

R&S®VISA

Release Notes

Software Version 5.8.6



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This software makes use of several valuable open source software packages. For information, see the "Open Source Acknowledgment" (included in delivery).

The following abbreviations are used throughout this document: R&S®VISA is abbreviated as R&S VISA.

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1 Information on the Current Version and History

1.1 Release Version 5.8.6 (April 2018)

- Update of OSA (Open Source Acknowledgment)
- Support for Linux Ubuntu LTS 16.04 and LTS 18.04

1.2 Version 5.8.5 (April 2018)

- Support for Linux Ubuntu LTS 16.04
- Support of new attributes which allow querying information about devices found via LXI
- The *Find Resource* Dialog of the RsVisaTester shows now additional information about LXI devices

1.3 Version 5.8.2 (April 2017)

- Update of VISA Shared Components V 5.8.
- Support of resource class ASRL[board]::INSTR for serial devices (RS-232, Virtual USB Serial Ports)
- Attributes fixed: VI_ATTR_IO_PROT, VI_ATTR_DMA_ALLOW_EN, VI_ATTR_TCPIP_KEEPALIVE, and VI_ATTR_TCPIP_NODELAY

1.4 Version 5.7.0 (January 2017)

- Update of VISA Shared Components V 5.7.
- When connecting to a device the *RsVisaTester* now allows to set the mode parameter of the *viOpen* call.
- If for VXI-11 connections *retCnt* and *cnt* differ in the *viWrite* method the VISA does not return an IO Error anymore, but *VI_SUCCESS*
- Minor bugfixes

1.5 Version 5.5.6 (August 2016) – only for Mac OS

- The setup package file is digitally signed, such that it can be downloaded from the web and is trusted by the gatekeeper.
- Layout improvements of the resource string editor of the RsVisaConfigure Tool.
- Higher reliability of VXI-11 connections.

1.6 Version 5.5.5 (July 2016)

- Support for Mac OS.
- The RsVisaTraceTool displays the VISA resource string.
- Improvements of the RsVisaConfigure GUI.
- The VXI-11 Channel now supports the attributes *VI_ATTR_TCPIP_PORT*, *VI_ATTR_TCPIP_NODELAY*, and *VI_ATTR_TCPIP_KEEPAALIVE*.
- Potential memory corruption bugs in the RSIB and USBTMC channels are fixed.
- If *viRead* time-outs in the VXI-11 channel the VISA returns already received data.
- Minor bugfixes.

1.7 Version 5.5.4 (October 2015)

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 monitors communications between multiple applications and T&M instruments simultaneously and, with the aid of efficient filters, permits targeted analysis.

Core features are:

- 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, and free-of-charge under the R&S terms and conditions for royalty-free products

Besides the VISA library this product contains three utility applications:

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

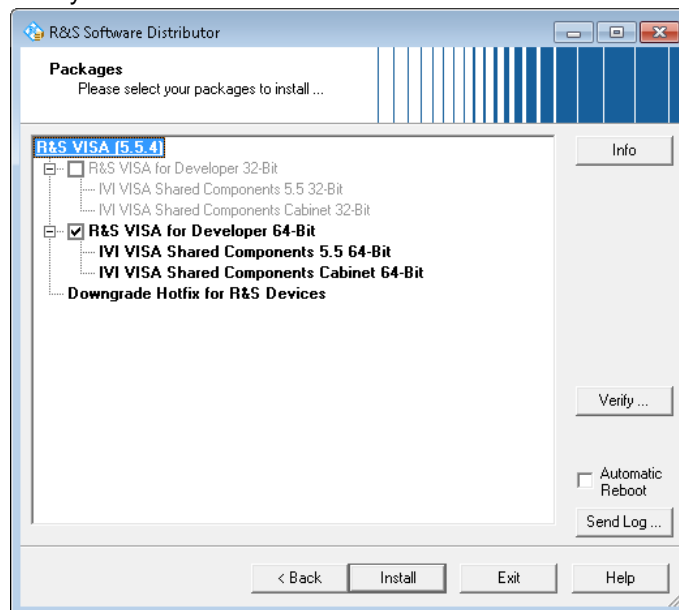
2 Installation on Microsoft Windows

2.1 System Requirements

Operating System: Microsoft Windows (XP with Service Pack 2 or later)

