ROHDE&SCHWARZ

Test and
Measurement Division

Operating Manual

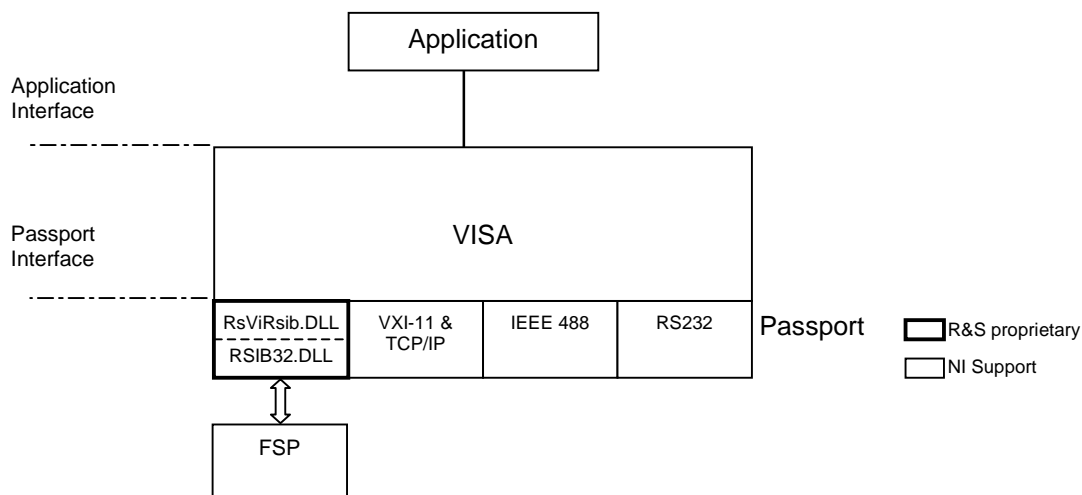# VISA RSIB PASSPORT

Contents

1 Overview

This overview shows how to control the instrument via the passport (RsViRsib.dll) which in turn requires the RSIB interface (Rsib32.dll).

2 Installation

Start **Setup.exe** on the installation CD. If NI-VISA has not been installed, setup is interrupted. To be VISA-conformal, use the recommended installation path.

The following requirements must be fulfilled:

- **NI – VISA 2.5** library or higher must be installed.
- The user must have administrator rights (Windows NT, Windows 2000).

The following files are contained in these directories:

- **RSIB32.dll** in the Windows system directory (e.g. C:\WinNT\System32).
- **RsViRsib.dll** passport Dll in the VISA Bin directory which may have the designation **C:\VXIpnp\WinNT\Bin** .
- **RsViRsib.ini** passport INI file in the VISA directory **C:\VXIpnp\WinNT** in the **…\RSIB** subdirectory.
- The entries below can be found under the registration database key **HKEY_LOCAL_MACHINE\SOFTWARE\National Instruments\NI-VISA for Windows 95/NT\CurrentVersion\IoLibraries\RsViRsib.dll**

    – LibraryDescription   VISA Library Passport for RSIB-INSTR V1.1

    – LibraryEnabled   0x00000001

    – LibraryPath   C:\VXIpnp\WinNT\Bin\RsViRsib.dll

3   Passport

R&S attributes

Besides the VISA attributes, the programmer may also use the Rohde & Schwarz attributes:

Attribute	Description
RS_ATTR_RSIB_VER	Passport version; formatting according to VPP 4.3; read only e.g. 0x00100100UL (1.1)
RS_ATTR_RSIB_SRE	Switches the unit to LOCAL (0) or REMOTE (1).
RS_ATTR_RSIB_LOC	Switches the unit temporarily to LOCAL (no transfer parameters!).

Header file "RsViRsib.h"

The header file contains all Rohde & Schwarz-specific attributes that are supported by the passport in addition to the VISA attributes. To address these attributes from a C program, simply insert the header file.

Events

Only the VI_EVENT_SERVICE_REQ and VI_EVENT_IO_COMPLETION events are supported.

Passport name

The instrument name is structured as follows:

Examples: RSIB::192.168.1.33::INSTR or RSIB::PC-ABC::INSTR

	Description
RSIB	passport prefix, passport type
::	separator
a.b.c.d	host address
PC-ABC	host name
::	separator
INSTR	resource type (instrument)

RsViRsib.ini file

This file lists all resources which can be read by means of the viFindRsrc() VISA function. It is contained in the installed directory under …\Rsib. If the passport cannot find the INI file in the installed directory, it searches also the standard VISA directory (e.g. C:\VXIpnp\WinNT) under …\Rsib. Entries in MAX or VISAIC are made only if resources are listed. The passport is nevertheless integrated so that the user can still start sessions.

Extract:

```
[RSIB-RSRC-ALIAS]
Name0 = "RSIB::192.168.1.33::INSTR"
Name1 = "RSIB::192.168.1.37::INSTR"
Name2 = "RSIB::PC-ABC::INSTR"
```

The TCP/IP address can be entered in decimal, octal or hexadecimal notation.