

LabVIEW™ Release Notes

Version 8.0

These release notes contain installation and uninstallation instructions for LabVIEW, system requirements for the LabVIEW software, and known issues with LabVIEW 8.0.

If you are a new user, complete the exercises in the *Getting Started with LabVIEW* manual to familiarize yourself with the LabVIEW environment.

If you are upgrading from a previous version of LabVIEW, read the *LabVIEW Upgrade Notes* included with the upgrade package before you continue with this installation. You must consider several issues before you convert VIs for use in LabVIEW 8.0.

Read the *System Requirements* section of this document before you install LabVIEW and then follow the instructions in the *Installing LabVIEW 8.0* section. After you install LabVIEW, read the *Where to Go from Here* section for information about getting started with LabVIEW.

Contents

| | |
|---|----|
| System Requirements..... | 2 |
| Installing LabVIEW 8.0..... | 6 |
| Windows..... | 6 |
| Mac OS..... | 6 |
| Linux..... | 7 |
| Installing LabVIEW Add-Ons..... | 8 |
| Licensing..... | 9 |
| Access to LabVIEW is Dependent Upon License Activation..... | 9 |
| Single-Seat and Multi-Seat Licensing..... | 10 |
| Licensing for Libraries, Modules, and Toolkits..... | 10 |
| Installing and Configuring Hardware..... | 10 |
| Windows..... | 11 |
| Mac OS and Linux..... | 11 |
| Where to Go from Here..... | 11 |
| Common LabVIEW Launch Errors on Linux..... | 12 |
| Known Issues with LabVIEW 8.0..... | 12 |

System Requirements

Table 1 describes the system requirements you need to run LabVIEW 8.0.

Table 1. System Requirements for LabVIEW 8.0

| Platform | Media and System Requirements | Important Notes |
|---------------|--|--|
| All platforms | <p>LabVIEW requires a minimum of 256 MB of RAM, but National Instruments recommends 512 MB of RAM.</p> <p>LabVIEW requires a screen resolution of 1,024 × 768 pixels.</p> <p>When you deploy an application you build, the LabVIEW Run-Time Engine requires a minimum of 64 MB of RAM and a screen resolution of 800 × 600 pixels for applications that require a screen, but National Instruments recommends 256 MB of RAM and a screen resolution of 1,024 × 768 pixels.</p> | <p>LabVIEW and the <i>LabVIEW Help</i> contain 16-bit color graphics.</p> <p>LabVIEW requires a minimum color palette setting of 256 colors, but National Instruments recommends 16-bit color or higher.</p> <p>You must have Adobe Reader 5.0.5 or later to view PDF versions of all LabVIEW manuals. You must have Adobe Reader with Search and Accessibility 6.x or later to search the PDFs.</p> <p>(Mac OS) You must have Adobe Reader with Search and Accessibility 6.x or later to view and search the PDFs.</p> <p>LabVIEW uses a directory for storing temporary files. National Instruments recommends that you have several megabytes of disk space available for this temporary directory. You can view or change the temporary directory by selecting Tools» Options and selecting Paths from the Category list. If LabVIEW aborts unexpectedly, it can leave files in the temporary directory. Remove old files from this directory to free disk space.</p> <p>(Windows) The default temporary directory is the system temporary directory, such as C:\Documents and Settings\User\Local Settings\Temp.</p> <p>(Mac OS) The default temporary directory is \tmp\501\Temporary Items, where 501 is a unique number for each login.</p> <p>(Linux) The default temporary directory is /tmp.</p> |

