VoIP Call Performance Analysis Software—BrixCall



An advanced call signaling and media analysis and correlation application providing comprehensive visibility into the performance of live VoIP traffic to ensure call quality from the network core to customer care.

#### Applications

Voice service assurance

#### **Key Features and Benefits**

Comprehensive live VoIP call analysis and correlation application Provides detailed service visibility to ensure call quality and customer care Enables monitoring of overall service health via at-a-glance dashboard Delivers powerful performance and call accounting reports Provides single, per-call quality record Combines with BrixWorx engine to offer a unique blend of active and passive testing

Live Call Performance Analysis

BrixCall is EXFO's advanced call signaling and media analysis and correlation application that provides comprehensive visibility into the performance of live VoIP traffic to ensure call quality from the network core to customer care.

Deployed in conjunction with Brix 4000 Verifiers, BrixCall is an integrated component within the company's BrixWorx central-site software engine, and closes the visibility gap from expected network performance to actual customer experience. As a result, network operators can accelerate VoIP deployments with confidence and sustain greater profitability from IP-based services. With BrixCall, providers satisfy their subscribers by delivering high-quality customer care along with a high-quality service.

## Multiple Measurement Views, One Call Quality Record

Today's VoIP networks are characterized by separate routes for signaling and bearer traffic, as well as multiple signaling protocol legs and media streams for individual calls. In order to achieve visibility across an entire call, providers typically deploy Brix 4000 Verifiers at several locations across their networks, independently measuring each call component and leg. The key challenge when monitoring live VoIP traffic from multiple points in a network is how to manage and make sense of the large volume of performance information. BrixCall analyzes and correlates these independently measured views to provide a single, easy-to-understand call quality record (CQR) for each call.

Depending upon the user-selected reporting frequency of the Brix 4000 Verifiers, BrixCall generates CQRs for both in-progress and completed calls. Point-in-time performance information for active calls is often critical for troubleshooting intermittent problems that surface only on calls of longer durations or at particular times of the day.

#### **Dashboard Presentation of Most Critical Information**

Even in networks carrying large volumes of wholesale VoIP minutes and subscriber calls, BrixCall enables VoIP administrators to monitor the overall health of their service via an at-a-glance dashboard. The BrixCall dashboard presents critical information about the current state of the service, including all performance threshold violations, call disposition, average mean opinion score (MOS), peak call volume and bandwidth utilization, answer seizure and network efficiency ratios, and call duration information.

For finer-grained visibility, a host of configurable Live Call Reports are accessible from the dashboard home page and can be customized for time period and filtered by protocol, codec, monitoring location, Diffserv codepoint, call duration, VLAN tag and more.

The Call Activity View presents detailed information including source and destination numbers, MOS, duration, bandwidth and performance metrics for individual calls or aggregated across

multiple calls.

### Brix Tri-Q<sup>™</sup> Analysis for Full Service Coverage

BrixCall features the unique Brix Tri-Q Analysis, and graphically displays the impact of each of the elements that contribute to a user's satisfaction with a call—signaling quality, delivery quality and call quality.

Signaling quality measures the call's setup performance, such as protocol messages, post-dial delay, authentication registration times, hold time and termination delay. Delivery quality measures the underlying network transport performance including delay, packet loss, audio loss and jitter. Call quality reflects overall call experience in the form of an MOS. BrixCall relies on the ITU G.107 E-model algorithm to calculate and report listening and conversational MOS and R-factor measurements.

## **Proactive Performance Alerting**

Leveraging the capability of the BrixWorx central-site software engine, BrixCall administrators establish and monitor performance thresholds to proactively alert operational staff of call quality degradations, outages or abnormal calling patterns. Thresholds can be standardized network-wide or customized for individual locations, depending on business requirements.

# BrixWorx—A Unified System for Active Testing and Live Call Monitoring

To proactively avoid service outages and degradations and achieve visibility into individual call performance across production VoIP networks, administrators must employ a strategy that consists of both active testing of the network and VoIP infrastructure, together with monitoring the quality of actual live customer calls.

The addition of the BrixCall correlation application enables administrators to seamlessly configure, analyze and monitor the right mix of active testing and live call monitoring for their environments, all from the Web-based BrixWorx Operations Center.