EXFO Xtract

OPEN ANALYTICS PLATFORM DELIVERING REAL-TIME END-TO-END SERVICE LIFECYCLE MANAGEMENT

■ The Xtract Analytics platform combines EXFO's 30 years of telecom expertise, allowing service providers to automate, accelerate, visualize and optimize their service delivery lifecycle.

EXFO | Xtract

KEY FEATURES

Graphical workflow automation providing multivendor orchestration

Enhanced automated inventory and CRM integration

Template-based end-to-end service modeling provides network and service resources in one single view

Service-impact and root cause analysis with event prioritization enable service providers to focus on customer-impacting issues

Intuitive user-customizable dashboards with context navigation and drilldown

Operator-configurable subscriber dashboards

Trending and predictive analysis enable optimization of resources

Model "what-if" scenarios using captured data to simulate specific use cases

BENEFITS

Introduces into the service delivery lifecycle a measure of continuity that is not typically shared between different silo organizations

Reduces cost of ownership and eliminates human error while increasing operational efficiency

Accelerates time-to-value and reduces dependency on long development cycles

Accelerate service providers' product-to-market introduction by giving them control over how to model, manage and troubleshoot services

Reduces OPEX by eliminating noise and bringing focus to operations and break-fix teams

Provides a single looking glass into main service health indicators

EXFO

The competitive landscape within the telecom industry is putting tremendous pressure on service providers. To remain relevant in today's dynamic environment, operators are adopting an increasingly diverse array of technologies from an expanding marketplace in order to enable complex mobile and cloud-based services that are uniquely tailored to end-users' preferences. This creates challenges to effectively deploying, managing and visualizing end-to-end service performance, limiting the ability to distinguish between service-affecting and non-affecting events and to assess customers' quality of experience.

With EXFO Xtract, operators can now rely on EXFO's industry expertise to leverage data from a multitude of sources—including field instruments, test probes and network equipment—in turn enabling them to rapidly deploy new services, analyze performance baselines and accurately pinpoint service-affecting events. EXFO Xtract can be employed in conjunction with any other technology, network architecture or equipment vendor.
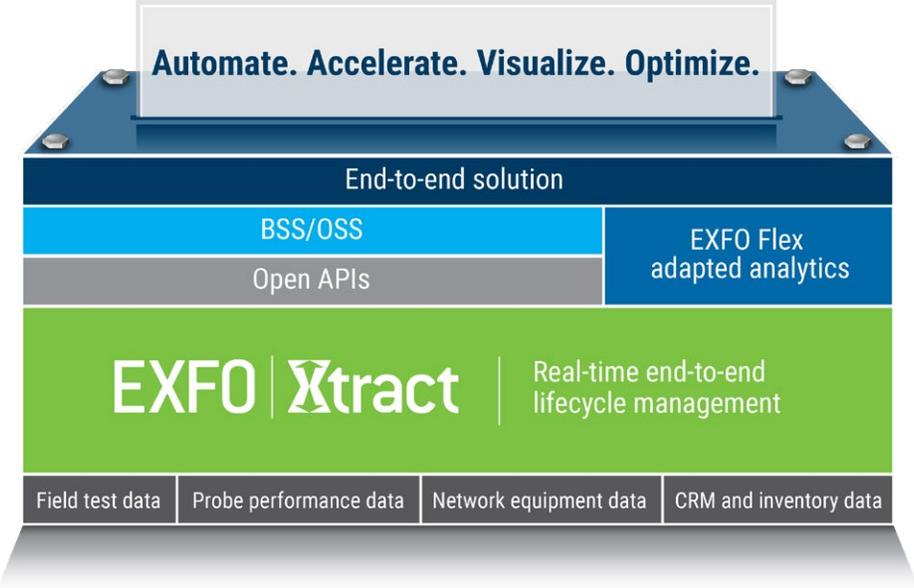
EXFO Xtract Service Flow Automation is a simple web-based user interface enabling customers to define a sequence of activities based on templates in order to accomplish a given task. The solution removes dependency on long development cycles and can be customized by non-developers. Multiple protocols are supported, e.g., SSH/Telnet, JDBC, SNMP (set and get operations), as are EXFO Worx application programming interfaces (APIs). These protocols can be extended and will become an integral part of the solution. Xtract also makes it possible to view historical and real-time flow executions as they happen. In addition, the EXFO Solutions team is extending the interface by providing domain-specific templates for even faster time-to-value.
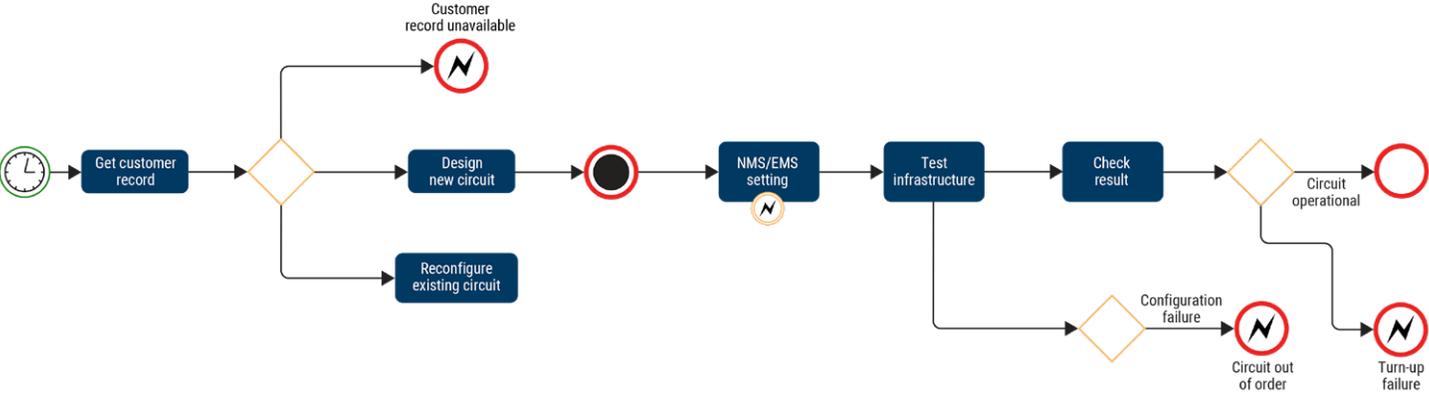
EXFO Xtract's end-to-end service modeling capabilities enable service providers to define the relationship between customers, services and their supporting resources (physical or logical) for a specific offering. The service modeling becomes the foundation of multiple applications, such as service quality management (SQM), which is necessary for operating, monitoring, maintaining and optimizing a service.

