

A blue-tinted background image showing a call center environment with several agents wearing headsets.

Transform broadband operations with complete visibility of the subscriber experience

SIMPLIFY OPERATIONS, BOOST PRODUCTIVITY AND REDUCE COSTS.

In today's market for gigabit broadband connectivity and dynamic demand for new services, broadband operations teams are balancing the need to become lean and agile with continuing to improve the subscriber experience and proactively addressing service availability and performance challenges. These challenges include having to sift through the noise from multiple network- and service-affecting issues simultaneously affecting the Network Operations Center (NOC), Help Desk, and Field Operations.

Calix Operations Cloud directly addresses customer demand for a tool that will help BSPs meet these challenges. By combining machine learning, automation, and predictive insights, Operations Cloud provides real-time visibility of what is happening across a BSPs network from the subscriber premises to the access network edge, allowing operations teams to react quickly to changes in bandwidth usage, network health, and subscriber demand. The result is faster issue identification and resolution, fewer truck rolls, lower support costs, and a great subscriber experience.

USE INSIGHTS, PREDICTION AND AUTOMATION TO UNDERSTAND AND MANAGE THE SUBSCRIBER EXPERIENCE IN REAL TIME.

With real time network health, performance and traffic insights, Calix Operations Cloud provides BSPs with the tools they need to monitor and manage their entire subscriber-facing network, from inside the subscriber premises to the access network edge. Real time, end-to-end visibility enables a deep understanding of the subscriber experience based on characteristics such as service tier, geography, network topology, application bandwidth usage and more. Broadband Operations teams can simplify operations by monitoring network performance and the subscriber experience, and by understanding network health in real time. This enables Operations teams to be proactive in maintenance and to automate various network and subscriber operations.



KEY FEATURES INCLUDE:

Network and subscriber insights

Operations Cloud effectively tracks and analyzes usage trends, quickly identifies high bit error and packet loss rates and highlights subscriber and network traffic flow anomalies.

Real time network health and traffic monitoring.

For both AXOS and EXA systems, Operations Cloud provides BSPs with a real time, comprehensive, 360-degree view of what is happening in their networks, both in the access network and within the subscriber premises.

Customized, programmable alarms and notifications

Operations Cloud delivers robust, intelligent alarm management and correlation capabilities to help operations staff easily identify and prioritize the most important issues. In addition, Operations teams can create customized alarm notifications, allowing them to select and group alarms, specify the conditions for notifications, and determine who should receive alarm notifications and when.

Simplified service provisioning

In Release 22.2, BSPs can use Operations Cloud for data service provisioning on AXOS systems while concurrently using SMx for provisioning. This preserves compatibility with existing OSS integrations by allowing customers to retain their existing ONT naming conventions. In addition BSPs can migrate existing subscriber provisioning from SMx to Operations Cloud at their own pace.

Proactive and predictive maintenance

Operations Cloud uses advanced machine learning algorithms to generate and prioritize maintenance recommendations based on analysis of past network behaviors. This allows BSPs to replace red-flagged network infrastructure before equipment failure occurs, predict when uplink exhaustion will occur, and see when degrading optical light levels will start to impact the subscriber experience.

The screenshot displays the 'Notification' configuration screen for an alarm. It includes sections for 'Trigger' (set to 'Immediately'), 'Email' (with a list of recipients), and 'Exclusions' (set to 'Tuesday 12:00 am to 12:00 am'). Below this is a 'Cleared Alarms Notification' section. An inset window shows the 'All Alarms' and 'Monitored Alarms' views, with a table of active alarms:

Alarm Name	Category	Severity
all-resources-trashed	TSA	WARNING
activate-ent-fail		
activate-ent-fail-ers		
activate-ent-fail-mp		
activate-ent-fail-ss		
active-stage-decommission	CARDMGRMT	CRITICAL
active-stage-to-factory-default	CARDMGRMT	CRITICAL
active-stage-reconnect	CARDMGRMT	INFO
active-stage-reconnect-fail	CARDMGRMT	INFO
service-disconnected		

Customized, programmable alarm notifications enable operations personnel to quickly identify issues and address them.



HOW ACTIONABLE INSIGHTS CAN REDUCE COSTS AND IMPROVE SUBSCRIBER SATISFACTION

By combining machine learning, automation, and predictive insights into a single cloud solution for broadband operations teams, Calix Operations Cloud delivers significant benefits and cost savings. Calix estimates that the effective utilization of network data and insights on a proactive basis can help BSPs reduce expenses by **35 percent**. Meanwhile, by leveraging automation to eliminate repetitive network monitoring tasks, BSPs can reduce operating costs by **60 percent**.¹ Three primary factors contribute to these benefits:

Dramatic Reduction in the Need for Truck Rolls

Because Operations Cloud offers operations teams real-time network visibility, they can address many issues remotely, reducing or eliminating the need for a field technician to check equipment in the cabinet or visit the customer's premises.

Fewer Issues, Lower Support Costs

Thanks to advanced machine learning capabilities, Operations Cloud can identify, prioritize, and fix network problems before they impact subscribers, removing the guesswork from troubleshooting. In addition, predictive maintenance features result in fewer equipment failures. The result? Helpdesks receive far fewer calls, and they can resolve reported issues more quickly and reduce escalations to the operations team.

Increased Subscriber Satisfaction

With Operations Cloud, BSPs can intelligently analyze usage trends, enabling them to respond quickly to changes in bandwidth usage, network health, and subscriber demand. The result is fewer service outages, faster problem resolution, and—most importantly—happier and more satisfied subscribers.

EASY INTEGRATION ACROSS CALIX SOLUTIONS AND CLOUD SERVICES

Calix Operations Cloud offers full visibility across the complete portfolio of Calix solutions and cloud services, including EXA environments (currently managed by Calix CMS) and networks built on the Intelligent Access EDGE solution (powered by the Network Innovation Platform, AXOS®). Leveraging industry standards, Operations Cloud is compatible with the full range of Calix optical network terminals (ONTs) and optical line terminals (OLTs), the GigaSpire® BLAST family and GigaCenter systems, and most third-party customer premises equipment (CPE). The solution also seamlessly integrates with industry-leading operations support systems and business support systems (OSS/BSS).

Calix Operations Cloud complements other Calix cloud services, most notably Calix Support Cloud. While Operations Cloud enables network operations teams to take a more proactive stance in managing their networks, frontline customer support representatives depend on the rich capabilities of Support Cloud to diagnose and successfully address subscriber trouble calls as they arise. Because Operations Cloud and Support Cloud share access to the same data, insights are generated from the same common platform, reducing the need for support staff to swivel-chair between multiple systems.



OPTIMIZING NETWORK PERFORMANCE AND ENHANCING THE SUBSCRIBER EXPERIENCE

Broadband service providers may have systems in place to monitor and analyze specific parts of their network, but a solution that provides end-to-end visibility of the entire subscriber-facing network has not existed—until now. Operations Cloud unlocks the wealth of data currently trapped in the network and converts it into actionable insights that allow BSPs to proactively improve network performance and even anticipate issues before they impact subscribers. These capabilities and insights become even more vital as BSPs support an ever-increasing number of devices, applications, and services in the subscriber home, adding to network complexity and potentially higher support costs.

Calix Operations Cloud allows BSPs to streamline operations, reduce customer support calls, and minimize truck rolls—enabling them to concentrate on exciting their subscribers and growing their business.

[Request a Demo](#) to Learn How Operations Cloud Can Transform Your Network Operations.

¹ Results reported from Calix customers.