   > **NOTE:** A license serial number is composed of 20 digits:
   > - LI 4.x – 0002-xxxx-xxxx-xxxx-xxxx
   > - 3D Multi-Modality Tools – 1000-xxxx-xxxx-xxxx-xxxx
   > - Spectral Unmixing and DyCE Tools – 1000-xxxx-xxxx-xxxx-xxxx

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

   You will be notified of a successful activation.

4. Repeat step 2 to step 3 until all applications are activated.

   > **NOTE:** On rare occasion a license may be corrupted and the status is denoted as "Tampered" in the License Information dialog box (Figure 3.1). If this occurs, do either of the following:
   > - Clear all license serial numbers by clicking **Clear All** in the dialog box (Figure 3.1). Click **Yes** in the prompt that appears, then repeat step 2 to step 4.
   > - Contact Revvity technical support (see page 2).

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 3.2 Select Proxy Settings
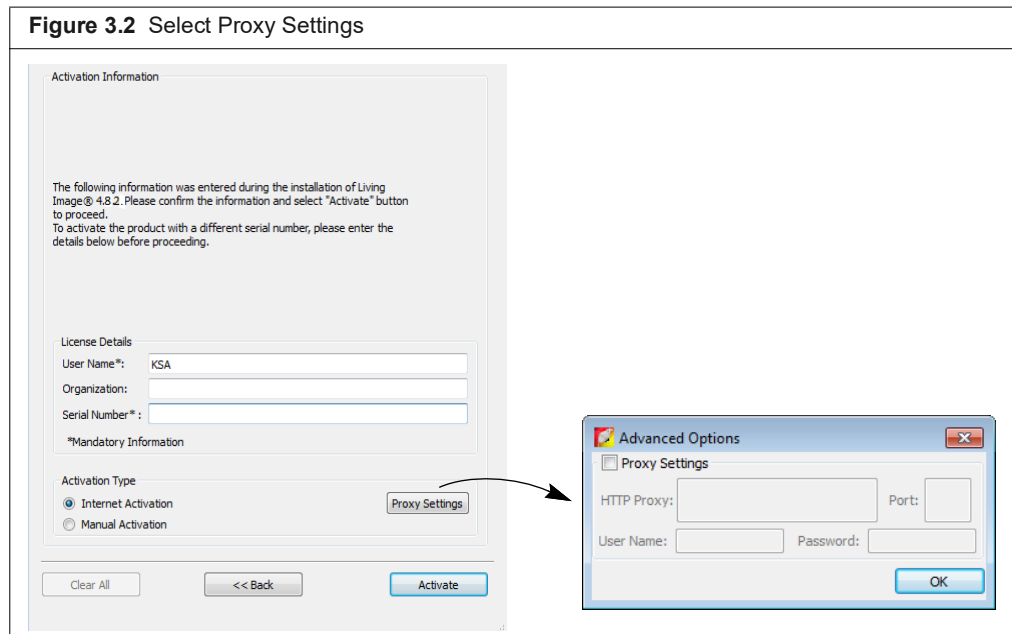
3.2 Manually Activating a License

For manual activation, generate a machine ID file and e-mail it to Revvity 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. Enter your user name, organization name, and software serial number in the dialog box that appears.

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. Follow the instructions to send the machine ID file to Revvity technical support.

