

## CASE STUDY

# FIRST QUANTUM MINERALS LTD

LEADING MINING FIRM USES LEVEL 3<sup>®</sup> MPLS/IP VPN AND LEVEL 3<sup>®</sup> MANAGED NETWORK SERVICES TO ENHANCE COMMUNICATIONS AND PRODUCTIVITY ACROSS GLOBAL OPERATIONS



### Exploring alternative solutions

The search for minerals and precious metals takes explorers and prospectors to the farthest reaches of our planet. For First Quantum Minerals, Ltd., it means setting up shop in the middle of the desert, the heart of the jungle, and every environment in between where there might be deposits of copper.

Today, First Quantum Minerals operates seven mines and several administrative offices around the world. The firm's sustained growth over the last decade has put a significant strain on its existing communications infrastructure and the ability to seamlessly coordinate operations around the globe. In response, the company chose Level 3 MPLS/IP VPN and Managed Network Services (MNS) to build a new secure, cost-effective and scalable global communications platform for uniting its resources worldwide.

"Our legacy communications infrastructure didn't have the horsepower or flexibility to keep up with the incredible demands our business placed on it," says Ben Rodgers, First Quantum Minerals' group network manager. "Level 3 MPLS/IP VPN and Managed Network Services are proven solutions for delivering easily scalable, high-speed communications virtually anywhere—even the middle of the desert."

### Connectivity for all coordinates

First Quantum Minerals' expanding global operations commanded an increasing amount of technical resources. With growth in file sharing, voice, and video communications among its workers, the company needed a more robust platform to help streamline its critical business operations, improve network access and reliability at each work site, and reduce the cost of doing business in the middle of nowhere.

One of the biggest advantages of choosing Level 3 solutions is the global reach of the services. Level 3's global platform includes fiber networks anchored on three continents, undersea facilities, and seamless integration with satellite services that enables reliable connectivity virtually anywhere in the world.

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**Ben Rodgers, group network manager**  
First Quantum Materials, Ltd.

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"It was always a challenge trying to figure out how to link up sites in Africa, rural parts of Turkey and our offices in Australia and Europe," Rodgers notes. "Level 3's global infrastructure helps us provide mission-critical services like secure file uploads, video communication, and reliable email to the most remote locations on the planet."

The company's previous VPN solution offered little in the way of bandwidth scalability and network reliability when the network reached outside of more densely populated areas. As a result, employees in the field routinely struggled to connect long enough to communicate with project managers and other stakeholders, creating significant delays that impacted decision making and mining operations.

In contrast, Level 3 solutions provide high availability and reliable connectivity anywhere First Quantum Minerals needs it. Level 3 MPLS/IP VPN converges voice and data traffic for more efficient delivery, offers multiple quality of service (QoS) levels to prioritize network traffic and manage bandwidth for optimal performance, and allows bandwidth sharing across First Quantum Minerals' various operating sites.

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### **Faster rollout of essential upgrades**

Building out a global infrastructure to support an expanding company is never easy. It's much harder when a company has limited staff resources to spread across widely scattered worksites. With limited IT resources available at each of its sites to support hundreds of users, First Quantum Minerals needed a cost-effective way to accelerate the rollout of its updated global communications platform.

Level 3 Managed Network Services (MNS) helped dramatically accelerate the launch of First Quantum Minerals' upgraded network by taking on many of the most time-consuming and resource-intensive tasks. With Level 3, First Quantum Minerals can outsource WAN administration, configuration of managed routers and failover policies, help desk operations, and even data encryption to free up important IT personnel for higher-order and more strategic initiatives.

"Level 3's Managed Network Services have allowed us to focus on supporting our core business and being more efficient as a company," Rodgers says. "Now, we get to concentrate on doing what we do best because we know they're doing what they do best."

### **The path to prosperity**

Working with Level 3 Communications has fundamentally changed First Quantum Minerals' business for the better. With Level 3, Rodgers and his team have a single point of contact for troubleshooting and network planning, as well as the peace of mind that comes with being backed by a highly responsive team of network and telecommunications experts.

As importantly, Level 3 MPLS/IP VPN and Managed Network Services have helped consolidate once disparate management activities into a lean, efficient, unified operation. The Level 3 services have paved the way for First Quantum Minerals to build centralized reporting, VoIP, and SharePoint systems. Now, managing global projects and communicating across sites is simpler and more efficient, and local finance teams can deliver their business-critical reports to the central office without delay.

"We used to have to take other traffic offline just to allow the teams to upload their reports," he says. "Level 3 has helped us build an environment where every operating unit and team can do its job more efficiently and with the knowledge that their systems will always be available and working."

At the same time, the new services are also having a positive impact on the company's bottom line by helping to reduce operating expenses. According to Rodgers, the company is saving as much as \$10,000 per month just on long distance calling, thanks to the upgraded VoIP system supported by the Level 3 MPLS/IP VPN.

More importantly, the company now has a clear path and vision for managing its growth—and the technology to support it. "In the next few years, we'll be making additional investments in new sites and need to bring them online quickly, seamlessly, and at a low cost," Rodgers states. "Level 3 offers the unique blend of global expertise and the best, most scalable technologies available to bring our plans to fruition. It's a relationship we're counting on continuing for years to come."

## About First Quantum Minerals, Ltd.

First Quantum Minerals, Ltd. is a well-established and rapidly growing metals and mining company producing mainly copper, nickel, zinc, gold and platinum group elements. With a geographically diversified portfolio of high-quality operations and development projects and a strategic plan to achieve 1.3 million ton annually of copper production capacity, First Quantum is poised to become one of the largest widely held, pure-play copper producer and one of the top five copper producers in the world.

## About Level 3 Communications

Level 3 Communications, Inc. (NYSE: LVL3) is a Fortune 500 company that provides local, national and global communications services to enterprise, government and carrier customers. Level 3's comprehensive portfolio of secure, managed solutions includes fiber and infrastructure solutions; IP-based voice and data communications; wide-area Ethernet services; video and content distribution; data center and cloud-based solutions. Level 3 serves customers in more than 500 markets in over 60 countries across a global services platform anchored by owned fiber networks on three continents and connected by extensive undersea facilities.

## Challenge:

Deliver connectivity and enhance communications across global worksites

Centralize business-critical operations for greater efficiency and cost savings

Improve scalability for rapid on-boarding of new sites and teams

Enhance network security

## Solution:

- Level 3<sup>®</sup> MPLS/IP VPN
- Level 3<sup>®</sup> Managed Network Services
- Level 3<sup>®</sup> Voice Complete<sup>SM</sup>
- Level 3<sup>®</sup> Dedicated Internet Access
- Level 3<sup>®</sup> Videoconferencing
- Level 3<sup>®</sup> Professional Services
- Level 3<sup>®</sup> Managed Security Services

## Benefits:

Provided reliable connectivity to all global worksites

Centralized reporting and IT operations for greater efficiency

Set SLA and guaranteed uptime for the first time

Reduced voice service costs by as much as \$10,000 per month

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**Ben Rodgers, group network manager  
First Quantum Materials, Ltd.**

## ABOUT LEVEL 3

We build, operate and take end-to-end responsibility for network solutions that connect you to the world. We put customers first and take ownership of reliability and security across our broad portfolio.

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