# LabVIEW Anwender Treffen

Was ist neu in LabVIEW 2014

### Marcel Krenz

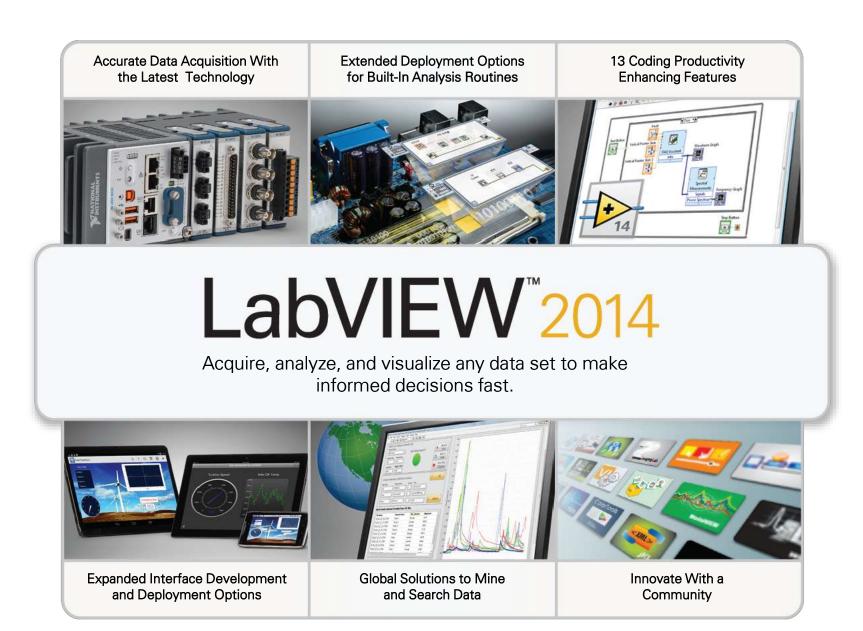
#### http://www.fhi-berlin.mpg.de/pc/labview

06.11.2014



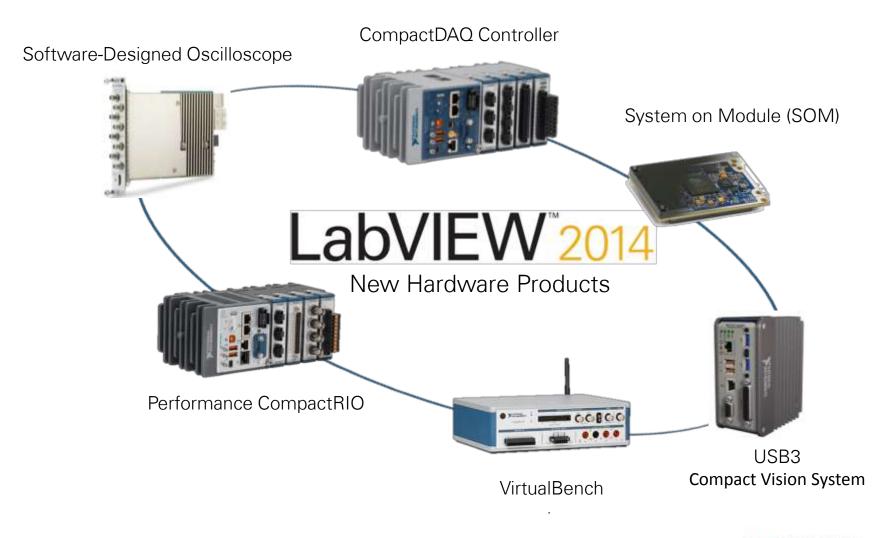
Fritz-Haber Institute, Berlin







# Unrivaled Integration With the Latest Technology





### Simplified Connection to Real-Time Targets

### Connect With USB

New NI Linux Real-Time targets use Ethernet over USB to connect to the host computer



e Edit View Touts Help			
🛄 My System 🍓 Remote Systems	🕐 Restart 🖬 🚃 🤗 Refresh	👔 🧕 Set Permissions 🛥 Log In	e? Show Hel
> 🖬 HL-cRIO-9967-03027866	Network Adapters		
	🔪 Ethernet Adapter eti	h0 (Primary)	
	Adepter Mode	TCP/IP Network	
	MAC Address	00:80:2F(02:7B:08	
	Configure 1Pv4 Address	OHCP or Link Local	•]
	IPv4 Address	10.2.228.62	
	Subnet Mask	255.255.255.0	
	Gateway	10.2.228.1	
	DNS Server	130.164.12.8	
	More Settings		
	🖌 Ethernet Adapter eth	hL	
	Adapter Mode	TCP/IP Network	<b>.</b> ]
	MAC Address	00:80:2F:12:7B:08	
	Configure IPv4 Address	DHCP or Link Local	-3
	IPv4 Address	0.0.0.0	
	Subnet Mask	0.0.0.0	
	Gateway	0.0.0.0	
	DNS Server	0.0.0.0	
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	Cthernet Adapter us	60	
	Adapter Mode	TCP/3P Network	
	MAC Address	08:80:27:22:78:09	
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	🗃 System Settings 👹 Network Se	ettings 📆 Time Settings 🍞 Help	/ ·
		- Cannected - Running	







