Performance Monitoring Overlay for Mobile Operator Sunrise Telecom, Switzerland

Deep, End-to-End Visibility with Service Segmentation and Fault Isolation

Challenge

Proactively monitor and isolate faults across mobile operator backhaul network, third-party carriers' leased lines and microwave chains

Solution

RAD's Service Assured Access (SAA) solution, comprised of PM Controllers and MiNID miniature programmable NIDs

Sunrise

Sunrise, the second-largest mobile operator in Switzerland, has decided to deploy RAD's adapted and customized Service Assured Access solution to help control the performance of its mobile backhaul network.

With over three million customers nationwide, Sunrise also offers fixed-line, IPTV, internet connectivity, as well as business and IT services to enterprises, in addition to its mobile offerings, which now include both LTE and LTE-Advanced (LTE-A, or 4G+). Much of this IP traffic is transmitted over microwave, which adds latency and jitter and can result in packet loss. For that reason, Sunrise sought a flexible, cost-effective performance monitoring solution that would ensure both quality of service (QoS) across all network segments and guarantee end-to-end quality of experience (QoE) for its customers.

Full TWAMP is critical

Such a solution would have to enable the network operations center (NOC) to monitor the quality of the traffic transmitted to and from mobile base stations. The relevant analytical data would be collected in performance monitoring controllers and delivered to an existing software package that displays the data at the NOC. Most critically, however, was that the existing networking uses full TWAMP monitoring to measure latency, jitter, and packet loss performance parameters, so the solution would have to as well.

For those reasons, Sunrise selected RAD's performance monitoring overlay solution as an add-on to its existing network. "The RAD solution allows us to constantly monitor service performance and solve issues before they turn
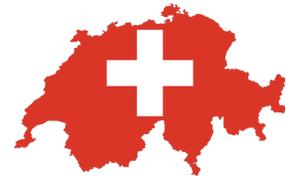
"The RAD solution allows us to constantly monitor service performance and solve issues before they turn into problems that affect our customers."

Dragan Ciric, Senior Manager Transport Network at Sunrise

RAD

Your Network's Edge

into problems that affect our customers," stated Dragan Ciric, Senior Manager Transport Network at Sunrise. "For detected issues, we are able to segment the problematic service path, measure the performance on each segment and in this way quickly identify the root cause. Moreover, the solution supports full TWAMP and the newer TWAMP Light in a single device, which enables more flexible monitoring while simultaneously reducing capital expenses."

Simplifies configuration, provisioning, monitoring, and managementl

RAD's performance monitoring (PM) solution is comprised of the PM Controllers and the unique MiNID – a field-programmable miniature Layer 2/ Layer 3 network interface device (NID). Sunrise placed the PM Controllers at central sites, where they collect data. The MiNIDs are placed at intermediate measurement points and multiple eNodeBs, where they can also be utilized to conduct testing between eNodeBs. Configuration, provisioning, monitoring, and management of the operator's network and services can be performed by the RADview network management suite or by any interoperable third-party analytic tools. In this particular case, Sunrise successfully integrated the RAD solution into their existing data network monitoring and provisioning system.

"Sunrise can now identify and segment performance degradation for its mobile backhaul services," notes Frank Möbius, RAD Sales Director for German, Austrian, Swiss, and Nordic Service Providers. "RAD's SAA solution provides deep visibility throughout the transport network, along with intuitive graphs and reports to enable quick remedial action where and when it is necessary."

> "RAD's SAA solution provides deep visibility throughout the transport network, along with intuitive graphs and reports to enable quick remedial action where and when it is necessary."
>
> Frank Möbius, Sales Director for German, Austrian, Swiss, and Nordic Service Providers at RAD

Features
- End-to-end performance monitoring
- High scale capabilities
- PM data collection
- Intuitive graphs and reports

Benefits
- Easy-to-deploy overlay solution
- Interoperability with existing equipment enables quick, easy integration
- Enables testing between multiple eNodeBs
- TWAMP and TWAMP-light support in one device reduces CapEx
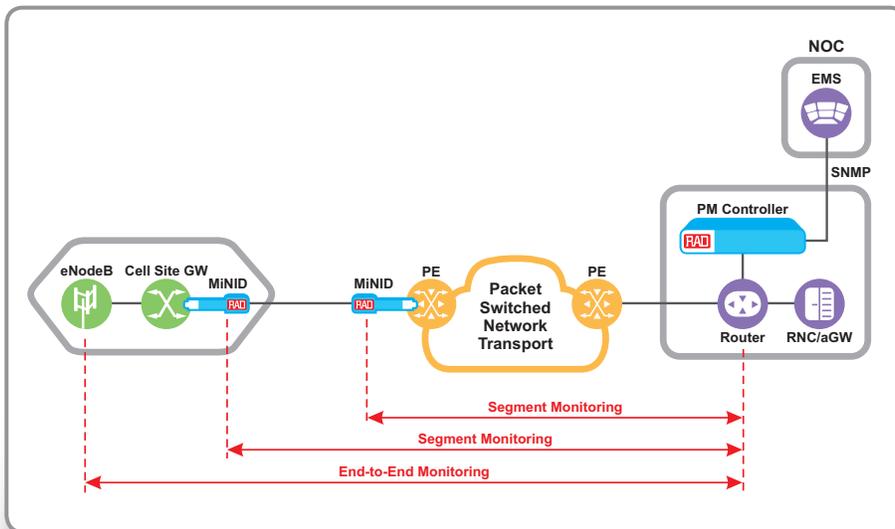
Sunrise's Concept for Service Assured Mobile Backhaul

Your Network's Edge

www.rad.com