

## RELEASE NOTES

# Academic Software Solutions

May 2004

Thank you for purchasing this department, college/faculty, or campus license of National Instruments software. Please read this document to familiarize yourself with the contents of your license.

The CD software set includes the following:

- LabVIEW Professional Development System (PDS) 7.1 for Windows
- LabVIEW PDS 7.1 for Mac OS
- LabVIEW PDS 7.1 for UNIX (**Solaris**)
- LabVIEW PDS 7.1 for Linux
- LabVIEW PDS 7.0 Japanese for Windows
- LabVIEW PDS 7.0 French for Windows
- LabVIEW PDS 7.0 German for Windows
- LabVIEW 7.1 Real-Time Module (ETS) for Windows
- LabVIEW 7.1 Real-Time Module (RTX) for Windows
- LabVIEW Simulation Module 1.0
- LabVIEW 7.1 PDA Module for Palm
- LabVIEW 7.1 PDA Module for Pocket PC
- LabVIEW 7.1 FPGA Module
- LabVIEW 7.1 Datalogging and Supervisory Control Module
- Measurement Studio 7.0
- LabWindows™/CVI™ Full Development System (FDS) 7.0 for Windows
- IMAQ Vision Development Module for LabVIEW, version 7.0
- DIAdem Standard Edition 9.0
- Toolkit Software CD for Windows—Refer to the *Toolkit Software CD* section of these release notes for more information about the included software tools.

- Toolkit Software CD for Mac OS—Refer to the *Toolkit Software CD* section of these release notes for more information about the included software tools.
- MATRIXx 7.1
- Device Drivers CD set
- LabVIEW Basics Interactive Training

## Changes Since Fall 2003 Release

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The following products have been added or updated since the last Academic Software Solutions release:

- LabVIEW 7.1 PDS English for all platforms
- LabVIEW 7.1 Datalogging Supervisory Control Module
- LabVIEW 7.1 Real-Time Module (ETS) for Windows
- LabVIEW 7.1 Real-Time Module (RTX) for Windows
- LabVIEW 7.1 FPGA Module
- LabVIEW Simulation Module 1.0
- LabVIEW System Identification Toolkit 1.0
- LabVIEW Control Design Toolkit 1.0
- LabVIEW Simulation Interface Toolkit 2.0
- LabVIEW Sound and Vibration Toolkit 3.1
- LabVIEW DSP Test for TIDSP Toolkit 2.0
- LabVIEW Internet Toolkit 6.0
- LabVIEW 7.1 PDA Module for Palm
- LabVIEW 7.1 PDA Module for Pocket PC
- LabVIEW Modulation Toolkit 2.0
- LabVIEW Report Generation Toolkit for Microsoft Office 1.1
- LabVIEW Enterprise Connectivity Toolkit 6.0
- MATRIXx 7.1
- DIAdem Standard Edition 9.0
- Device Drivers CD set

# Documentation

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This package includes printed sets of LabVIEW English manuals. Documentation for LabVIEW, LabWindows/CVI, and Measurement Studio add-on software is included on CD. Also, you can download all product manuals from [ni.com/manuals](http://ni.com/manuals) at no additional cost. You can purchase localized LabVIEW manuals for French, German, and Japanese by contacting the NI branch office in your area.

## LabVIEW Training Resources

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Refer to the following resources to learn more about National Instruments products, including LabVIEW:

- LabVIEW Basics I Interactive CD set (**included**)—A self-paced multimedia course that teaches you the fundamentals of LabVIEW programming in the learning environment of your choice. Basics I features hands-on exercises, step-by-step instructions, and an interactive user interface that merges video, audio, animated illustrations, and text. You can review or skip lessons to suit your level of expertise and learning style. This CD set is regularly sold for (U.S.) \$495.
- LabVIEW Basics II Interactive CD (**not included**)—This advanced course teaches you how to plan and build a large application, design an efficient and effective user interface, create block diagrams that are easier to understand, and improve the execution speed of a VI. As an educator you can receive a 25% discount on this product. Please contact your local branch office to purchase this CD (part number 777863-01).
- Hands-on training courses—Course attendees use actual NI hardware and software in a hands-on learning environment. The instructors are trained engineers who can answer questions and help guide your efforts. NI offers training in topics such as data acquisition, real-time control, motion and vision systems, and advanced programming. NI offers discounted pricing for academic customers. Refer to [ni.com/training](http://ni.com/training) for more information about these courses.

# Academic Resources CD

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The Academic Software Solutions software set also includes a CD with a comprehensive collection of the following reference materials for use in academia:

- **Measurement and Automation Experiments**—The Measurement and Automation Experiments Library contains experiments written by educators from around the world that demonstrate the use of NI products. Every experiment is free to download, easy to modify, and includes a complete equipment list, set up instructions, LabVIEW VIs, a list of references used by the author, and a student portion with objectives, theory, lab procedure, and more.
- **Distance learning resources**—View online tutorials, live experiments, white papers, and how-to guides at [ni.com/academic](http://ni.com/academic) that teach you how to use remote laboratories with LabVIEW. Refer to the free online tutorial to learn how to use the LabVIEW remote panels feature to develop and launch a remote laboratory using the Internet. Download white papers for an in-depth analysis of remote laboratory issues. Finally, for a demonstration, log on to any of the live experiments and control the LabVIEW program using your Web browser.
- **Pre-written course manuals**—The professor-developed course manuals are useful in teaching mechanical and electrical engineering, physics, and industrial technology classes. The manuals provide a complete description of the experiments and LabVIEW VIs that control the experiment.
- **Customer solutions**—NI has developed a library of customer success stories that demonstrates the benefits of computer-based tools in science and engineering education. A two-page solution gives you a brief introduction to the application and the benefit of your colleague's experience. This library also provides contact information so you can request additional information from the author.

