EXFO Fiber Case Study

Remote fiber monitoring system





Platform components

The EXFO service assurance platform delivers contextual insights that relate service quality and customer experience to infrastructure performance across all layers and domains—fiber, core, cloud, RAN and transport networks.

EXFO platform components and third-party systems integrate to assure multi-vendor networks, services, applications and infrastructure.





Case study: Wholesale provider monitors fiber on a national scale

Founded in 2009, NBN was established to design, build and operate Australia's national broadband network, bringing high speed Internet access to every corner of the continent-sized country. A dozen years later, NBN's national fiber footprint is 280,000 km (175,000 miles). The national fiber backbone, NBN Transit™, is itself over 70,000 km long.

In late 2020, NBN announced its intention to bring 1 Gbps internet access to another 6 million homes, bringing the total to 8 million homes passed.

The sheer vastness of Australia poses several challenges to the operation and maintenance of a nation-wide fiber optic network. Locating a fiber fault could take anywhere from 1 day in metro areas to 4 days in the case of the most remote locations. NBN wanted to do better, ultimately turning to EXFO and its Nova Fiber remote fiber monitoring solution. In conjunction with the OTDR-based Fiber Guardian 750 remote test units installed at more than 300 locations around Australia, Nova Fiber enables NBN to monitor more than 90 per cent of the DWDM-based Transit network via the network operations centre.

Nova Fiber monitors 24/7, enabling NBN to track network health in realtime

Nova Fiber is operated remotely via a web-based user interface that regularly triggers OTDR tests and is centrally managed by an element management system.

As a result of adopting Nova Fiber, NBN can identify and isolate faults faster, avoid costly truck rolls, particularly to remote locations, and deliver higher network availability, contributing to increased end-user satisfaction.



"With the EXFO Fiber Guardian hardware and Nova Fiber real-time fiber monitoring solution, we can quickly see if a fibre degradation is due to connections within an exchange, or in third-party connecting fibres, making demarcation of responsibility simpler while building trust with our third-party providers that we are only raising genuine faults to them."

Dan Beaman, Technical Specialist, Operations Support, NBN Co

EXFO corporate headquarters

400 Godin Avenue, Quebec City (Quebec) G1M 2K2 CANADA T +1 418 683-0211

Toll-free (USA and Canada) **1 800 663-3936**





© 2020 EXFO Inc. All copyright and/or trademarks or service marks are the property of their respective owners. EXFO's copyright and/or trademarks or service marks have been identified as such. However, the absence of such identification does not constitute a waiver of EXFO's rights and does not affect the legal status of any intellectual property.