

Traffic Analytics Solution with R&S® Net Reporter 2

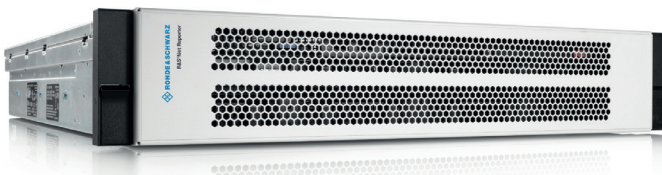
Actionable intelligence for network operators



Traffic Analytics Solution with R&S®Net Reporter 2 At a glance

Key facts

- Unique, carrier-grade, end-to-end solution consisting of the R&S®Net Sensor intelligent IP probe and the R&S®Net Reporter 2 flexible analytics platform
- Qualitative analytics approach is a very cost-efficient solution that delivers similar or better results than competing solutions while using significantly fewer probes
- Powered by R&S@PACE 2, the Rohde & Schwarz “Protocol and Application Classification Engine” with industry-leading accuracy
- Short deployment time with passive, nonintrusive probes
- Agnostic to type of network (wireless, wireline or converged)
- Customizable to network operator needs
- Open APIs for integration with third party systems (e.g. CRM, big data)
- Part of the comprehensive range of Rohde & Schwarz mobile network testing solutions



R&S®Net Reporter 2 hardware platform

Today's mobile networks provide a wealth of data. The challenge for network operators is to turn this raw data into valuable and actionable information that enables them to make educated business decisions on topics like new data plans, network planning, content optimization, subscriber experience and peering agreements. Together, the new R&S®Net Reporter 2 and the closely integrated R&S®Net Sensor intelligent IP probe deliver a powerful, highly versatile, carrier-grade solution. The solution's qualitative analytics approach requires less hardware and delivers similar or better results than competing products – at a much more attractive price. It features short deployment times along with flexible options to customize the solution and integrate it with third-party systems such as CRMs or big data systems. Customers benefit from quick time-to-market for new business cases.

Highly versatile

The R&S®Traffic Analytics solution is highly versatile and supports business decisions in many different areas such as:

- Network operations and planning:
 - Is better connectivity to certain content delivery networks necessary based on subscriber access frequency and throughput?
 - What proportion of traffic is video? Should we deploy CDN nodes locally in the network for faster video delivery?
 - What was the network traffic profile at a particular date and time when many customers complained of low data speed?
 - Is it sufficient to invest in capacity expansion or is a traffic management solution required?
- Marketing and product management¹⁾:
 - Do subscribers with a certain type of device consume more social media data? Should we market a bundled offer that includes an unlimited social media plan together with a certain type of phone?
 - How do certain subscriber categories react to rate changes, offers, events, etc.? This knowledge can be used to refine the marketing strategy.

R&S®Net Reporter 2 – connecting the dots

In a typical deployment scenario, R&S®Net Reporter 2 receives IP data records from multiple R&S®Net Sensor probes deployed throughout the network and automatically aggregates and stores application classification information. When hooked into additional databases (subscriber DB, CRM, TAC), the application classification is supplemented with additional information such as subscriber, device, location and data plan. An easy-to-use, intuitive user interface provides a wide variety of views, filtering and drill-down options on the underlying data.

