

# BrixCall Solution Overview



Advanced call signaling and media analysis and correlation application that provides comprehensive visibility into the performance of live VoIP/IMS traffic.

## KEY FEATURES

Comprehensive live VoIP call analysis and correlation application

Full support for new voice-over-IP (VoIP) services based on IP multimedia subsystem (IMS)

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 to offer a unique blend of active and passive testing

## LIVE CALL PERFORMANCE ANALYSIS

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

Deployed in conjunction with Brix 4000 series Verifiers, BrixCall is an integrated component within the 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. 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/IMS 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 a time period and filtered by protocol, codec, monitoring location, DiffServ code point, 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™ 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 the 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 to 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/IMS 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.

## SPECIFICATIONS

### Features

- >At-a-glance service health dashboard
- >Sophisticated multiprotocol, multileg signaling and media stream live call correlation
- >Easy-to-read CQR for each call
- >Signaling and media ladder diagrams
- >Complete integration with BrixWorx for combined call monitoring and active testing solution
- >Point-in-time analysis of in-progress calls
- >Individual or aggregated call activity and performance

### Report Types

- >Call detail record visualization
- >Answer seizure ratio
- >Network efficiency ratio
- >Peak call volume
- >Peak bandwidth utilization
- >Average call duration
- >Total call duration
- >Call accounting (attempts, failure)
- >Call disposition analysis
- >Call performance metrics (packet loss, latency, jitter)
- >MOS analysis

### System Requirements

- >BrixWorx Software: Version 5.0 and above

## EXFO SERVICE ASSURANCE

EXFO Service Assurance is the trusted provider of the most widely deployed service assurance solutions that enable carriers, service providers, cable operators, large enterprises and government agencies to proactively manage the performance and reliability of interactive, rich-media applications, such as voice and video-over-IP.

The company's seamlessly integrated hardware and software products, collectively called the Brix System, let network operators control the quality of their wireline, cable, campus and wireless offerings to maximize profitability and ensure user satisfaction.

The Brix System consists of a family of hardware Verifiers—including the Brix 100M, Brix 1000, Brix 2500, Brix 3000, Brix 3500T and Brix 4000 Series—and software Brix Verifier Agents that are pervasively deployed throughout a network and are tightly coupled with either the BrixWorx (service provider) or BrixMon (enterprise) central-site software and related optional test suites.

The Brix System improves the overall effectiveness of networks, and allows organizations to maximize their investment in, and increase the value of, their business-critical IP services.

**EXFO Corporate Headquarters** > 400 Godin Avenue, Quebec City (Quebec) G1M 2K2 CANADA | Tel.: +1 418 683-0211 | Fax: +1 418 683-2170 | info@EXFO.com

			Toll-free: +1 800 663-3936 (USA and Canada)   <a href="http://www.EXFO.com">www.EXFO.com</a>	
<b>EXFO America</b>	3701 Plano Parkway, Suite 160	Plano, TX 75075 USA	Tel.: +1 800 663-3936	Fax: +1 972 836-0164
<b>EXFO Asia</b>	151 Chin Swee Road, #03-29 Manhattan House	SINGAPORE 169876	Tel.: +65 6333 8241	Fax: +65 6333 8242
<b>EXFO China</b>	36 North, 3 <sup>rd</sup> Ring Road East, Dongcheng District Room 1207, Tower C, Global Trade Center	Beijing 100013 P. R. CHINA	Tel.: + 86 10 5825 7755	Fax: +86 10 5825 7722
<b>EXFO Europe</b>	Omega Enterprise Park, Electron Way	Chandlers Ford, Hampshire S053 4SE ENGLAND	Tel.: +44 2380 246810	Fax: +44 2380 246801
<b>EXFO NetHawk</b>	Elektronikkatie 2	FI-90590 Oulu, FINLAND	Tel.: +358 (0)403 010 300	Fax: +358 (0)8 564 5203
<b>EXFO Service Assurance</b>	270 Billerica Road	Chelmsford, MA 01824 USA	Tel.: +1 978 367-5600	Fax: +1 978 367-5700

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