### Value Added to Existing LabVIEW Editions

### Full Edition

Make advanced control applications through included PID and Fuzzy Logic palettes

### Professional Edition

- VI Analyzer Toolkit
- Unit Test Framework Toolkit
- Desktop Execution Trace Toolkit
- Database Connectivity Toolkit
- Report Generation Toolkit

#### LabVIEW Base Edition

- Graphical development environment
- Drag-and-drop UI libraries
- PC-based data acquisition

#### LabVIEW Full Edition

- LabVIEW Base Edition plus:
- 950+ built-in analysis libraries
- Core edition for add-ons

#### LabVIEW Professional Edition LabVIEW Full Edition plus:

- Building and distributing EXEs
- Unit testing and code validation
- Source code control integration



### New Taskbar Icon

- Easily differentiate between LabVIEW versions
- Suggested by 500+ <u>Idea Exchange</u> kudos

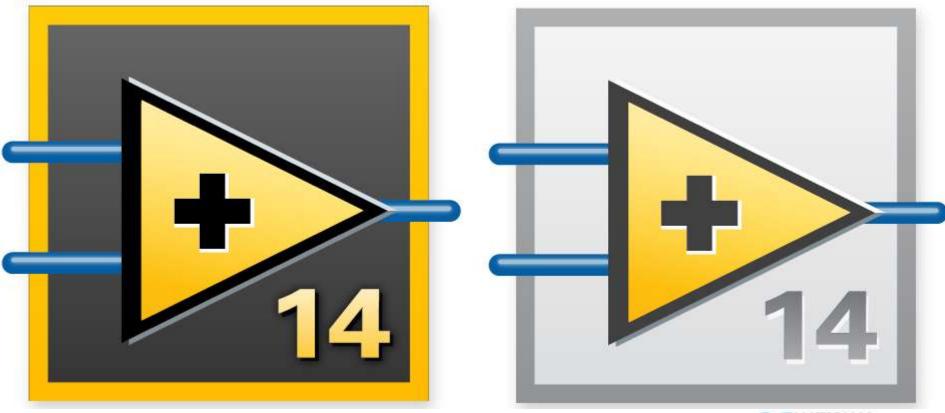






## 32-bit

### 64-bit





# LabVIEW 2014

## What's New in LabVIEW 2014

Kellis Garrett Wiseman

NI Field Sales Engineer



ni.com

### Troubleshoot Faster With Guided Error Debugging

Why do I get Error 43 when using the

Primary Software: LabVIEW Development Systems>>LabVIEW Professional Development System

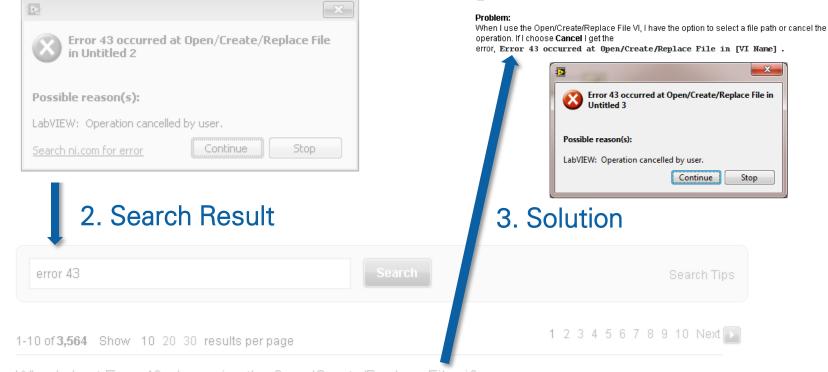
Secondary Software: LabVIEW Development Systems>>LabVIEW Full Development System

**Open/Create/Replace File VI?** 

Primary Software Version: 8.2 Primary Software Fixed Version: N/A

Embedded resource links

### 1. Error Dialog



I get Error 43 when using the Open/Create/Replace File.vi? Primary Software: LabVIEW Development Systems>>LabVIEW... following error, ...