The Academic Resources CD also includes information about special academic products, a guide to measurement and automation reference books, and other resources. Refer to [ni.com/academic](http://ni.com/academic) for more information about academic resources.

# Product Configurators

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Refer to the following resources to help design your systems:

- DAQ Designer—This interactive configuration advisor assists you in selecting the appropriate data acquisition products for your application. This utility also recommends any special signal conditioning, such as filtering, isolation, and amplification, needed for accurate measurements.
- Instrupedia CD—Instrupedia is an encyclopedia of instrumentation offerings from NI. This CD contains the NI *Measurement and Automation Catalog*, Technical Notes, Application Notes, and customer solutions.

## Serial Numbers

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You can find your serial number on the Certificate of Ownership card. Use this serial number when installing all software in your package. Fill out the card and return it to NI. NI uses the name that you provide for future updates if you have a maintenance agreement.

## Software Activation

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Multiple software products included in the Software Solutions library require activation. You will need to activate on each computer you intend to use the software.

Multiple methods exist for activation. When you launch the product after installation, a splash screen alerts you that activation is required to use the full version of the software, as well as the steps necessary for activation. If you cannot activate immediately, the software runs in evaluation mode.

For more information on software activation, refer to the software activation documentation included with the license, or visit [ni.com/license](http://ni.com/license).

# Deployment Licenses for LabVIEW Real-Time Module

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A LabVIEW Real-Time deployment license is required when targeting a LabVIEW Real-Time application to any National Instruments supported real time operating system (RTOS). The deployment license is already included with all NI FP-20xx, NI cFP-20xx, NI CVS-145x, NI PCI-7041, and NI RT Series PXI embedded controllers, but additional deployment licenses are required for every RTX or ETS targeted computer.

For more information on LabVIEW Real-Time deployment licenses, visit [ni.com/realtime](http://ni.com/realtime).

## LabVIEW Student Edition

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NI and Prentice Hall are pleased to announce the availability of LabVIEW 7 Express Student Edition, which allows students to use this powerful engineering software at home. LabVIEW 7 Express Student Edition includes *Learning with LabVIEW*, by Dr. Robert H. Bishop of the University of Texas at Austin.

LabVIEW 7 Express Student Edition allows instructors to assign LabVIEW homework. Students can then take the VIs they partially developed in the classroom and work on them at home.

Instructors can visit the LabVIEW Student Edition Web site at [ni.com/labviewse](http://ni.com/labviewse) to request a complimentary copy of LabVIEW Student Edition.

## Toolkit Software CD

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The Toolkit Software CDs for Windows and Mac OS include additional software for LabVIEW, LabWindows/CVI, and Measurement Studio. Run the setup program from the appropriate directory to install your add-on software. Each directory includes documentation in PDF format. You can download Adobe Acrobat Reader from the Adobe Web site at [www.adobe.com](http://www.adobe.com).



**Note** If you need toolkits for UNIX or Linux, please contact your nearest NI branch office.

Table 1 describes the software included for use with LabVIEW.

**Table 1.** LabVIEW Toolkits

<b>Software</b>	<b>Components</b>
LabVIEW Enterprise Connectivity Toolset	Internet Tools 6.0 Database Tools 1.0.1* Statistical Process Control Tools 5.0
LabVIEW Signal Processing Toolset*	Digital Filter Design Tools 7.0.1 Joint Time Frequency Analysis Tools 7.0.1 Wavelet and Filter Bank Design Tools 7.0.1 Super-Resolution Spectral Analysis Tools 7.0.1
LabVIEW PID Control Toolset	PID Tools 6.0 Fuzzy Logic Tools 6.0
LabVIEW Modulation Toolkit 2.0*	—
LabVIEW System Identification Toolkit 1.0*	—
LabVIEW Control Design Toolkit 1.0*	—
LabVIEW Sound and Vibration Toolset 3.1*	—
LabVIEW Report Generation Toolset for Microsoft Office 1.1*	—
LabVIEW Order Analysis Toolset 2.0*	—
LabVIEW Simulation Interface Toolkit 2.0*	—
LabVIEW DSP Test Integration Toolkit for TI DSP 2.0*	—
LabVIEW Express VI Development Toolkit 1.0	—
LabVIEW State Diagram Toolkit 1.0	—
LabVIEW Math Interface Toolkit 1.0*	—
* Windows only	

Table 2 describes the software included for use with LabWindows/CVI.

**Table 2.** LabWindows/CVI Toolkits

Software	Components
LabWindows/CVI Enterprise Connectivity Toolset for Windows	Internet Tools 1.0.1 SQL Toolkit 2.0.6 Statistical Process Control Tools 1.1.1
LabWindows/CVI PID Toolset	PID Tools version 1.1
LabWindows/CVI Signal Processing Toolset for Windows	Digital Filter Design Tools 7.0.1 Joint Time Frequency Analysis Tools 7.0.1 Wavelet and Filter Bank Design Tools 7.0.1 Super-Resolution Spectral Analysis Tools 7.0.1

Table 3 describes the software included for use with Measurement Studio.

**Table 3.** Measurement Studio Toolkits

Software	Components
Automation Symbols 1.0	—
Autotuning PID Tools 1.0	—

