Carrier-class WiMAX™ Quality Management System

alvarion®
Your Open WiMAX Choice

StarQuality

Alvarion's StarQuality is a carrier-class performance and traffic monitoring system that optimizes WiMAX network performance, identifies network problems and bottlenecks, maximizes traffic capacity and optimizes resource allocation. This end-to-end performance solution collects, analyzes, stores and presents performance data for delivering and maintaining reliable and high-quality service.

Detect Problems With Threshold Crossing Alerts (TCA)

The StarQuality enhanced TCA mechanism detects abnormal traffic patterns and load conditions, and anticipates performance degradation. When a threshold is crossed, StarQuality generates a TCA alarm to notify network managers and administrators.

Intuitive Web-Based Client and User Interface

StarQuality boasts an intuitive Web-based client based on Ajax technology eliminating the need for CD installation or updates. Accessed easily from any Internet browser with a Web connection, StarQuality enables easy navigation and drill down with an intuitive WiMAX logical hierarchy consisting of base stations, sectors and subscriber devices. StarQuality measurements are presented in user friendly graphs, allowing operators to easily go backwards and forwards in time, or request data for specific periods. The data for each performance measurement can be exported to popular file formats, such as Microsoft Excel®, for further analysis.

Northbound Interfaces

StarQuality offers standard-based northbound application programming interfaces (NBI) for connectivity to higher-level management systems, such as OSS and Network Management

System (NMS) platforms. StarQuality NBI includes Web services (XML/SOAP), SNMP for alarm forwarding, bulk data export to Excel and direct database access for data mining operations.

Flexible Report Generation

StarQuality features versatile report generation capabilities for detecting potential network problems and resolving them before the network is adversely affected. These capabilities include comparison, trend analysis and other user-defined reports which are configured and generated from the same intuitive and simple Web-based GUI. In addition, built-in Top N reports enable easy identification of the most loaded and problematic sectors, as well as daily, weekly, or monthly report view.

StarQuality Benefits

- Optimize WiMAX networks
- Maximize traffic capacity
- Ensure Quality-of-Service (QoS) and service levels
- Proactively identify problems and bottlenecks
- Detect performance degradation
- Enable reduced ongoing support costs, OPEX and Total Cost of Ownership (TCO)
- Increase subscriber loyalty and satisfaction

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Specifications

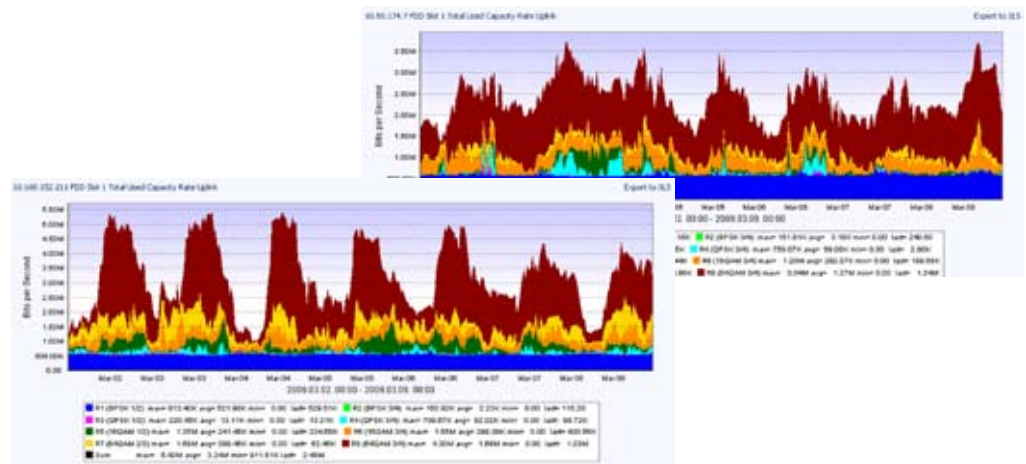### WiMAX Performance Measurements

- Base station and sector KPIs
    - Air link utilization
    - Throughput
    - MCS distribution
    - Subscriber devices per sector
    - Subscription
    - HARQ packet error rate
    - SINR distribution
    - MAP size distribution
    - Downlink retransmission
    - Uplink noise floor
    - Uptime
- KPIs per subscriber device
    - RSSI, SNR
    - Modulation rate
    - Spectral efficiency

Scalability and Configuration

StarQuality is a cross-platform solution available in both Windows configuration for small to medium sized networks and Unix configuration for medium to large-scale networks.

Supported Alvarion WiMAX Portfolio

- BreezeMAX® Micro Indoor 16d
- BreezeMAX Micro Indoor 16e-ready
- BreezeMAX Macro Outdoor 16e

Alvarion's Star management suite is a comprehensive, robust, carrier-grade family of products for ensuring the successful deployment of WiMAX services. The suite includes:

- AlvariStar: Carrier-class NMS for managing WiMAX base stations
- StarACS: Unified and standard system for managing a variety of WiMAX CPEs
- StarQuality: Performance monitoring system for ensuring QoS and network optimization
- StarReport: Powerful report generator for generating network inventory reports

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About Alvarion

Alvarion (NASDAQ: ALVR) is the largest WiMAX pure-player with the most extensive WiMAX customer base and over 250 commercial deployments around the globe. Committed to growing the WiMAX market, the company offers solutions for a wide range of frequency bands supporting a variety of business cases. Through its OPEN WiMAX strategy, superior IP and OFDMA know-how, and proven ability to deploy end-to-end turnkey WiMAX projects, Alvarion is shaping the new wireless broadband experience.