

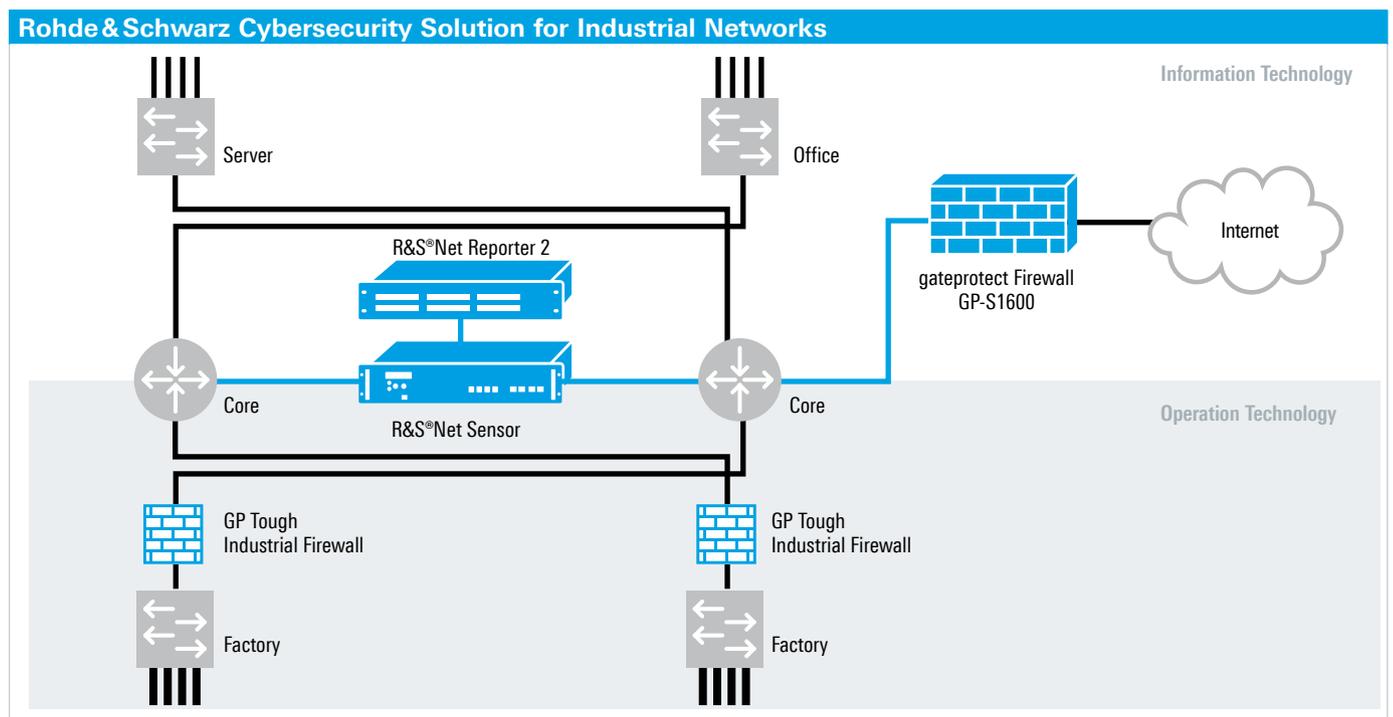
Security Solutions for Industry 4.0

Detect, Analyze and Protect Proactively

The Industrial Internet of Things (IIoT) allows the manufacturing sector to make giant innovative leaps. But if the IIoT is to succeed, cyberattacks and network issues have to be detected in time and blocked consistently.

Until recently, production facilities were connected in isolated networks. Today, control systems and facilities often have to be connected to the Internet. This makes them vulnerable to cybercriminals who exploit open interfaces as loopholes for their attacks. The consequences range from the loss of sensitive company information over sabotage of individual machines to production stoppages. High-performance IT solutions are therefore indispensable.

Rohde & Schwarz Cybersecurity offers a multilayered security concept. Our products cover identification of protocols and applications in network traffic, analysis of the extracted data, visualization of anomalies and proactive protection of industrial networks.



Detecting protocols and applications

First, the IP probe R&S®Net Sensor captures and fully processes information from the network traffic. The integrated DPI (deep packet inspection) solution R&S®PACE 2 classifies and decodes data streams down to the content layer, allowing even permitted protocols to be searched for hidden attacks. This enables early detection of problems that can result from infected machine controls, misconfigurations or potential cyberattacks.

At the same time, R&S®Net Sensor forwards the valuable information extracted from the network traffic to the analysis platform R&S®Net Reporter.

