

How to use the Rohde & Schwarz VXIplug&play Instrument Drivers

Driver Documentation

Getting started guide for Rohde & Schwarz attribute based VXIplug&play instrument drivers.

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

1.1 How to use the attribute based Instrument Driver

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

1.2 Getting Started

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

<http://www.rohde-schwarz.com/drivers>

1.2.1 Visual C#

A wrapper is necessary to enable a direct access to the driver DLL. The *rs<Driver>.cs* and *rs<Driver>64.cs* wrapper for C# is automatically installed in the corresponding *~VXIpnP\WinNT\include* or *~VXIpnP64\Win64\include* directory.

1.2.2 Visual Basic .NET

A wrapper is necessary to enable a direct access to the driver DLL. The *rs<Driver>.vb* and *rs<Driver>64.vb* wrapper for VB.NET is automatically installed in the corresponding *~VXIpnP\WinNT\include* or *~VXIpnP64\Win64\include* directory.

1.2.3 Agilent VEE Version

Please use Agilent VEE Version 6 or later. Please note that the using attributes is not possible in Agilent VEE.

How to instrument drivers is described here: [1MA35: Rohde & Schwarz Drivers under VEE - Installation and Troubleshooting](#).

1.3 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 `~VXIppp\WinNT\rs<Driver>` or in the `~VXIppp64\Win64\rs<Driver>` directory on 64 bit Windows systems¹.

¹ Only for instrument drivers supporting 64 bit applications.

2 Linux Instrument Drivers

Due to the fact that Linux is becoming more and more popular as a desktop operating system, Rohde & Schwarz supports instrument drivers for Linux distributions.

This section gives a brief overview of how to get started with Rohde & Schwarz instruments drivers on a Linux operating system.

2.1 Supported Distributions

Rohde & Schwarz instrument drivers are based on the VISA standard and are compatible with the ANSI-C99 standard². National Instruments VISA installation package, which is crucial for using Rohde & Schwarz instrument drivers, is currently (07/2010, NI-VISA 4.5.1) supporting³ the following distributions:

- Red Hat Enterprise Linux WS 4
- Red Hat Enterprise Linux Desktop + Workstation 5
- Mandriva Linux 2008
- Mandriva Linux 2009
- openSUSE 10.3
- openSUSE 11.0

Rohde & Schwarz supports these distributions as well.

2.2 How to View Compressed HTML Help Files (chm)

On Linux operating systems many viewers for compressed HTML help files are available, for instance:

KDE desktop environment:

In the KDE environment the *kchmviewer*⁴ is available.

² For further information please visit <http://www.open-std.org/JTC1/SC22/WG14/www/docs/n1256.pdf>

³ For latest updates please visit <http://www.ni.com/visa/>

⁴ Available under <http://www.kchmviewer.net/>

2.3 Getting started with C/C++

Visit your instrument's driver site to download the *rs<Driver>-linux-<Version>.tar.gz* (Linux Instrument Driver) *tar* file. Then extract the *tar* file and follow the instructions given in the *README* file.

3 Mac OS X Instrument Drivers

Due to the fact that Mac OS X is becoming more and more popular as an operating system, Rohde & Schwarz supports instrument drivers for this platform.

This section gives a brief overview of how to get started with Rohde & Schwarz instruments drivers on a Mac OS X operating system.

Currently the Mac OS X Snow Leopard (10.6.x) and later versions are supported. National Instruments VISA installation package, which is crucial for using Rohde & Schwarz instrument drivers.

3.1 How to View Compressed HTML Help Files (chm)

On Mac OS X operating systems several viewers for compressed HTML help files are available, for instance *Chmox*⁵.

3.2 How to Install Rohde & Schwarz Instrument Drivers

Getting started with C/C++:

Visit your instrument's driver site to download the *rs<Driver>-osx-<Version>.zip* (Mac OS X Instrument Driver) *zip* file. Then extract the *zip* file and follow the instructions given in the *README* file.

⁵ Available under <http://chmox.sourceforge.net/>

4 Related Documents

- Application Note 1MA170: Introduction to Attribute Based Instrument Drivers <http://www.rohde-schwarz.com/appnote/1MA170.html>
- Application Note 1MA153: Development Hints and Best Practices for Using Instrument Drivers <http://www.rohde-schwarz.com/appnote/1MA153.html>
- Application Note 1MA35: Rohde & Schwarz Drivers under VEE - Installation and Troubleshooting <http://www.rohde-schwarz.com/appnote/1MA35.html>

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Environmental commitment

- Energy-efficient products
- Continuous improvement in environmental sustainability
- ISO 14001-certified environmental management system



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