Table 1. System Requirements for LabVIEW 8.0 (Continued)

| Platform | Media and System Requirements | Important Notes |
|-----------------------------------|---|--|
| <p>Windows 2000/XP/XP x64</p> | <p>LabVIEW requires a minimum of a Pentium III or greater or Celeron 866 MHz or equivalent processor, but National Instruments recommends a Pentium 4/M or equivalent processor. National Instruments recommends that you have at least 900 MB of disk space for the minimum LabVIEW installation or 1.2 GB disk space for the complete LabVIEW installation.</p> <p>When you deploy an application you build, the LabVIEW Run-Time Engine requires a minimum of a Pentium 200 MHz or equivalent processor, but National Instruments recommends a Pentium III or greater or Celeron 600 MHz or equivalent processor. The LabVIEW Run-Time Engine requires at least 80 MB of disk space, but National Instruments recommends 580 MB of disk space if you install the device drivers from the National Instruments Device Drivers CD.</p> | <p>LabVIEW does not support Windows NT/Me/98/95.</p> <p>Current NI driver support for XP x64 is limited.</p> <p>To use the <i>LabVIEW Help</i> and the NI Example Finder, you must have Microsoft Internet Explorer 5.0 or later.</p> <p>To view and control a front panel remotely using Internet Explorer, National Instruments recommends that you have Internet Explorer 5.5 Service Pack 2 or later.</p> <p>To use Windows Explorer to display or modify the contents of .11b files, you must have Internet Explorer 5.5 Service Pack 1 or later.</p> <p>You must have the .NET Framework 1.1 Service Pack 1 or later to use .NET functions and applications.</p> |

Table 1. System Requirements for LabVIEW 8.0 (Continued)

| Platform | Media and System Requirements | Important Notes |
|-----------------|---|--|
| Mac OS | LabVIEW requires Mac OS X 10.3 or later. LabVIEW requires a minimum of a G3 processor, but National Instruments recommends a G4 or greater processor. National Instruments recommends that you have at least 500 MB of disk space for the minimum LabVIEW installation or 600 MB disk space for the complete LabVIEW installation. | National Instruments recommends that you use Safari 1.0 or later or Firefox 1.0.2 or later to view the <i>LabVIEW Help</i> . |

Table 1. System Requirements for LabVIEW 8.0 (Continued)

| Platform | Media and System Requirements | Important Notes |
|-----------------|--|---|
| Linux | <p>LabVIEW requires an X Window System server, such as OpenWindows, CDE, or X11R6.</p> <p>National Instruments recommends that you have at least 400 MB of disk space for the minimum LabVIEW installation or 550 MB disk space for the complete LabVIEW installation.</p> <p>LabVIEW runs on Linux for Intel x86 processors with kernel version 2.2.x, 2.4.x, or 2.6.x. LabVIEW requires a minimum of a Pentium III or Celeron 866 MHz or equivalent processor, but National Instruments recommends a Pentium 4/M or equivalent processor.</p> <p>LabVIEW runs on Red Hat Enterprise Linux WS 3 or later, MandrakeLinux/Mandriva 10.0 or later, and SuSE Linux 9.1 or later.</p> <p>LabVIEW can run without hardware driver support on any other distributions that provide GNU C Library (glibc, also known as lib.c.so.6) Version 2.2.4 or later.</p> | <p>LabVIEW does not require a specific graphical user interface (GUI) such as Motif or OpenLook because LabVIEW uses <code>xlib</code> to create its own GUI.</p> <p>National Instruments recommends that you use Netscape 6.0 or later, Mozilla 1.2 or later, or Firefox 1.0.2 or later to view the <i>LabVIEW Help</i>.</p> <p>LabVIEW requires GNU C Library Version 2.2.4 or later. Most Linux vendors offer an updated <code>glibc rpm</code> for most Linux distributions on their Web sites so you do not have to upgrade the entire system.</p> |

Installing LabVIEW 8.0

Refer to the KnowledgeBase at ni.com if you encounter errors during installation.

Windows

Complete the following steps to install LabVIEW for Windows.

1. Disable any automatic virus detection programs before you install. Some virus detection programs interfere with the installation program.
2. Log on as an administrator or as a user with administrator privileges.
3. Insert the LabVIEW 8.0 installation CD and follow the instructions that appear on the screen. You first are prompted to install LabVIEW, and then the directions on the screen help you to activate your LabVIEW license.
4. After installation, enable any virus detection programs you disabled.
5. (Optional) Install LabVIEW add-ons. Refer to the [Installing LabVIEW Add-Ons](#) section of this document for more information.
6. (Optional) Install and configure National Instruments hardware. Refer to the [Installing and Configuring Hardware](#) section of this document for more information.