The service model is a web-based solution with two main functions:

1. A reusable template definition that describes a service and its supporting resources, key performance indicators (KPIs) and key quality indicators (KQIs), measuring the different aspects of service health and external events, such as threshold violations, SNMP traps, syslog and external notifications.

2. Model instances that are typically created by integrating the EXFO Xtract solution with external sources such as a configuration management database (CMDB), inventory and/or customer relationship management (CRM) systems.

This integration ensures a rapid and automatic deployment with minimum maintenance, and also preserves the data integrity between our solution and reference data. During runtime, incoming raw data collected from various sources is processed and transformed based on defined templates, following which customer business rules are applied to triage between service-impacting and any other events.

A large number of predefined, vendor-specific data sources and their KPIs are already available out-of-the-box. These KPIs are grouped into an abstraction layer derived from vendor-specific definitions and/or industry-common KPIs, providing the operator with complete visibility, even in heterogeneous deployments.

EXFO XTRACT
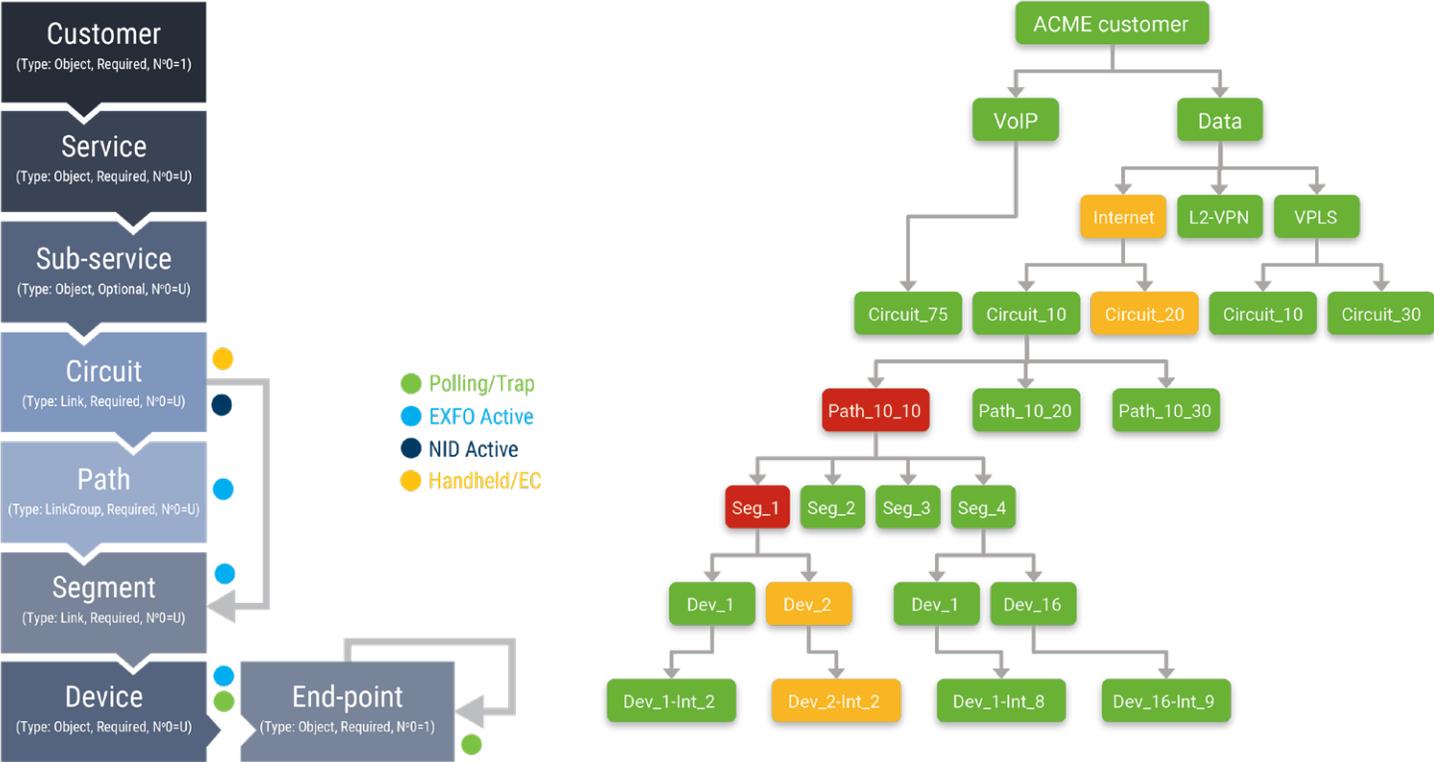
The **EXFO Xtract** flexible dashboard and reporting module ensures an optimized experience based on user profiles, job function or use cases. The dashboard is web-based with drag and drop capabilities and a context-sensitive drilldown. Different types of reports are also available, from geographical maps to trending, worst and top N, alarm reports and much more.