Figure 3.3 Manual License Activation
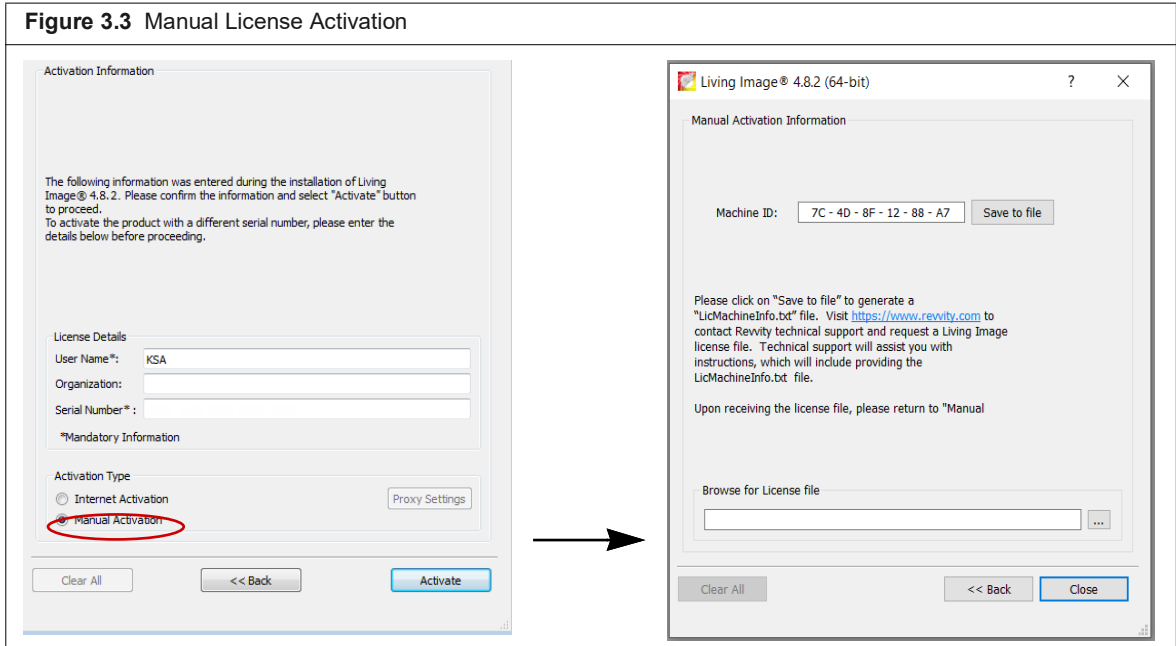
7. After you receive the license file from Revvity technical support, click the **Browse** button and navigate to the license file.

Figure 3.4 Browse to License File
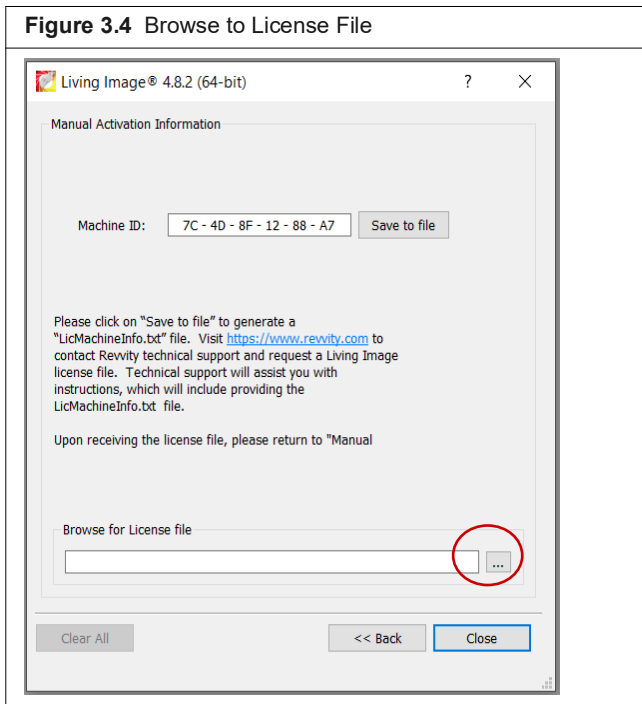
8. Click **Close**.

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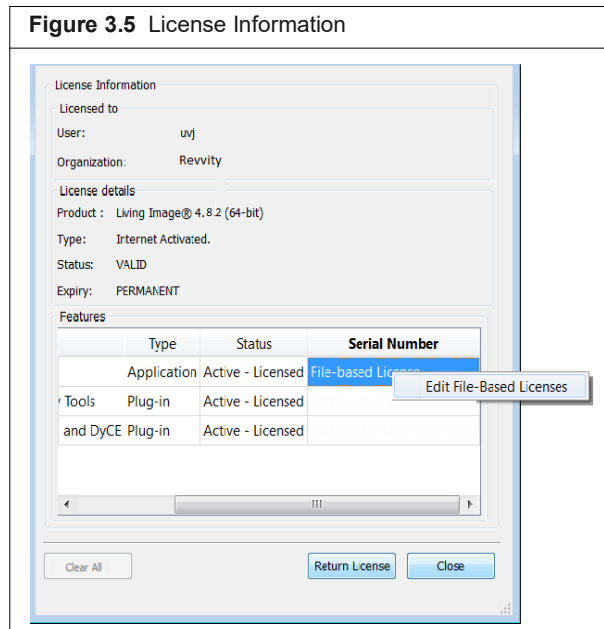
3. In the dialog box that appears, use the Add or Delete buttons ➕✖ to edit the license configuration.