Analyze network traffic and anomalies

R&S®Net Reporter is a flexible and scalable aggregation and analysis platform that was designed for the continuous monitoring of large, heterogeneous IP networks. The platform provides a wide range of options that also include the analysis of communication relations in the network and of individual machines' communication behavior.

A central feature of R&S®Net Reporter is the event monitoring, which alerts administrators and operators of industrial networks to potential problems in the network. The precise localization of network problems enables a proactive troubleshooting without interfering with production processes or incurring high costs.

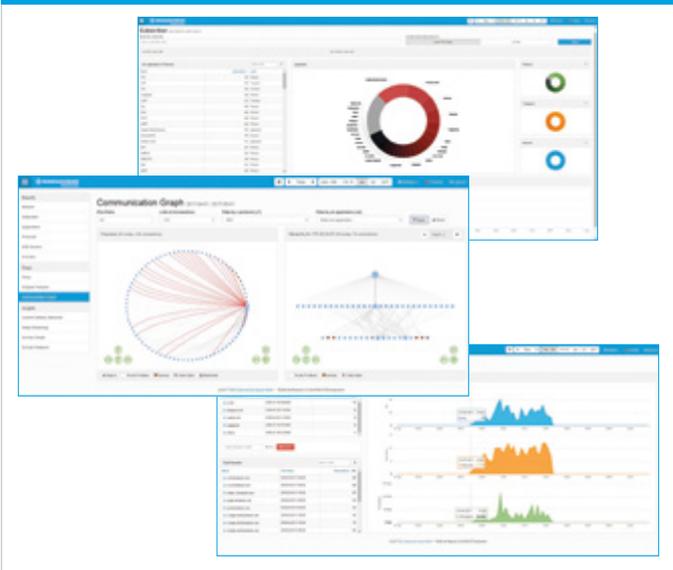
Protecting networks proactively

Finally, the results from the fine-grained analysis are used to set up the necessary protection measures with the gateprotect Firewalls of the Specialized Line, allowing attacks to be repelled quickly and safely. All firewalls support the special industry and SCADA protocols IEC 60870-5-104, Modbus TCP and DNP 3.

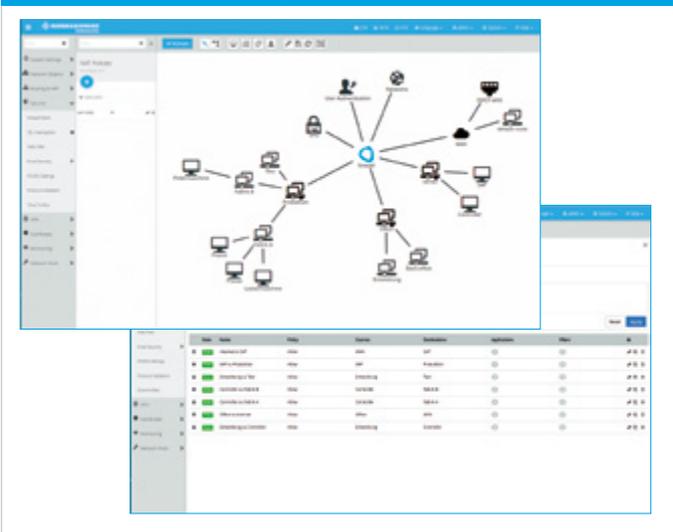
The firewalls are administrated via a tabular or a graphic user interface. This makes them quick, concise and easy to use. The firewalls can be used as VPN gateways and are suitable for the connection and remote maintenance of machines.

The firewall GP Tough can be easily installed in industrial environments as a DIN rail box and was designed for the use in especially challenging environments. Thanks to its robust hardware, the GP Tough prevents splashing water, dust and extreme temperatures from disrupting operations.

R&S®Net Reporter 2 Visualizations



User Interface of the gateprotect Firewalls



Benefits:

- Complete insight into machine network communications
- Early detection of threats
- Prevention of industrial espionage and production stoppages
- Ensuring continuous operations

Rohde & Schwarz Cybersecurity GmbH

Muehldorfstrasse 15 | 81671 Munich, Germany
Info: +49 30 65884-223
Email: cybersecurity@rohde-schwarz.com
www.cybersecurity.rohde-schwarz.com

Rohde & Schwarz GmbH & Co. KG

www.rohde-schwarz.com

R&S® is a registered trademark of Rohde&Schwarz GmbH&Co. KG

Trade names are trademarks of the owners

PD 5215.1682.32 | Version 01.00 | November 2017 (sch)

Security Solutions for Industry 4.0

Data without tolerance limits is not binding | Subject to change

© 2017 Rohde&Schwarz Cybersecurity GmbH | 81671 Munich, Germany



5215168232