To modify the current LabVIEW installation or to uninstall LabVIEW 8.0, select **National Instruments Software** in the Add/Remove Programs applet in the Control Panel. When you modify the installation, a list of National Instruments software appears. Select a product in the list to add or remove individual components or to uninstall the product. Select multiple products to remove by pressing the <Shift> or <Ctrl> key while you select them. Click the **Uninstall** button to remove all the products you selected.

Mac OS

Complete the following steps to install LabVIEW for Mac OS.

1. Disable any automatic virus detection programs before you install. Some virus detection programs interfere with the installation program.
2. Insert the LabVIEW 8.0 installation CD.
3. Run the appropriate installation program.

The following types of installations of LabVIEW 8.0 are available:

- **Easy Installation**—Installs all LabVIEW 8.0 files, including LabVIEW, NI-488.2 drivers, and NI-VISA drivers.
- **Custom Installation**—If you select this option, you select the files to install. To select a custom installation, click the **Customize**

button on the **Installation Type** page. You must select the **LabVIEW 8.0 Core** component to install the core set of LabVIEW files necessary for running LabVIEW 8.0.

4. Follow the instructions that appear on the screen.
5. After installation, enable any virus detection programs you disabled.
6. (Optional) Install LabVIEW add-ons. Refer to the [Installing LabVIEW Add-Ons](#) section of this document for more information.
7. (Optional) Install and configure National Instruments hardware. Refer to the [Installing and Configuring Hardware](#) section of this document for more information.

You cannot install LabVIEW into a non-default location, but you can move the `labview` directory after you install. If you move the `labview` directory to a non-default location, LabVIEW does not uninstall and remove the directory unless you move the `labview` directory back to the default location.

To uninstall LabVIEW 8.0, run the `Uninstall.sh` shell script file from a Terminal shell. Save important files to another location before uninstalling LabVIEW 8.0.

Linux

Complete the following steps to install LabVIEW for Linux.

1. Log into the system as `root`.
2. Insert the LabVIEW 8.0 installation CD. Use `mount /mnt/cdrom` to mount the CD. On some systems, the CD mounts automatically.
3. To change the current directory to the mounted CD, enter the following command:

```
cd /mnt/cdrom
```
4. To run the installation script, enter the following command:

```
sh ./INSTALL
```
5. (Optional) Install LabVIEW add-ons. Refer to the [Installing LabVIEW Add-Ons](#) section of this document for more information.
6. (Optional) Install and configure National Instruments hardware. Refer to the [Installing and Configuring Hardware](#) section of this document for more information.

The `INSTALL` script prompts you to enter the directory where you want to install LabVIEW, which is typically `/usr/local`. The script also optionally runs the installation scripts for the NI-VISA and NI-488.2 drivers. The `INSTALL` script uses `rpm` to install on systems that support the `.rpm` format or to extract the `rpm` archives directly on other systems. You

also can install the files manually by using `rpm`—or a GUI `rpm`-based install tool—on Red Hat or other `rpm`-based systems or on systems without `rpm`, by using the utilities in the `bin` directory on the LabVIEW installation CD.

If you installed Netscape or Mozilla in the default location, the LabVIEW installation program automatically installs the browser plug-in so you can view and control front panels remotely using a Web browser. Otherwise, you can install the browser plug-in manually by installing the LabVIEW Run-Time Engine and then copying `/usr/local/lib/LabVIEW-8.0/LV80NPlugin.so` to the browser plug-in directory such as `/usr/lib/netscape/plugins`, `/usr/lib/mozilla/plugins`, or `/opt/SUNWns/plugins`.

Refer to the `readme.html` document in `/mnt/cdrom/linux` for custom installation instructions and other information.

Refer to the [Common LabVIEW Launch Errors on Linux](#) section of this document if you encounter errors when you launch LabVIEW after installation.

