R&S®CDS
Campus Dashboard Software
Teaching software for multi-user student labs

ROHDE&SCHWARZ

R&S®CDS
Campus Dashboard Software
At a glance

The R&S®CDS campus dashboard software simplifies teaching of student groups in laboratories with multiple workbenches. It also provides access to many instrument functions and settings as well as firmware updates and screenshots.

Teaching large student groups in test and measurement laboratories can be difficult to manage. Especially in laboratories with many workbenches and different instruments, it is cumbersome to provide identical conditions for all students. Retrieving results from all students' instruments usually is a time-consuming task. At the same time, it is necessary to keep all instruments up-to-date with regular firmware updates.

With the R&S®CDS software, these tasks can be performed for multiple instruments simultaneously. It enables simple and time-efficient teaching of large student groups in laboratories with multiple test and measurement benches.

Operated from one central computer, the software automatically connects to supported instruments in the local network. It makes it possible to arrange the instruments on virtual benches that can be customized to match the

user's laboratory layout. The software also enables simultaneous firmware updates on multiple instruments with just a few clicks.

The R&S®CDS campus dashboard software remotely controls up to 300 individual instruments (oscilloscopes, spectrum analyzers, network analyzers and power supplies). With the software, the teacher sets identical conditions for all student benches, to save settings from one instrument and distribute these settings to all students, or to retrieve results of all students simultaneously. These operations require just a few clicks.

In addition, the teacher can remotely control the single instruments and execute various measurement functions using the software interface. This way, the software tremendously simplifies simultaneous lab training for student groups. It also streamlines regular maintenance of multiple instruments in laboratories with many workbenches by enabling simultaneous firmware updates on multiple instruments.

The R&S®CDS software is an ideal solution for easily managing and controlling large student laboratories from a single computer. Lab managers, tutors, students and professors equally benefit from its excellent usability, simplified workflows and automation capabilities.

Key facts
▎ Improve teaching routines in large student laboratories
▎ Control up to 300 individual test and measurement instruments from one workplace
▎ Train student efficiently on oscilloscopes, spectrum analyzers, network analyzers and power supplies
▎ Set identical conditions for all student benches
▎ Save settings from one instrument and distribute to all students
▎ Retrieve results of all students simultaneously
▎ Control various instrument functions, settings, firmware updates, screenshots

R&S®CDS Campus Dashboard Software

Benefits and key features

Efficient laboratory teaching for student groups
- Set identical conditions for all student benches
- Save settings from one instrument and distribute to all students
- Retrieve results of all students simultaneously
- Customize virtual benches to match the laboratory layout

Loading settings to multiple instruments makes it possible to load identical lessons onto several instruments. Taking screenshots from multiple instruments and collecting them with just a few clicks after a test increases efficiency for teaching and testing large student groups.

Remote control of up to 300 individual instruments
- R&S®RTC1000, R&S®RTB2000, R&S®RTM3000, R&S®RTA4000 oscilloscopes
- R&S®FSH, R&S®FSC, R&S®FPH, R&S®FPC1000, R&S®FPC1500 spectrum analyzers
- R&S®ZVH, R&S®ZPH network analyzers
- R&S®NGE100, R&S®NGE100B power supplies

Grouping several instruments into multiple virtual benches gives a clear overview of the laboratory in the software interface, including the status of each individual instrument. An automated search detects all supported instruments in the local network. Alternatively, an .xml list of individual instruments can be loaded into the software. Custom bench layouts match the software with the actual lab arrangement.

