

Mobile Backhaul & Ethernet Business Services



Transition Networks Partners with Videotron for Mobile Wireless 3G Backhaul and Ethernet Business Services

Operating one of the largest two-way interconnected HFC (hybrid fiber optic/coaxial cable) networks in North America, Videotron is dramatically changing the way Service Providers deliver services and how they build their networks. Designed for superior network reliability and differentiated services tailored to both residential and small to large businesses, Videotron is one of the largest MSO/Service Providers in North America with nearly 2 million subscribers in Quebec and east of Ontario. Their network spans more than 56,000 kilometers, the equivalent of two round-trips from Montreal to New Delhi with over 36,700 km of coaxial cable and 19,300 km of fiber optic cabling.

Transition Networks was awarded the Metro-Ethernet access vendor of choice by Videotron and is now deployed in two of the most predominant access services offered today: Mobile Backhaul and Ethernet Business Services. "There were three key criteria that separated Transition Networks from the other competitors evaluated, explained Philippe Perron, Director of IP Networks Engineering Business Research and Development for Videotron. "We required a Metro-Ethernet delivery solution that was simple to provision and install, was attractively priced, and offered management capabilities that were comprehensive and provided a complete end-to-end solution. Transition Networks was #1 in each of these three areas."

3G Mobile Backhaul

Beginning in 2008, Videotron implemented their own 3G network and now owns the complete 3G backhaul network, including the necessary spectrum and operating licenses to offer voice, data, and video transmission services. With over 1,000 3G sites now in-service, Transition Networks' xFBRM and xBFFG Network Interface Devices (NIDs) are installed at all of these sites and at the head-end central office locations as well. The xFBRM and xBFFG intelligent NIDs, both MEF 9 & 14 certified, provide 100Mbps and 1Gigabit fiber access from the Provider's Edge (PE) router out to the tower location and also between each tower - providing tower to tower backhaul in a ring topology.

Having exceptional Mean Time Between Failure (MTBF) performance is a mandatory requirement for any vendor deployed in Videotron's network today and a recent failure frequency audit revealed that less than .003% of all Transition Networks equipment installed in Videotron's network had a reported incident or failure. Also Transition's NIDs provided an important troubleshooting feature called Last Gasp. This feature enables the NID to store a small amount of power in order to send out an SNMP trap that alerts the management console in the event of a power failure. In the rare event of a failure in the field, Last Gasp functionality aids the technician in determining whether the service interruption was caused by a power outage or a disruption in the fiber cabling infrastructure.

"We are pleased that Videotron selected Transition Networks for both Mobile Backhaul and Ethernet Business Services," explained Kevin Faulds, Director of Product Management for Transition Networks. "Mobile backhaul is the critical link between the radio equipment and the core network. Selecting Transition's products with superior reliability and Carrier Grade Ethernet features was extremely important to Videotron and we are pleased to be their network partner."

"The product simplicity and ease of management with Transition Networks' products were #1 when compared to other vendors. Their products have been proven to be very reliable, simple to manage and very cost effective for us."

Philippe Perron,
Director of IP Networks Engineering
Business Research and Development,
Videotron



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Ethernet Business Services

Videotron's Business Solutions offering is a premier full-service business telecommunications service platform. It serves three customer segments: small and medium-sized businesses, large businesses, and telecommunications carriers. Products and services for businesses and carriers are all based on state-of-the-art technology - offering high performance and reliability.

Transition Networks' high density Point System chassis is deployed in the head-end central office and delivers comprehensive end-to-end managed Ethernet services for large and small businesses. Featuring a 2 RU managed system, the 19-slot Point System chassis provides a single management module that monitors and reports fault connectivity issues via SNMP traps and events. The individual xFBRM and xBFFG slide-in modules provide fiber to copper Ethernet connectivity to outlying businesses with stand-alone xFBRM and xBFFG network interface devices (NIDs) installed at customer premises, enabling demarcation hand-offs for 100Mbps and 1Gigabit services.

xBFFG and xFBRM Network Interface Devices

Industry
Service Provider

Application
3G Mobile Backhaul
Ethernet Business Services

Business Challenge
Providing comprehensive end-to-end Business Class Ethernet services for multiple applications including Mobile Backhaul and Ethernet to the Business.

Solution
The xBFFG and xFBRM offered Videotron a low cost, versatile infrastructure platform for delivering diverse services over a remotely managed end-to-end network.

Benefits
The xBFFG and xFBRM NIDs provide the following benefits for 3G Mobile Backhaul and Ethernet Business Services applications:

- SLA Assurance
- Advanced Fault Management
- Supports latest OAM Standards
 - Remote Management
 - IEEE 802.3ah (EFM)
 - VLANs, Q in Q
 - Bandwidth Allocation
- Small Form Factor
- Competitively Priced
- Ease of Use



xBFFG



xFBRM

The NIDs support several important network functions including 802.3ah OAM management, 802.1p CoS, 802.1q VLAN, 802.1ad (QinQ), and both egress and ingress bandwidth rate limiting. In addition to various diagnostics and remote troubleshooting available with an end-to-end Point System solution, additional optical remote monitoring is offered as an option through Transition Networks SFP based digital monitoring interface (DMI) SFP's. Additionally, the head-end modules and remote NIDs can also be configured as mere pass-thru devices allowing transparent remote network management and monitoring. "The product simplicity and ease of management with Transition Networks' products were #1 when compared to other vendor's products," explained Philippe Perron. "Their products have been proven to be very reliable, simple to manage and very cost-effective for us."