Installing LabVIEW Add-Ons

You can purchase several add-on software toolkits and modules for developing specialized applications. All the add-ons integrate seamlessly in LabVIEW.

After you install LabVIEW 8.0, complete the following steps to install LabVIEW add-ons.

1. Restart the computer.
2. Disable any automatic virus detection programs before you install. Some virus detection programs interfere with the installation program.
3. Insert the LabVIEW module or toolkit installation CD and follow the instructions that appear on the screen.
4. After installation, enable any virus detection programs you disabled.



Note LabVIEW 8.0 might not support add-ons designed for previous versions of LabVIEW.

Refer to the *LabVIEW Help* and to the National Instruments Web site at ni.com/toolkits for more information about National Instruments add-ons. Refer to the specific add-on documentation for more information about installation procedures.

Licensing

(Windows) LabVIEW relies on licensing activation. You must activate a valid LabVIEW license before you can run LabVIEW. To activate LabVIEW, use the serial number you received as part of your installation package. You can activate the LabVIEW license in any of the following ways:

- During installation, enter the serial number and select to run the **Activation Wizard** at the end of installation.
- After you launch LabVIEW in evaluation mode, select **Activate** in the **Activation Startup** dialog box.
- While running LabVIEW in evaluation mode, select **Help»Activate LabVIEW**. The license activation does not take effect until you restart LabVIEW.

If you did not activate LabVIEW during installation, you are prompted to activate LabVIEW when you initially launch LabVIEW. You no longer see this prompt once you activate the LabVIEW license. Any activation failures leave LabVIEW in evaluation mode until the 30-day evaluation period expires.

Access to LabVIEW is Dependent Upon License Activation

For all VIs or libraries that do not have a valid license specific to the version of LabVIEW that you purchased, you cannot perform the following:

- Accessing or printing the block diagram.
- Editing the front panel or block diagram.
- Running the VI.
- Running parent VIs which use the VI as a subVI.
- Saving the VI to a previous version of LabVIEW or using **Save As**.
- Completing a Diff operation.

If you open a VI while LabVIEW is in evaluation mode, you cannot perform the following:

- Accessing or printing the block diagram.
- Editing the front panel or block diagram.

If you run LabVIEW in evaluation mode and then purchase and activate a LabVIEW license for the LabVIEW Base Package, any VIs that are exclusive to the Professional Development System or Full Development System versions of LabVIEW break. Parent VIs that use these VIs as subVIs also break. Similarly, if you run LabVIEW in evaluation mode and then purchase and activate a LabVIEW license for the LabVIEW Full

Development System, any VIs that are exclusive to the Professional Development System version of LabVIEW break. Parent VIs that use these VIs as subVIs also break. Licensing errors appear in the **Error list** window.

Single-Seat and Multi-Seat Licensing

LabVIEW supports both single-seat and multi-seat licenses. Single-seat licensing is the use of LabVIEW on one computer. Multi-seat, or volume, licensing is the use of LabVIEW on more than one computer. Each machine using LabVIEW must have a valid license from a license server. Refer to the National Instruments Web site at ni.com/license for more information.

Licensing for Libraries, Modules, and Toolkits

The PDA Module is a licensed product and must be licensed and activated separately from LabVIEW. The Remote Panel Server, which is included in the LabVIEW Full and Professional Development Systems, also is licensed separately, but additional seats can be purchased.

Installing and Configuring Hardware

After you install LabVIEW software and activate the appropriate licenses, you can install the drivers you need to use National Instruments hardware. All National Instruments devices include the drivers and other software you need to use the device. The National Instruments Device Drivers CD includes the drivers and other software you need to use all National Instruments hardware. The drivers packaged with LabVIEW and those packaged with the devices might be different versions. Always use the latest available drivers that support the devices in your system. If you are using NI-DAQ 7.0 or later, refer to the *NI-DAQ Readme* for more information about which driver version to use with the devices in your system.



Note National Instruments periodically updates device drivers. Refer to the National Instruments Web site at ni.com/info and enter the info code `exyc6h` to download the latest drivers.

