



# R&S®VISA

## At a glance

R&S®VISA is a standardized software library that allows fast communications over diverse interfaces with a wide variety of T&M instruments that are detected in the network from PC applications. R&S®VISA also includes a trace tool that simultaneously monitors communications between multiple applications and T&M instruments and permits targeted analysis with the aid of efficient filters.

Maintained by the IVI Foundation<sup>1)</sup>, Virtual Instrument Software Architecture (VISA) is a multivendor, standardized I/O software interface for T&M instruments. Applications based on this interface remain flexible and fit for future requirements.

R&S®VISA supports the popular LAN protocols (HiSLIP, VXI-11) as well as USBTMC. Simple code examples show how to use both the VISA interface and specialized extensions from Rohde&Schwarz that permit, for example, automated searches for T&M instruments in the network via broadcast or mDNS (in line with the LXI standard).

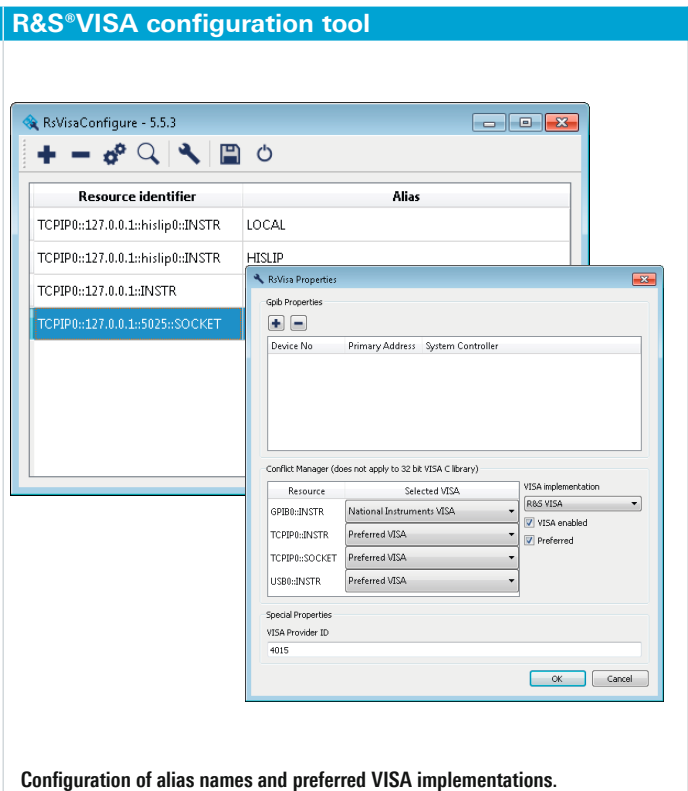
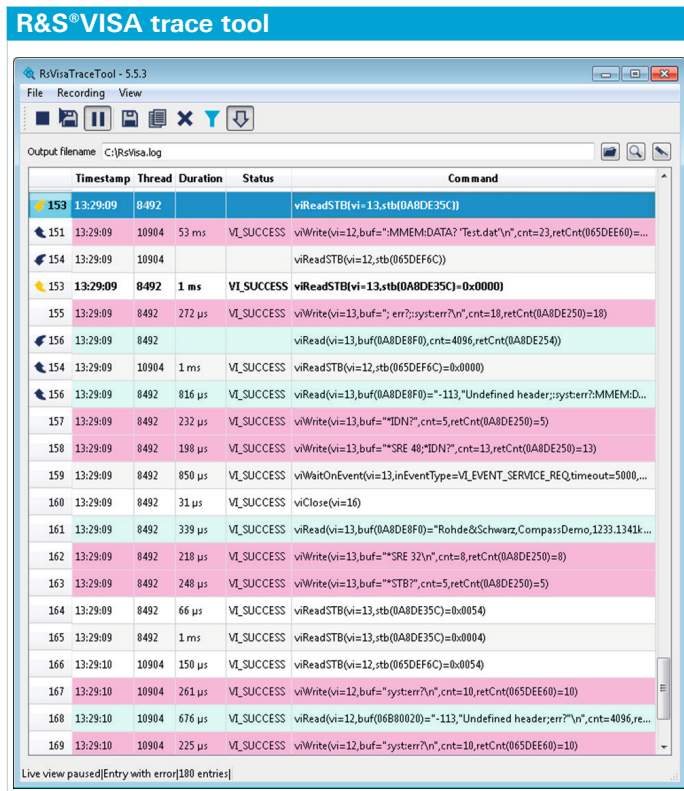
<sup>1)</sup> www.ivifoundation.org