Perform remote measurements
- Remote control of various instrument functions
- Direct access to hardkey functions and software features
- Graphical user interface for easy operation via live view

Measurement functions of each configured instrument can be executed using the R&S®CDS campus dashboard software. With a GUI that matches the control layout of the selected instrument, the software can be intuitively operated. This simplifies measurement tasks and enables individual training of students.
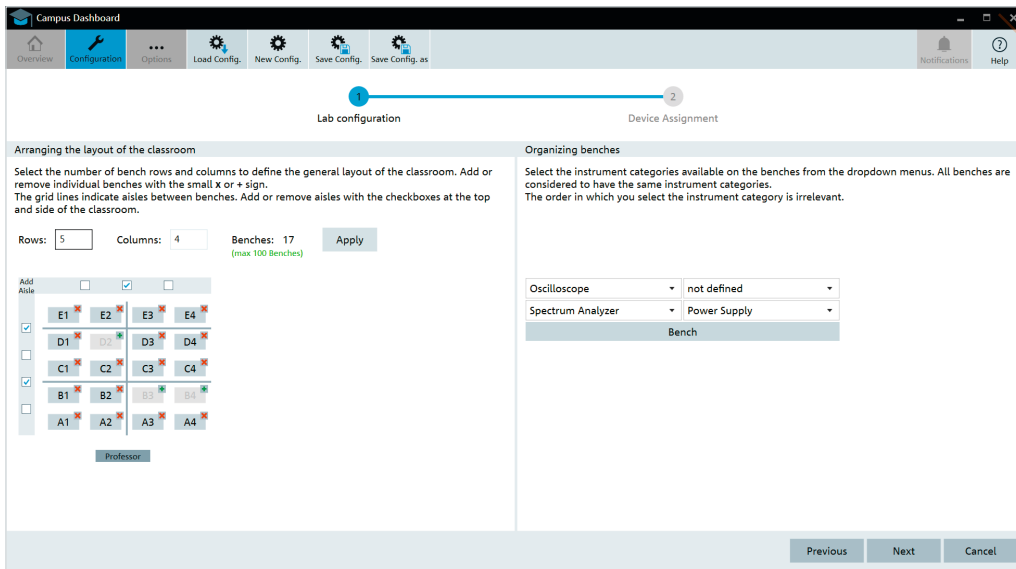
The R&S®CDS campus dashboard software enables simple and time-efficient teaching in multi-user student laboratories
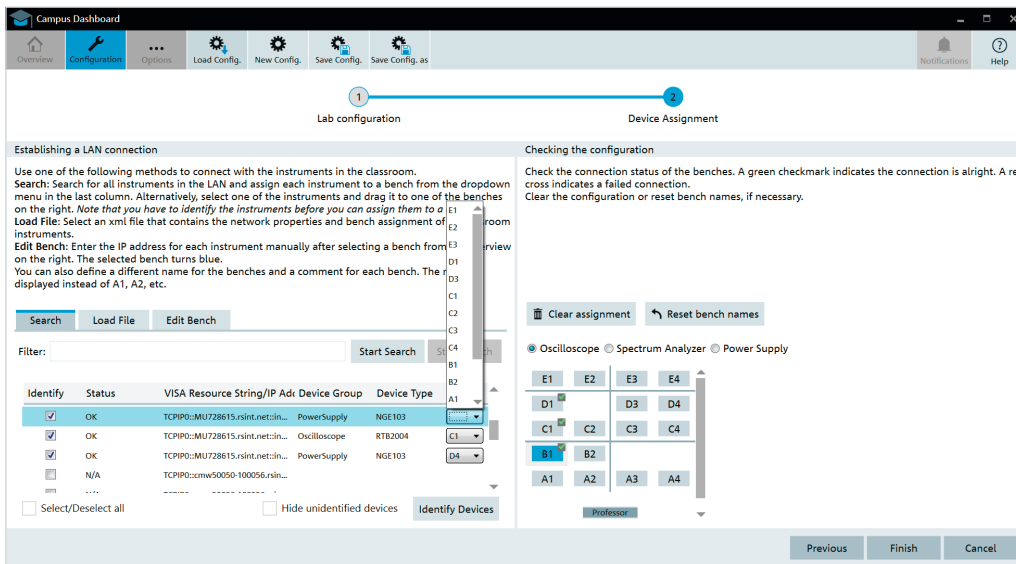
Match software layout to your lab arrangement and organize individual benches with up to four instruments each