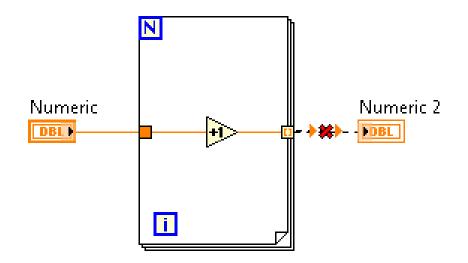
х

Stop



Automatic shift register creation

For Loops output arrays by default





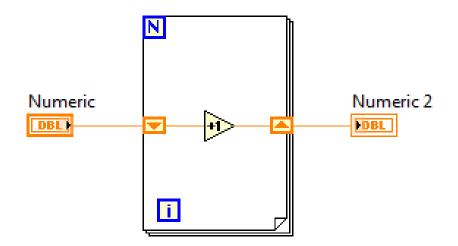


ni.com



Automatic shift register creation

- For Loops output arrays by default
- Context-sensitive to wired outputs
- Shift register creation matches logical flow

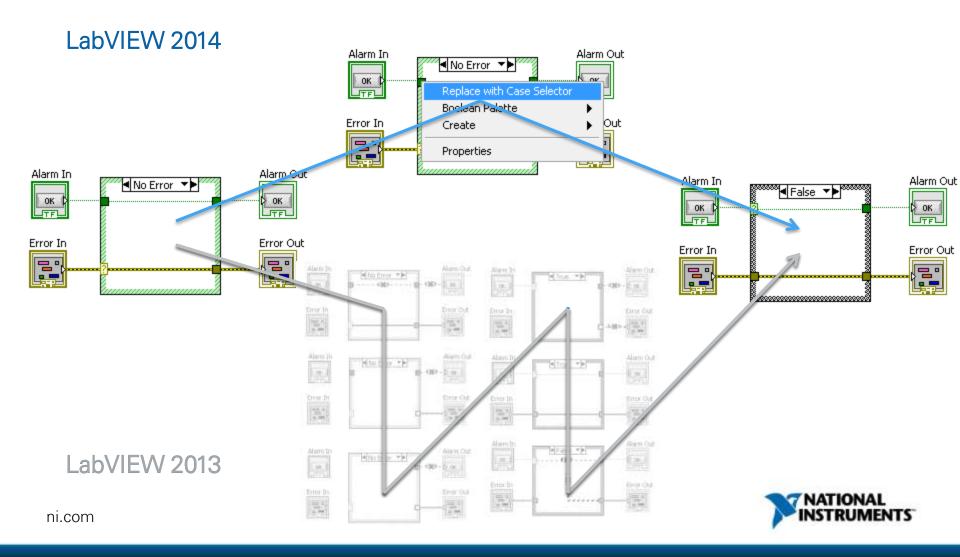






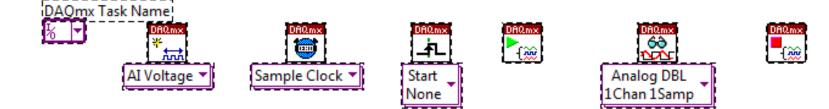


Replace case structure tunnel with selector

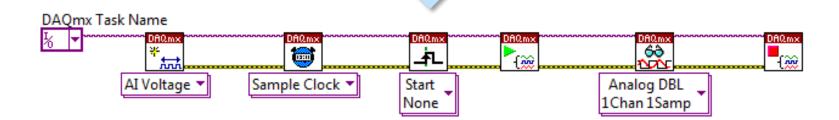




Auto-Wire Quick Drop shortcut



<*Ctrl-Space>* 





### Data Dashboard for LabVIEW 2.2

Wind Speed

Historical Strain

Bridge Health

Calibration

10.0.136.132

Warning'

10.0.136.132 Connect to new server.

#### <u>Multiplot</u>

Data Dashboard now supports 2D array of numerics as a data type for charts and graphs

#### **Alternate Servers**

Now you can set up one dashboard to monitor multiple targets and use the drop-down menu to switch where the data is streaming from while the dashboard is running

#### Android Tablets

Data Dashboard on Android tablets now supports monitoring and control applications and free canvas customizations