2.2 Installation Procedure

- 1) Start the Setup executable *SetupRsVisa<Version>.exe*
- 2) Click *Next*
- 3) Read the license agreement carefully. If you agree to the terms of the agreement click on "I accept the license agreement" and then click *Next*
- 4) Use the *Verify* button to verify that the setup executable is not compromised.
- 5) Depending on your system either only the 32-bit library or the 64-bit package are selectable for installation. Note that the 64-bit package contains the 32-bit VISA library as well.



If the IVI Shared Components are either not already available on your system or have a lower version number, this component is installed along with the R&S VISA. Click *Install* to start the installation of all required components.

- 6) If requested, read the license agreement of the IVI Shared Components carefully and accept these if you agree.
- 7) After a successful installation click *Exit* to finish the setup.

2.3 Uninstallation

Open the uninstall manager in the control panel. Select R&S VISA and click *Uninstall*. When uninstalling R&S VISA from your system all R&S VISA components are removed

along with all user settings (e.g. the resource identifier and alias list). The IVI Shared Components remain installed, but can be uninstalled separately.

2.4 Repair, Update and Downgrade

If a file of the R&S VISA is missing (e.g. by accidentally deleting it) rerun *SetupRsVisa<Version>.exe*. The missing files are copied to your system. The user settings are not modified.

To initiate the update or downgrade process run *SetupRsVisa<Version>.exe* of the newer or older version and follow the installation steps given above. All R&S VISA components are replaced by the components of the version being installed. The user settings are not modified. Note, the R&S VISA setup only updates and never downgrades the IVI Shared Components.