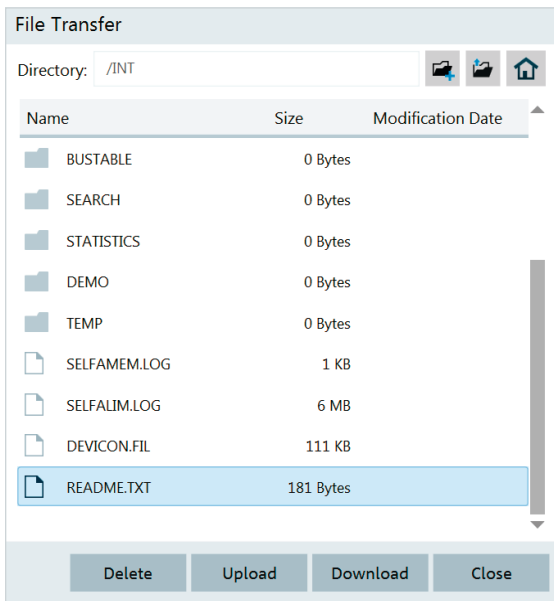Search supported instruments in your local network; drag&drop instruments onto individual benches

View all instruments on one bench on your computer screen using the R&S®CDS campus dashboard software; the software also supports remote control of each instrument
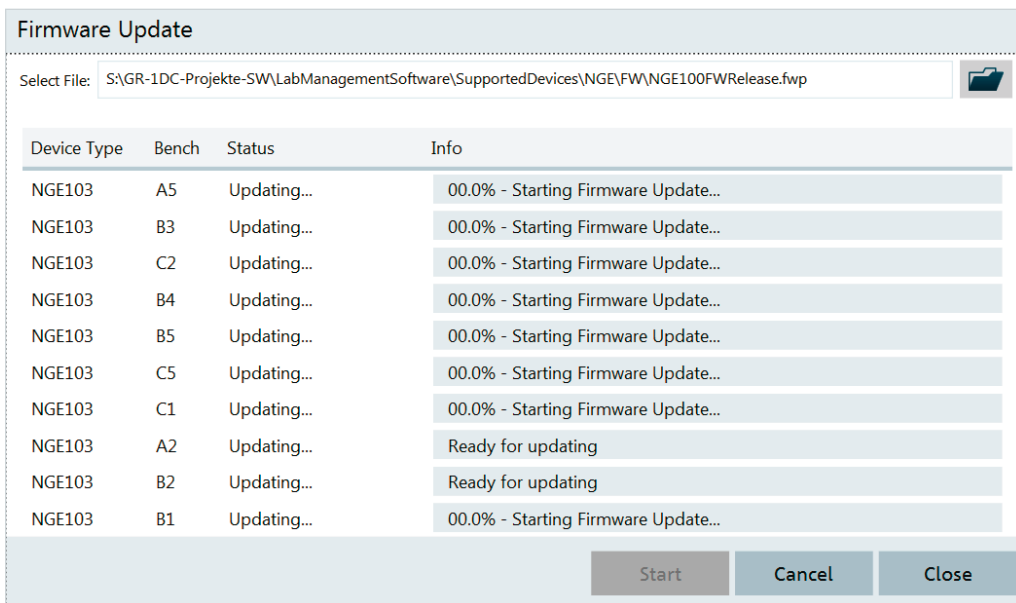
Load and retrieve settings and firmware updates

⏽ Simultaneous configuration of multiple instruments of the same type
⏽ Identical teaching procedures for student groups
⏽ Simultaneous firmware updates of several instruments

The ability to configure several instruments at the same time is crucial to generating identical training conditions for student groups. In addition, updating multiple instruments simultaneously saves time and boosts efficiency to keep the lab environment up to date. The file transfer function makes it possible to store, download and delete files from the instruments.

