

EXFO Worx Ethernet/IP Service Assurance Solution

A Scalable Service Assurance Strategy

Solution Description

The EXFO Worx Ethernet/IP Service Assurance Solution is an end-to-end Ethernet/IP service performance solution that enables communication service providers (CSPs) to activate, monitor and troubleshoot the entire transport layer using a single system. CSPs can ensure superb service experience in their IP-based networks by giving them visibility into end-to-end service delivery performance. Visibility is provided using high-performance active probes (**EXFO Verifiers**), standards-based test methodologies and high-scalability databases. **EXFO Worx** manages and orchestrates the EXFO Verifiers while **EXFO Xtract** delivers data analytics.

Solution Benefits

Customizable and scalable for optimized total cost of ownership

- Unmatched scalability enables monitoring of millions of simultaneous sessions with endpoints ranging from a few to thousands (i.e. 100,000+).
- Customizable according to different scenarios, with a range of different probes, feature packs and models for L2-L4 SLA assurance.
- Without any per-seat license or costly yearly usage fees, system can easily be grown and updated via simple software updates requiring no hardware forklift.

Proactive assurance through real-time, end-to-end network visibility

- Continuously stress and exercise services across multiple domains, measure degradation and E2E performance all the way to the subscriber level.
- Identify, isolate and resolve issues faster, without impacting subscriber experience.
- Real-time reporting of the performance of millions of sessions enables quick business and operational decision-making based on actionable data.

Standards-based methodologies, open architecture and vendor-agnostic platform

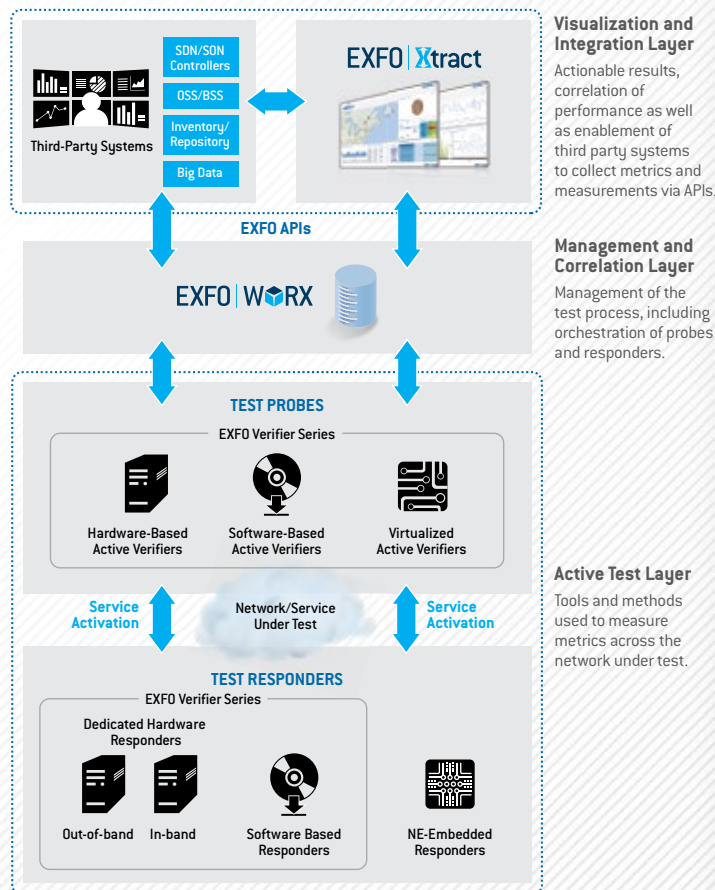
- Data and network visibility available on one screen.
- Leverages vendor responders and intelligent SFPs to reduce deployment costs.
- Integration with existing OSS/BSS systems through a range of flexible APIs.
- Standards-based methodologies ensure compatibility with a variety of network endpoints.

