VIAVI

Troubleshooting LTE with PacketPortal and the Signaling Analyzer (SART)

PacketPortal™

E N A B L E D

A Significant Breakthrough in Accessing Customer, Content, and Network Intelligence

The dramatic increase in smart devices and data-intensive applications puts unprecedented demands on mobile networks. Network and service complexity continue to grow and over-the-top services are changing the landscape of service economics. And, in the midst of network upgrades and technology migrations, consumers demand impeccable performance; they are loyal to their devices, not their providers. There has never been a more important time to minimize churn by providing uninterrupted, predictable service quality.

LTE brings many opportunities yet it also brings some considerable challenges. The architecture puts more intelligence at the network edge, and this is exactly where there is a lack of visibility into the service being delivered—particularly when a customer is moving from cell to cell.

PacketPortal Lets Operators See The Network the Way Customers Experience It

PacketPortal addresses this challenge by providing immediate visibility and reach right to the network edge. It removes network blind spots so that critical signaling and user traffic is fully visible at the eNodeB and elsewhere.

PacketPortal is a new, breakthrough technology that makes it possible for any optical transceiver in the network to analyze packets. Intelligent, PacketPortal-enabled SFP transceivers called SFProbes™ remotely examine packets at full line-rate speeds and then time-stamp, copy, and forward, via PacketPortal software, selected packets to centrally located analysis applications like the industry-leading Viavi Solutions™ Signaling Analyzer. This delivers on-demand access to critical network information from multiple points in the network—including the edge.

With PacketPortal, you can now instantly see issues such as handover problems without ever leaving your desk. This means an improved customer experience with higher service quality and better capacity planning.

Benefits

- Reduce churn: optimize the customer experience by instantly segmenting, isolating, and resolving QoE issues

- Lower OpEx: monitor quality metrics remotely without deploying a technician; remotely see handover issues, signaling data, and subscriber service quality

- Lower CapEx: unique form factor enables deployment even in small cells

A Typical LTE-Network PacketPortal Deployment

When you deploy SFProbes at the eNodeBs, you:

- gain instant access to the X2 interface that is always ready and always on

- can filter user and signaling data per subscriber to an analyzer at a central location—you never need to leave your desk

- analyze handovers in real time—drilling down to handover failure cause codes and identifying network capacity issues or protocol errors—and quickly resolve service issues.
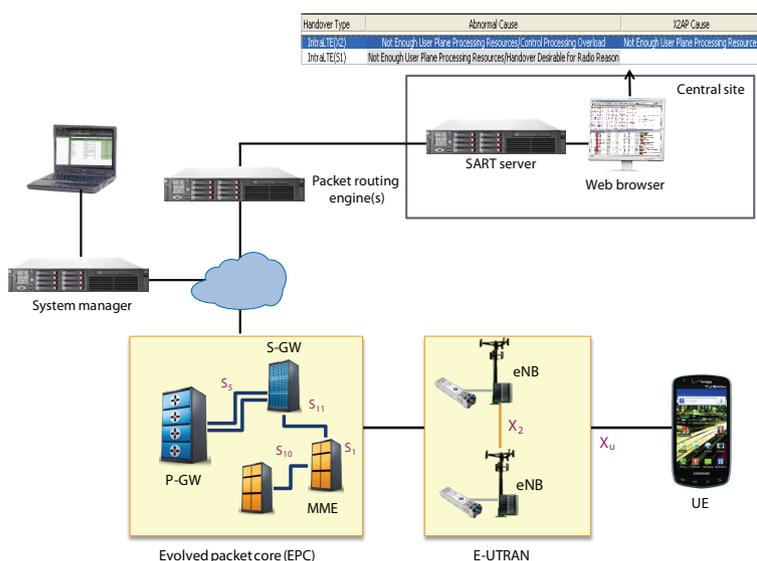
PacketPortal deployment: SFProbes are deployed at the eNodeBs, packets are filtered to the SART server, and data is analyzed on a web browser at a central site.

PacketPortal LTE Troubleshooting with The Signaling Analyzer Package (Part #JPS-LTE)

This Package Includes:

- All software elements of the PacketPortal solution
  - System manager and platform software
  - Activation entitlements for SFProbes
  - One filter bank activated per SFProbe

- Signaling Analyzer Real Time for LTE
  - Real-time monitoring, network diagnostics, and trouble-shooting
  - Correlation and analysis of protocol signaling messages produced from multiple technologies and multiple interfaces
  - Key KPIs defined by the LTE standards organizations

- Deployment services
  - Installation and provisioning of software and hardware
    · Deployment completed at single site or remotely
    · Minimum 10 percent of SFProbes activated during deployment

- User- and administrator-training classes
  · >100 SFProbes = 1-day course
  · <100 SFProbes = 2-day course
  - Project management included for 100+ SFProbe deployments

- Standard PacketCare solution for 12 months
  - 8x5 phone and email support
  - Software update subscription service
  - Software update installation service (SUIS)
  - Remote hardware support and replacement

Customers must select the following when ordering:

- Number of probe licenses desired (1 to N)

Solutions containing over 1,000 probes require a Statement of Work and Contract.