File Transfer

Directory: /INT

Name	Size	Modification Date
BUSTABLE	0 Bytes	
SEARCH	0 Bytes	
STATISTICS	0 Bytes	
DEMO	0 Bytes	
TEMP	0 Bytes	
SELFAMEM.LOG	1 KB	
SELFALIM.LOG	6 MB	
DEVICON.FIL	111 KB	
README.TXT	181 Bytes	

Delete | Upload | Download | Close

Delete, upload and download files on each instrument remotely

Firmware Update

Select File: S:\GR-1DC-Projekte-SW\LabManagementSoftware\SupportedDevices\NGE\FW\NGE100FWRelease.fwp

Device Type	Bench	Status	Info
NGE103	A5	Updating...	00.0% - Starting Firmware Update...
NGE103	B3	Updating...	00.0% - Starting Firmware Update...
NGE103	C2	Updating...	00.0% - Starting Firmware Update...
NGE103	B4	Updating...	00.0% - Starting Firmware Update...
NGE103	B5	Updating...	00.0% - Starting Firmware Update...
NGE103	C5	Updating...	00.0% - Starting Firmware Update...
NGE103	C1	Updating...	00.0% - Starting Firmware Update...
NGE103	A2	Updating...	Ready for updating
NGE103	B2	Updating...	Ready for updating
NGE103	B1	Updating...	00.0% - Starting Firmware Update...

Start | Cancel | Close

Launch simultaneous firmware updates on several instruments with one click

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Specifications in brief

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Supported instruments	
Oscilloscopes	R&S®RTC1000, R&S®RTB2000, R&S®RTM3000, R&S®RTA4000
Spectrum analyzers	R&S®FSH, R&S®FSC, R&S®FPH, R&S®FPC1000, R&S®FPC1500
Network analyzers	R&S®ZVH, R&S®ZPH
Power supplies	R&S®NGE100, R&S®NGE100B Other instruments on request. Please contact your local Rohde&Schwarz partner.
Minimum system requirements	
HDD	300 Mbyte
RAM	3 Gbyte
Operating system	Windows 7 (or later), 64 bit

Ordering information

Two license models are available for the R&S®CDS campus dashboard software. Both require a hardware USB dongle for operation:

∎ The local license requires that the R&S®CDS-LL USB dongle be connected to the computer that runs the R&S®CDS campus dashboard software. In this case, the software can only be operated on this computer.
∎ The floating license requires that the R&S®CDS-FL USB dongle be connected to a server in the local network. In this case, the license can be used on different computers, but only on one computer at a time.

Designation	Type	Order No.
Campus dashboard (local license and dongle)	R&S®CDS-LL	1337.9817P02
Campus dashboard (floating license and dongle)	R&S®CDS-FL	1337.9817P03

Service that adds value

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

Rohde & Schwarz

The Rohde & Schwarz electronics group offers innovative solutions in the following business fields: test and measurement, broadcast and media, secure communications, cybersecurity, monitoring and network testing. Founded more than 80 years ago, the independent company which is headquartered in Munich, Germany, has an extensive sales and service network with locations in more than 70 countries.

www.rohde-schwarz.com

Sustainable product design

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

Certified Quality Management	Certified Environmental Management
ISO 9001	ISO 14001

Rohde & Schwarz training

www.training.rohde-schwarz.com

Regional contact

ı Europe, Africa, Middle East | +49 89 4129 12345
customersupport@rohde-schwarz.com
ı North America | 1 888 TEST RSA (1 888 837 87 72)
customer.support@rsa.rohde-schwarz.com
ı Latin America | +1 410 910 79 88
customersupport.la@rohde-schwarz.com
ı Asia Pacific | +65 65 13 04 88
customersupport.asia@rohde-schwarz.com
ı China | +86 800 810 82 28 | +86 400 650 58 96
customersupport.china@rohde-schwarz.com