¹⁾ Integration with subscriber, CRM and TAC databases required

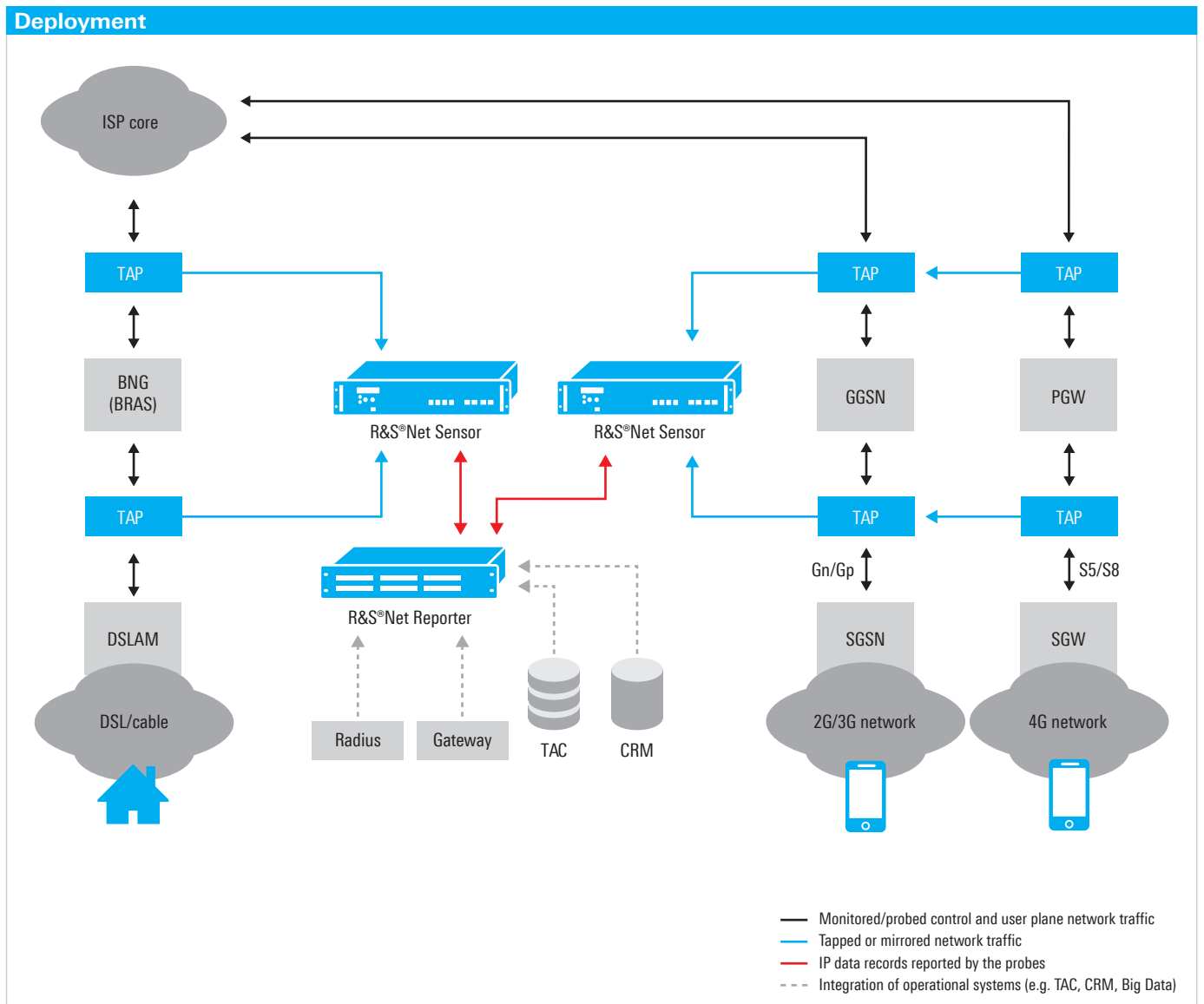
Examples include application visibility for the entire network, specific access network segments, mobile gateways and specific subscriber, device and location. Open APIs provide direct access to the underlying analytics database. R&S®Net Reporter 2 can be customized to operator needs and connected northbound to big data and other third-party systems. R&S®Net Reporter 2 can run on dedicated hardware² or in common virtualization environments.

R&S®Net Sensor – intelligent, network agnostic IP probe

Deployed in the network at statistically relevant spots, R&S®Net Sensor is the element that processes all user and control plane IP traffic, classifies it into applications and extracts information such as RADIUS, GTP-C or DHCP messages to support transparent subscriber resolution in R&S®Net Reporter 2. Nonintrusive installation of the probe via a network ensures short deployment times. When installed, the R&S®Net Sensor is agnostic to the type of

monitored network and can process plain IP traffic as well as the GTP-encapsulated traffic seen on Gn/Gp or S5/S8 interfaces. A single probe can simultaneously handle traffic from different access type networks

R&S®Net Sensor is powered by R&S®PACE 2. This leading “Protocol and Application Classification Engine” delivers highly accurate application and protocol detection. It supports the 2000 most used applications and protocols from all geographical regions and across various business fields. By providing the full classification vector for layer 3 to layer 7 and above, R&S®Net Sensor provides full traffic awareness and consistent performance reporting capabilities. Frequent, as often as weekly, automatic updates of R&S®PACE 2 software ensure high quality and outstanding IP classification performance. R&S®Net Sensor is offered on different hardware platforms based on the required analytics capacity.



²⁾ For available hardware options please ask your sales representative.

About ipoque

ipoque GmbH, a Rohde&Schwarz company, is a leading supplier of network traffic analytics and IP classification solutions to network operators and infrastructure vendors. Over 200 customers in more than 60 countries across the globe rely on ipoque to maximize network efficiency, improve the quality of experience for their subscribers and develop the intelligent communications networks of the future.

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.

Certified Quality Management

ISO 9001

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