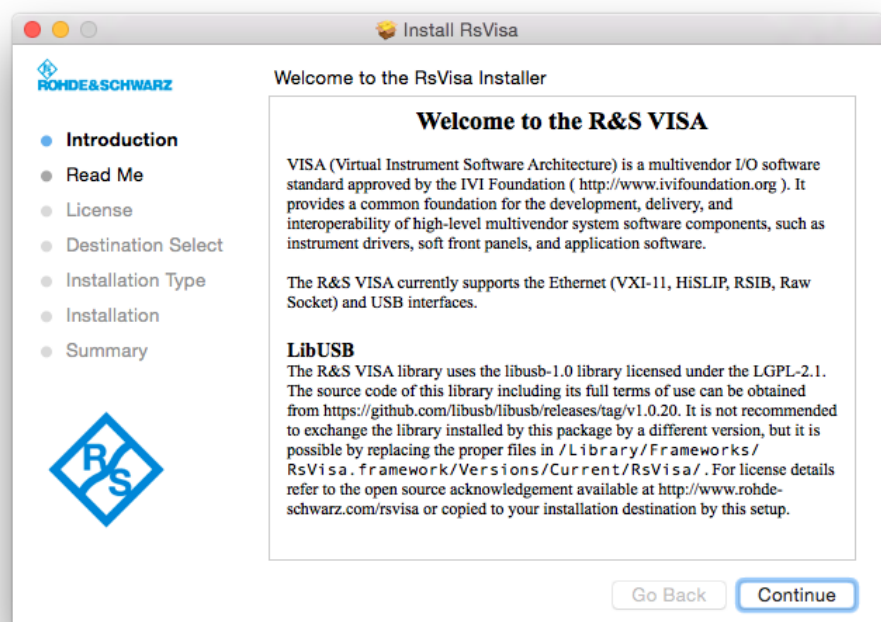
3 Installation on Mac

3.1 System Requirements

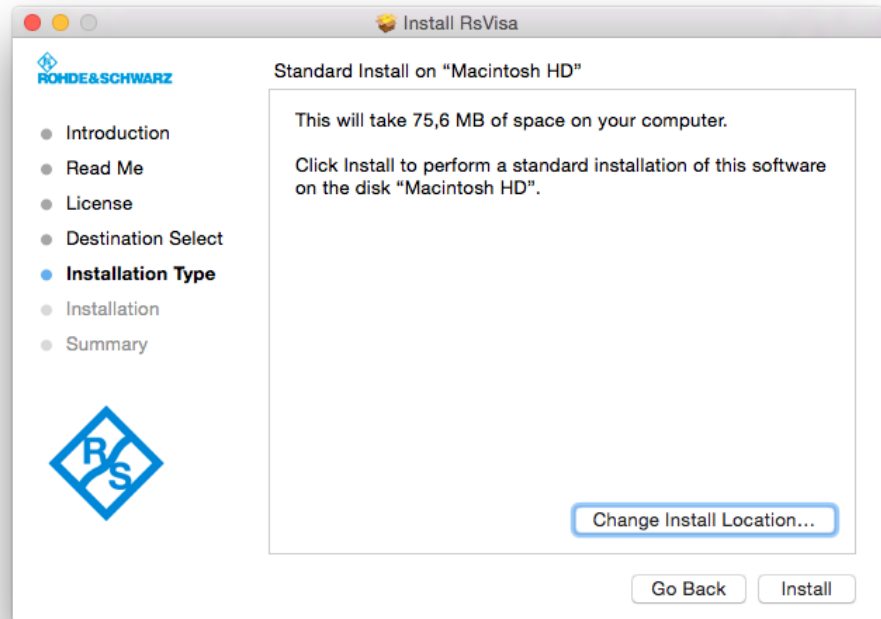
Operating System: Mac OS X (10.10 or later)

3.2 Installation Procedure

- 1) Start installer by double-clicking on package *rsvisa<Version>.pkg*



- 2) Read the first and second page of the installer to get an overview of VISA and recent changes. If needed, save the “Usage” information to a file for later access.
- 3) Read the license agreement carefully. If you comply, click “Continue” and “Agree”. If you do not comply either exit the installer or click “Continue” and “Disagree”.
- 4) Click install to start the installation. Note that you might be requested to enter the credentials of a privileged user to proceed with the installation.



5) Click "Close" to finish the installation.

3.3 Uninstallation

For convenience the R&S VISA provides an uninstall script which removes all R&S VISA related files from your hard drive. This file is located at `/Applications/Rohde-Schwarz/removeVisa.sh` and should be invoked with root privileges. In a terminal this can be achieved by the command `sudo /Applications/Rohde-Schwarz/removeVisa.sh`.

3.4 Repair, Update and Downgrade

If a file of the R&S VISA is missing (e.g. by accidentally deleting it) rerun the installation procedure as outlined above. The installer copies missing files to your system without modifying the user settings.

To up- or downgrade the R&S VISA run the installer of desired version as outlined above or in the release notes of the target version. The installer replaces all R&S VISA components by the components of the version being installed without modifying the user settings.

4 Installation on Ubuntu

4.1 System Requirements

(K-) Ubuntu Linux Operating System: 16.04 LTS

4.2 Installation Procedure

R&S VISA versions for Linux distributions are available for download. The packages constitute installable *.deb files which can be processed by the standard package tools dpkg.

To install the R&S VISA Ubuntu packages on your system invoke

```
$ sudo dpkg -i rsvisa_<version>-1_amd64.deb
```

This installs the R&S VISA library runtime, along with the tools and examples. The examples and the documentation are installed to `/usr/share/doc/rsvisa/`.

5 Customer Support

Technical support – where and when you need it

For quick, expert help with any Rohde & Schwarz equipment, contact one of our Customer Support Centers. A team of highly qualified engineers provides telephone support and will work with you to find a solution to your query on any aspect of the operation, programming or applications of Rohde & Schwarz equipment.

Up-to-date information and upgrades

To keep your instrument up-to-date and to be informed about new application notes related to your instrument, please send an e-mail to the Customer Support Center stating your instrument and your wish. We will take care that you will get the right information.

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