How to use the RsSpecAn Driver for R&S®Spectrum Analyzers and R&S®ESL EMI Test Receiver

Driver Documentation

Products:

|	R&S®FSV	|	R&S®FSL
|	R&S®FSVR	|	R&S®ESL
|	R&S®FSP	|	R&S®FSH4/8
|	R&S®FSU	|	R&S®FSC
|	R&S®FSQ	|	R&S®FSUP
|	R&S®FMU	|	R&S®FSMR
|	R&S®FSG		

How to use the LabVIEW, LabWindows/CVI and VXIplug&play Instrument Driver for C#, C/C++, Visual Basic .NET, VEE, etc.

Juergen Straub
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ROHDE&SCHWARZ

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1 LabVIEW

1.1 Getting Started

The LabVIEW drivers and examples can be downloaded from the Rohde & Schwarz download area of the website:

http://www2.rohde-schwarz.com/en/service_and_support/Downloads/Drivers/

In order to use this driver as a LabVIEW instrument driver please copy the contents of ZIP archive *rsspecan_lv<Version>_<Revision>.zip* into your LabVIEW directory (*C:\Program Files\National Instruments\LabVIEW<Version>*). After restarting your LabVIEW development environment the driver will then be directly accessible from the Instrument Driver function palette menu.
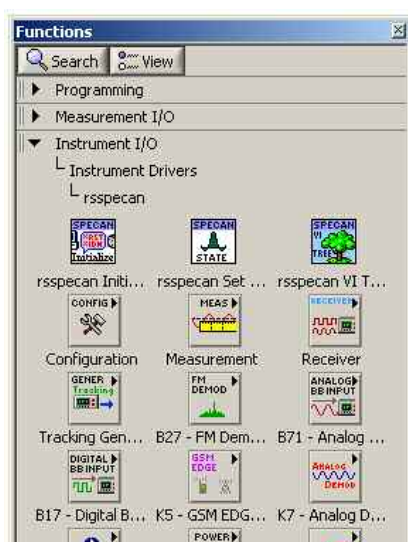

Figure 1: Path to LabVIEW instrument driver in the function palette of the Block Diagram

1.2 LabVIEW Settings

For optimal usage please turn off "*Synchronize with directory*" feature on Instrument Drivers palette before installing any Rohde & Schwarz LabVIEW driver. If this feature is turned on, it overwrites driver's palette files with its own.

LabVIEW 8.2 and higher
Turn off "*Synchronize with directory*" feature:
    Tools => Advanced => Edit palette set. Then find "Instrument I/O" palette

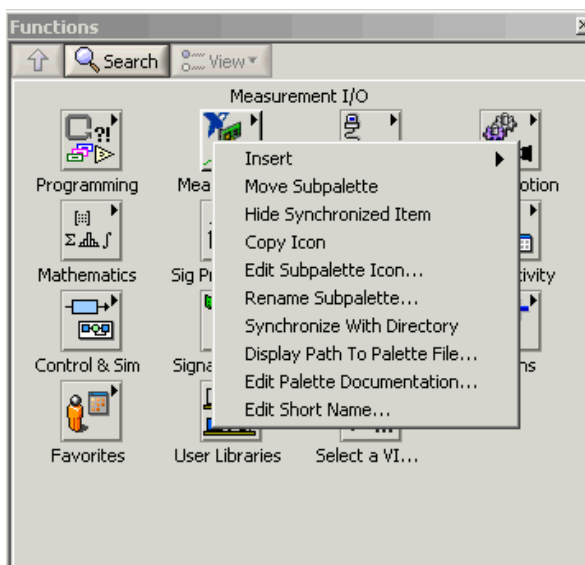Right click on it and clear checkbox besides Synchronize with directory in context menu and save the changes.

Figure 2: Turn off "Synchronize with directory" feature in LabView 8.x

1.3 Additional Help

In addition the instrument driver documentation is included in compressed the HTML format (Windows CHM help file) and stored together with the LabVIEW driver sources. Each VIs help is linked to the section in the help file that describes all the features of the VI.

An additional help topic can be accessed directly by pressing "*Click here for more help*" in the Context Help of LabVIEW.

1.4 LabVIEW 8.2 and higher

Please use the LabVIEW 8.2 driver.