All elements of the dashboard enable you to seamlessly navigate between real-time and historical views. A subscriber portal option is also available, enabling you to provide your customers with a controlled view of the attributes and KPI levels. The features are realized by leveraging the platform's data segregation and security features. The subscriber portal offers a competitive advantage by giving your business customers visibility into your service quality.

In addition, EXFO Xtract listens to and collects alerts and syslog messages about current events from enterprise or service providers' networks. Many service providers are overwhelmed by the number of events and alarms that their network operation centers (NOCs) receive on a daily basis. In many cases, critical events go unnoticed. EXFO Xtract has an integrated fault solution to help organizations gain operational efficiency through its out-of-the-box library of known network events and their corresponding sets of intelligent rules for alarm filtering, deduplication and reduction. In addition to the existing rules, EXFO Xtract provides a simple mechanism capable of enriching its knowledge rules based on your own organization's current or ongoing experiences.

EXFO Worx family synergy

EXFO Xtract seamlessly integrates all EXFO Worx service-level agreement (SLA) and service test results, enabling you to combine your proactive service testing with its underlying network infrastructure. In addition to offering a single perspective into both service and network performance, the solution gives operators the insight they need to accurately pinpoint service-affecting events in their network.

With the new EXFO Xtract dashboard and reporting capabilities, EXFO Worx customers can configure various views based on their users profiles. The automatic integration between the two solutions also provides greater visibility into the detailed EXFO Worx test results, with seamless navigation between historical and real-time data.

Based on user-defined hierarchies, various reports (e.g., trending, geographical maps and status reports) can be leveraged to drill down from high-level views all the way down to detailed KPIs. This allows users to zero in on problem areas with just a few clicks.
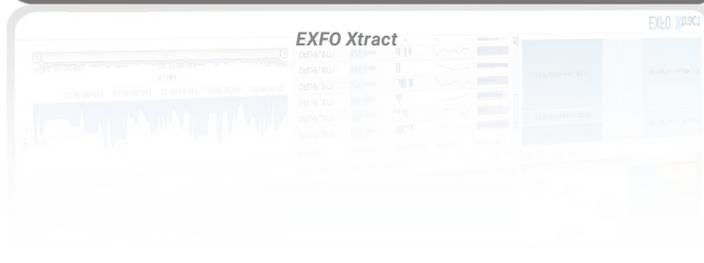
EXFO Xtract

EXFO

SPECIFICATIONS

Hardware requirements

EXFO Xtract can be used in combination with a Java virtual machine (VM) with a minimum memory of 32 MB. The average EXFO Xtract system uses between 200 MB and 300 MB to monitor 100 devices.

System benchmark: optimal configurations

CONFIGURATION SIZE	REQUIREMENT GUIDELINES
10 000 monitors (100 hosts)	4 GB RAM, two dual-core CPUs, and 50G disk (2G database)
100 000 monitors (1000 hosts)	16 GB RAM, two quad-core CPUs, and 500G disk (200G database)
1 000 000 monitors (10 000 hosts)	64 GB RAM, four quad-core CPUs, and 8T SAN Array (2T database)

Supported platforms

EXFO Xtract can be run on a 64-bit operating system (Red Hat Enterprise 6 or Centos 6.5).

EXFO Xtract can also be run in a virtual environment. The following requirements are applicable to virtual deployment:

- VMware vSphere 5.1
- VMware vSphere Hypervisor (ESXi) 5.5
- Xen hypervisor 4.4

Supported browsers

EXFO Xtract can be run from any of the following browser versions (or later):

- Firefox version 32 (and higher)
- Chrome version 30 and above
- Internet Explorer 11
- Safari 6
- Opera 12