The high-performance trace tool can be used to monitor communications between applications and T&M instruments. Efficient filters make it possible to analyze multiple processes simultaneously in different windows. Color coding speeds up debugging significantly.

R&S®VISA also includes a VISA tester. This permits manual testing of the individual VISA interface functions in addition to testing the performance and stability of the connections to the T&M instruments. The configuration tool makes it possible to set alias names and LAN addresses for frequently used T&M instruments in order to create customized test environments.

### Key facts

- Communications via TCP/IP (HiSLIP, VXI-11, RSIB, Raw Socket) and USBTMC
- Support for all Windows versions from XP Service Pack 2
- Available for 32-bit and 64-bit applications
- Switching between VISA implementations at runtime
- Integrated, automatable search algorithms for detecting T&M instruments in the network
- Efficient trace tool for communications analysis
- Compact, fast, free-of-charge



Configuration of alias names and preferred VISA implementations.

## Benefits and key features

### R&S®VISA trace tool

- ▮ Logs all communications between the R&S®VISA library and applications
- ▮ Long-term logging to file along with quick display of all VISA remote control commands
- ▮ Filters permit targeted monitoring of individual processes, threads or sessions
- ▮ Configurable color coding facilitates analysis
- ▮ Clear visual highlighting of VISA commands called simultaneously from different threads
- ▮ Reduction of a series of identical commands into a single log entry
- ▮ Automatic pause at VISA errors
- ▮ Multiple instances of R&S®VISA trace tool can be launched independently

### R&S®VISA tester

- ▮ Call of common VISA commands for a quick connection check
- ▮ Automated test sequences for testing the performance and reliability of a connection
- ▮ Query and definition of VISA attributes
- ▮ Support of VISA event and locking mechanism
- ▮ Switching between active VISA implementations at runtime
- ▮ Search for instruments in the network via mDNS and VXI-11

### R&S®VISA configuration tool

- ▮ Definition of alias names for resources
- ▮ Manual entry of LAN resources
- ▮ Configuration of VISA conflict manager: assignment of channels to VISA implementations

Download a free copy from [www.rohde-schwarz.com/rsvisa](http://www.rohde-schwarz.com/rsvisa).

**Automated search for LXI instruments.**

**Test application for quick connection check.**

## Service that adds value

- | Worldwide
- | Local and personalized
- | Customized and flexible
- | Uncompromising quality
- | Long-term dependability

## About Rohde & Schwarz

The Rohde & Schwarz electronics group offers innovative solutions in the following business fields: test and measurement, broadcast and media, secure communications, cybersecurity, radiomonitoring and radiolocation. Founded more than 80 years ago, this independent company has an extensive sales and service network and is present in more than 70 countries. The electronics group is among the world market leaders in its established business fields. The company is headquartered in Munich, Germany. It also has regional headquarters in Singapore and Columbia, Maryland, USA, to manage its operations in these regions.

## Sustainable product design

- | Environmental compatibility and eco-footprint
- | Energy efficiency and low emissions
- | Longevity and optimized total cost of ownership

Certified Quality Management

ISO 9001

Certified Environmental Management

ISO 14001

## Rohde & Schwarz GmbH & Co. KG

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