1.5 How to use the attribute-based Instrument Driver in LabVIEW

How to use attributes is described here: 1MA170: Introduction to Attribute Based Instrument Drivers. For further information please consult 1MA153: Development Hints and Best Practices for Using Instrument Drivers.

2 LabWindows/CVI

2.1 Getting Started

The LabWindows/CVI drivers and examples can be downloaded from the Rohde & Schwarz download area of the website:

http://www2.rohde-schwarz.com/en/service_and_support/Downloads/Drivers/

In order to be able to compile an application it is required to add following files to your LabWindows/CVI project:

- *rsspecan.c*
- *rsspecan.h*
- *rsspecan.fp*
- *rsspecan_attributes.c*
- *rsspecan_attributes.h*
- *rsspecan_callbacks.c*
- *rsspecan_utility.h*
- *rsspecan_utility.c*
- *rsidr_core.c*
- *rsidr_core.h*

To be able to use feature of a specific personality, as well the corresponding source code is needed to add to the LabWindows/CVI project (e.g. *rsspecan_<Personality>.c*).

2.2 LabWindows/CVI Version

Use National Instruments LabWindows/CVI 6 or later.

2.3 Additional Help

The LabWindows/CVI instrument driver consists of a ZIP archive containing the driver sources. In addition the instrument driver documentation is also included in compressed HTML format (Windows CHM help file) and stored together with the driver sources.

2.4 How to use the attribute based Instrument Driver in LabWindows/CVI

How to use attributes is described here: [1MA170: Introduction to Attribute Based Instrument Drivers](#).

VXIplug&play Instrument Driver for C#, C/C++, Visual Basic .NET, VEE, etc.

Getting Started

3 VXIplug&play Instrument Driver for C#, C/C++, Visual Basic .NET, VEE, etc.

3.1 Getting Started

The VXIplug&play instrument driver and examples can be downloaded from the Rohde & Schwarz download area of the website:

http://www2.rohde-schwarz.com/en/service_and_support/Downloads/Drivers/

3.1.1 C#

A wrapper is necessary to enable a direct access to the driver DLL. The *rsspecan.cs* or *rsspecan64.cs* wrapper for C# is automatically installed in the *~VXIPnP\WinNT\include* or *~VXIpnp64\Win64\rsspecan* directory.

3.1.1.1 How to use the attribute-based Instrument Driver in C#

How to use attributes is described here: 1MA170: Introduction to Attribute Based Instrument Drivers

3.1.2 Visual Basic .NET

A wrapper is necessary to enable a direct access to the driver DLL. The *rsspecan.vb* or *rsspecan64.vb* wrapper for .NET is automatically installed in the *~VXIpnp\WinNT\include* or *~VXIpnp64\Win64\rsspecan* directory.

3.1.3 Agilent VEE Version

Please use Agilent VEE Version 6 or later. Please note that the browsing for attributes is not possible in Agilent VEE due to a bug in Agilent VEE.

3.2 Additional Help

In addition the instrument driver documentation is also included in compressed HTML format (Windows CHM help file) and stored together with the driver sources in the *~VXIpnp\WinNT\rsspecan* or *~VXIpnp64\Win64\rsspecan* directory.

4 Linux and Mac OS X

Drivers for Linux and Mac OS X are available. For further information please consult 1MA153: Development Hints and Best Practices for Using Instrument Drivers.

About Rohde & Schwarz

Rohde & Schwarz is an independent group of companies specializing in electronics. It is a leading supplier of solutions in the fields of test and measurement, broadcasting, radiomonitoring and radiolocation, as well as secure communications. Established more than 75 years ago, Rohde & Schwarz has a global presence and a dedicated service network in over 70 countries. Company headquarters are in Munich, Germany.

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- Continuous improvement in environmental sustainability
- ISO 14001-certified environmental management system

Certified Quality System
ISO 9001

Regional contact

Europe, Africa, Middle East
+49 89 4129 12345
customersupport@rohde-schwarz.com

North America
1-888-TEST-RSA (1-888-837-8772)
customer.support@rsa.rohde-schwarz.com

Latin America
+1-410-910-7988
customersupport.la@rohde-schwarz.com

Asia/Pacific
+65 65 13 04 88
customersupport.asia@rohde-schwarz.com