#### **Transparency**

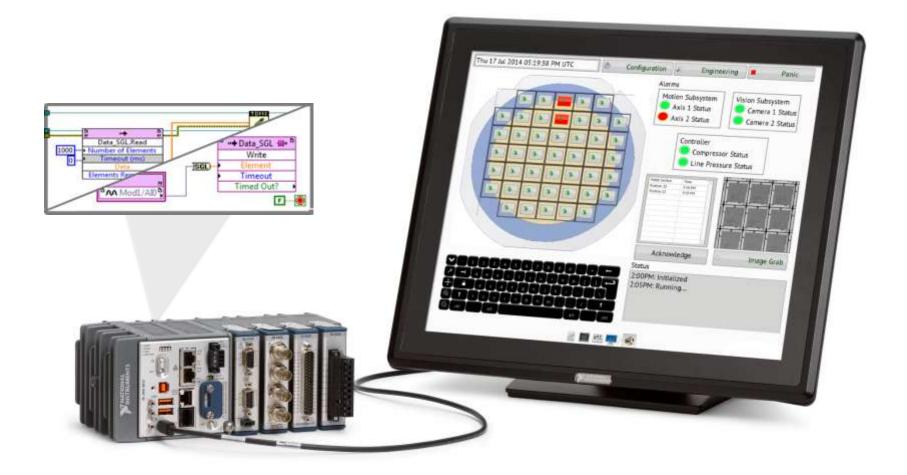
Adjust the transparency of images, controls, and \_\_\_\_\_ indicators on your dashboard



ni.com

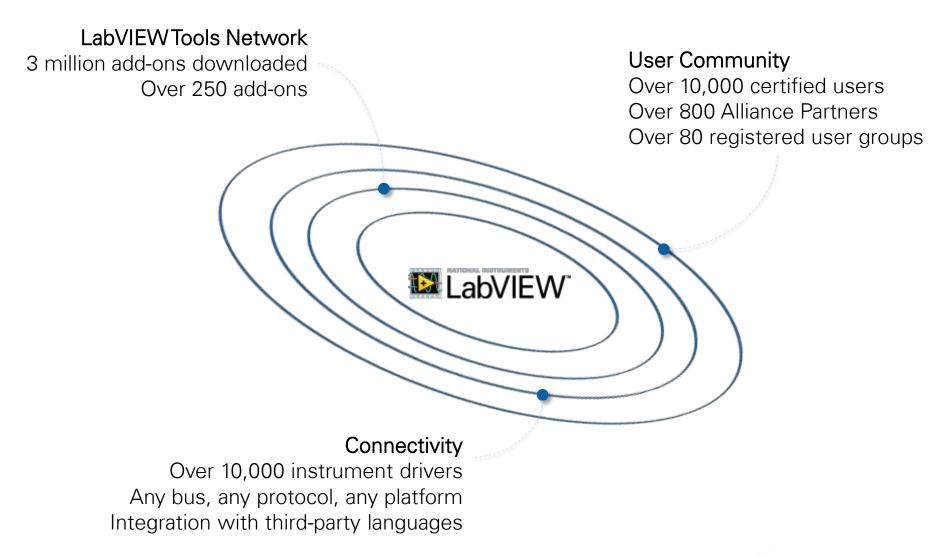
# LabVIEW 2014 Real-Time With Embedded UI

Simplify system complexity by implementing a local HMI on CompactRIO





### Growing LabVIEW Ecosystem







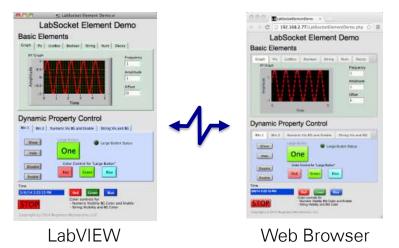


### LabSocket by Bergmans Mechatronics

LabVIEW

New on the LabVIEW Tools Network

- Automatically creates interactive HTML5 interfaces from LabVIEW front panels
- Access on any modern mobile or desktop browser



Download evaluation at ni.com/labviewtools/labsocket



ni.com

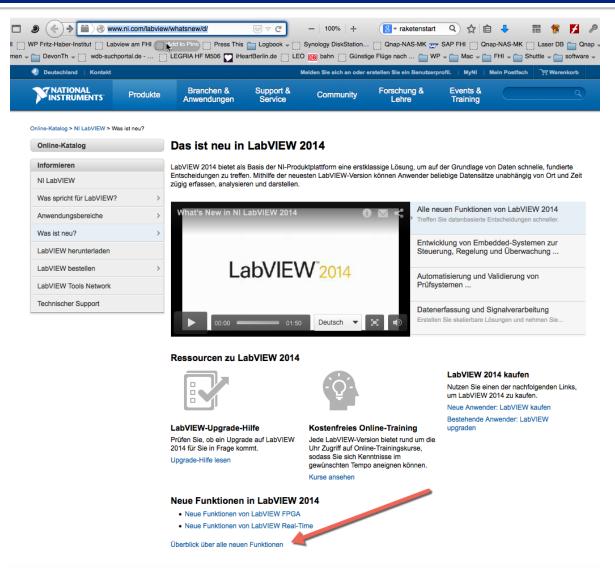
### http://labsocket.com



#### Labview am FHI



Das war nur eine Auswahl an Änderungen, Die vollständige Liste befindet sich auf:



http://zone.ni.com/reference/de-XX/help/371361L-0113/lvupgrade/labview\_features/