Easy growth path for expansion to IMS/VoLTE/VoIP infrastructure

- Wire-speed activation and troubleshooting tests (Y.1564) available on the same EXFO Verifiers.
- VoIP, video and web QoE performance assurance on the same EXFO Verifiers.
- Leverages existing service assurance investment to monitor infrastructure and IMS networks.

Solution Architecture

The **EXFO Worx Ethernet/IP Service Assurance Solution** consists of four layers, each providing different functionalities that contribute to the overall solution:

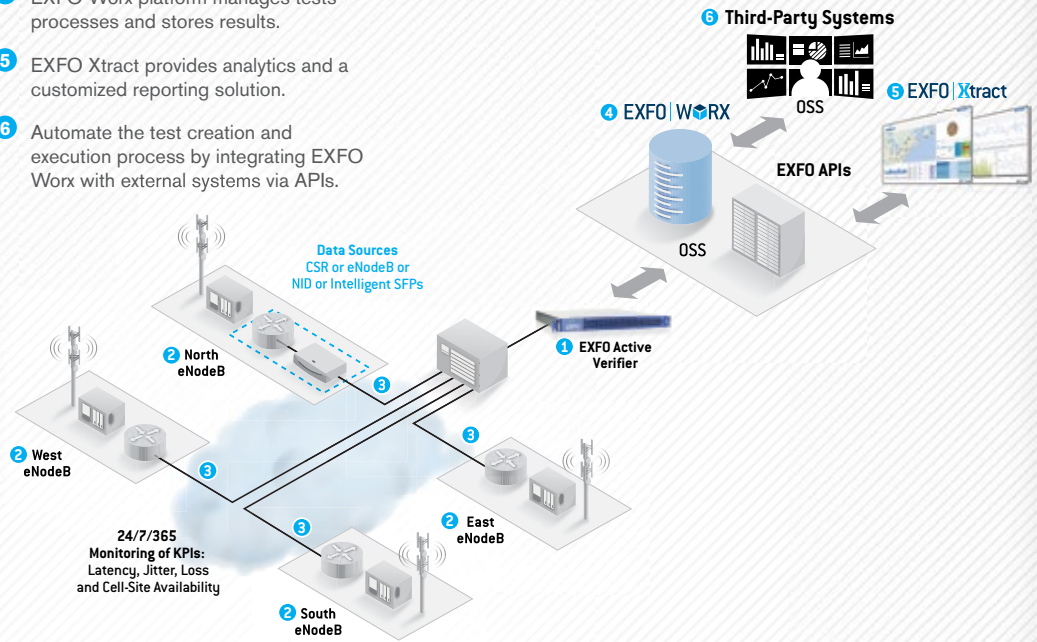


Solution Use Cases

Wireless Backhaul Assurance

The wireless backhaul provides the link between the RAN and the core network and can contribute significantly to the degradation of the customer experience. The EXFO Worx Ethernet/IP Service Assurance Solution delivers a complete solution for wireless backhaul assurance.

- 1 EXFO Active Verifier probes deployed at aggregation points.
- 2 Responder capabilities activated on cell sites.
- 3 Standards-based approach for performance measurements and interoperability with multi-vendor tools.
- 4 EXFO Worx platform manages tests processes and stores results.
- 5 EXFO Xtract provides analytics and a customized reporting solution.
- 6 Automate the test creation and execution process by integrating EXFO Worx with external systems via APIs.



Core Transport Assurance

Core networks play critical roles for business services and connectivity across WANs as they link multiple regional and aggregation nodes. The EXFO Worx Ethernet/IP Service Assurance Solution delivers a tiered solution for assuring core networks.

- 1 EXFO Active Verifier probes deployed at each edge point.
- 2 Mesh testing between active probes coupled with per-QoS sessions.
- 3 Internet service quality assessed for all sites through Internet QoE measurements and infrastructure performance tests.
- 4 Implementation of additional emulation of VoIP, video and data services between the existing test topology.
- 5 EXFO Worx platform manages tests processes and EXFO Xtract provides dashboards and reports.
- 6 EXFO Worx platform integrated in existing OSS/BSS through APIs.