Figure 3.6 Edit License Configuration
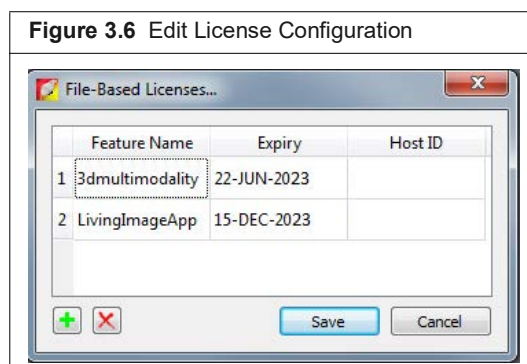
4. Click **Save**.

5. Restart the Living Image software.

3.3 Checking Current Licensing

Select **Help** → **License Information** on the menu bar to view current licensing.

3.4 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**.

3.5 Troubleshooting

Table 3.1 Troubleshooting

| Issue	Possible Causes	Solutions
Licensing error message: Unable to send application activation to remote server.	The workstation is unable to reach the Revvity 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.
Licensing error message: 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 4.8.2 license from another workstation. 2. Acquire additional license seats from Revvity.
Cannot activate Living Image software via the Internet or manually. **NOTE:** Please try both solutions before contacting Revvity technical support.	■ User account settings need adjustment. ■ Living Image Software is not being run with Administrator privileges.	■ See *Changing the User Account Control Settings* below. ■ See *Starting Living Image Software as Administrator* on page 16.

Changing the User Account Control Settings

1. Log in as the Administrator (contact your IT department if you need help).
2. Click the Windows Start button.
3. Enter "UAC" in the text box (Figure 3.7).

Figure 3.7 Start Menu

Enter "UAC"
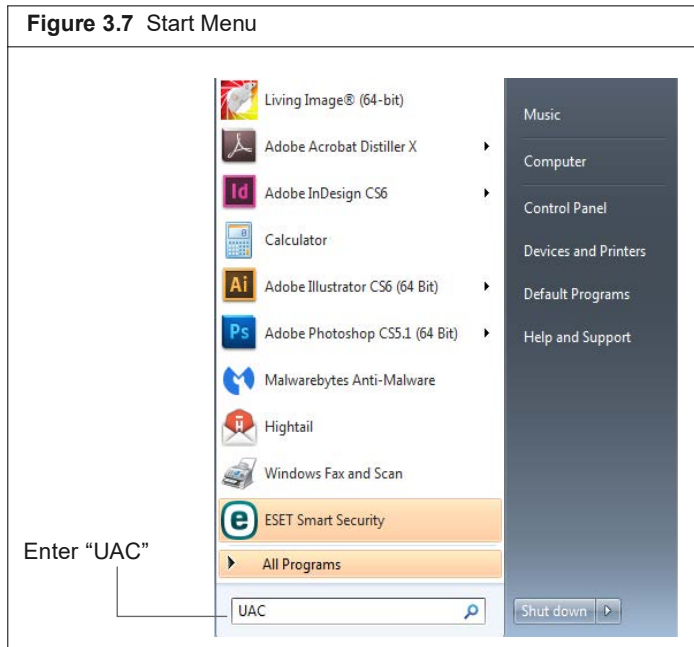
4. Click "Change User Account Control Settings" in the search results (Figure 3.8).

Figure 3.8 Change User Account Control Settings
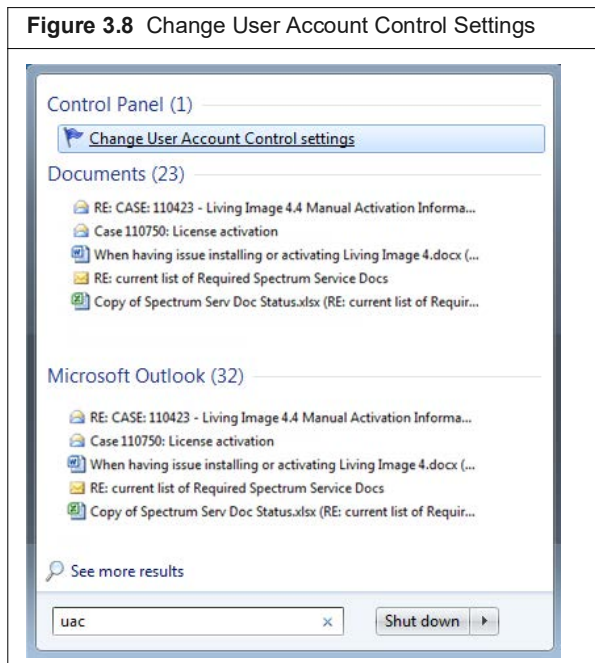
5. Move the slider in the dialog box that appears to "Never Modify" and click **OK** (Figure 3.9).