(Windows) Use the Measurement & Automation Explorer (MAX) or the Add/Remove Programs applet in the Control Panel to find the version number of an installed driver.

Configure National Instruments hardware after you install the drivers for those devices.

Windows

Use MAX to confirm that the device is recognized, to configure accessories and device settings, and to run test panels to test device functionality, such as the ability to acquire and generate signals. Launch MAX by selecting **Start»All Programs»National Instruments»Measurement & Automation** or by double-clicking the **Measurement & Automation** icon on the desktop. If you are using NI-DAQ 7.4 or earlier, refer to the *DAQ Quick Start Guide for NI-DAQ 7.x* for information about using MAX to configure DAQ devices. If you are using NI-DAQ 7.5 or later, refer to the *DAQ Getting Started Guide*.

The way you configure virtual channels depends on whether you are using Traditional NI-DAQ (Legacy) or NI-DAQmx. Refer to the *LabVIEW Help* for information about configuring channels for Traditional NI-DAQ (Legacy) or configuring channels or tasks for NI-DAQmx.

Mac OS and Linux

The LabVIEW installation program prompts you to choose the NI-488.2 driver for the GPIB interface you are using.



Note LabVIEW does not support the GPIB-1014 series (VME) devices or the original GPIB-SCSI box. LabVIEW does support the GPIB-SCSI-A box.

The installation program then installs that driver automatically.

Where to Go from Here

Refer to the *LabVIEW Help* for information about LabVIEW programming concepts, step-by-step instructions for using LabVIEW, and reference information about LabVIEW VIs, functions, palettes, menus, and tools. The *LabVIEW Help* also lists the LabVIEW documentation resources available from National Instruments. Access the *LabVIEW Help* by selecting **Help»Search the LabVIEW Help**.

Common LabVIEW Launch Errors on Linux

The following table lists common errors that might occur when you launch LabVIEW for Linux.

| Error | Possible Cause and Solution |
|---|--|
| xlib: connection to :0.0 refused by server | Possible Cause —You are trying to run LabVIEW as a user who does not have permission to open a window on the display server. You typically receive these errors after you run the <code>su</code> command to temporarily become a different user, such as <code>root</code> (superuser). Solution —Exit the <code>su</code> command and launch LabVIEW as the login user or use the <code>xhost</code> or <code>xauth</code> commands to grant permission to open a window on the display server. |
| client is not authorized to connect to server | |
| internal error during connection authorization check | |

Refer to the National Instruments Web site at ni.com/support for information about other errors that might occur when you launch LabVIEW for Linux.

Known Issues with LabVIEW 8.0

If you have Windows XP Service Pack 2 installed, a **Security Alert** dialog box appears when you launch LabVIEW or the NI Example Finder for the first time. If you select the **Keep blocking this program** option, the LabVIEW VI Server, LabVIEW Web Server, and any server written in LabVIEW cannot accept incoming connections from a remote computer. Select the **Unblock this program, despite the security risk** option to configure your computer to launch LabVIEW without any changes in functionality. Refer to the KnowledgeBase at ni.com for more information about correcting this problem.

The NI Publish-Subscribe Protocol (NI-PSP) networking technology is incompatible with the Windows XP Service Pack 2 firewall. You must disable this firewall for networking to function correctly. Refer to the National Instruments Web site at ni.com/info and enter the info code `exnj38` for more information about the firewall.

LabVIEW 8.0 is not compatible with NI TestStand 3.1 and earlier. Refer to the National Instruments Web site at ni.com/info and enter the info code `exd8yy` to access the Upgrade Advisor and download NI TestStand 3.5 or later.

(Linux) Creating a new project might generate an error if you use Fedora Core 3 or Fedora Core 4 with SELinux. Use the Update Agent to install the latest selinux-policy-targeted package to correct this error.

Refer to the `readme.html` file in the `labview` directory for more information about known issues with LabVIEW 8.0 and for clarifications and additions to the LabVIEW documentation.

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