Figure 3.9 User Account Control Settings
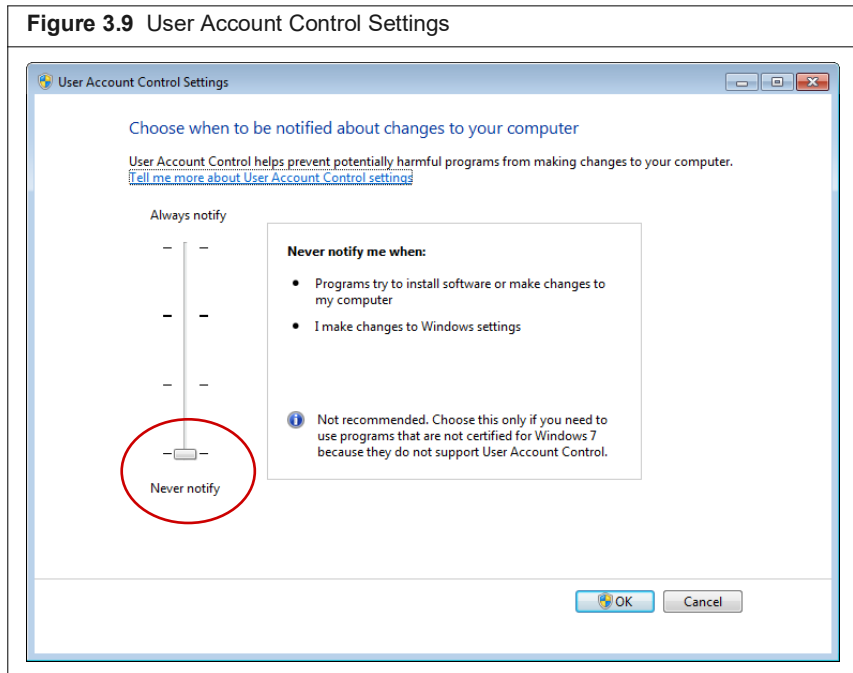
6. Start Living Image software as the Administrator by following the procedure page 16.

7. Select **Help → License Information** on the Living Image menu bar.

8. Activate the license via the Internet using your 20-digit license serial number. See page 8 for instructions.
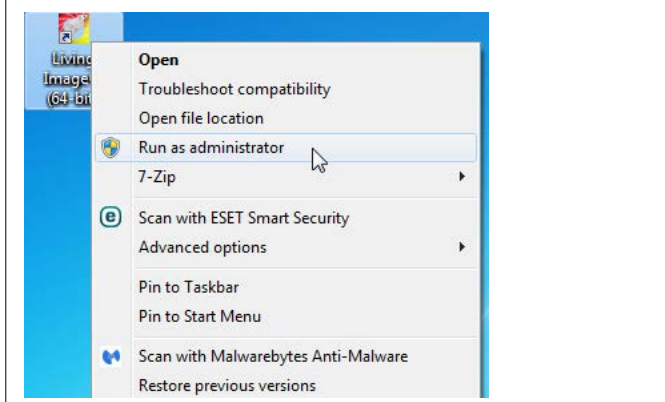
Starting Living Image Software as Administrator

1. Right-click the Living Image icon 🖼️ on the desk top and select "Run as administrator" on the shortcut menu.

Figure 3.10 Start Living Image Software as Administrator

2. After Living Image software opens, select **Help → License Information** on the menu bar.

3. Activate the license via the Internet using your 20-digit license serial number. See page 8 for instructions.

4. If Living Image software activates properly, you can change the Privilege Level:

   a. Right-click the Living Image icon 🖼️ on the desktop and select properties on the shortcut menu.

   b. Click the Compatibility tab in the dialog box that appears (Figure 3.11.

   c. Put a check mark next to "Run this program as an administrator". Click **Apply** and **OK**.

Figure 3.11 Living Image Properties – Compatibility Tab