

APPLICATION NOTE MULTINATIONAL MINING COMPANY



Red Lion's FlexEdge provides the mining industry with a flexible edge device that enhances the industry's ability to provide sustainable solutions, and that can adapt to solve a wide array of problems in multi-vendor environments.

CUSTOMER

Multinational Mining Company

CHALLENGES

- ▲ Balancing the extraction and processing of minerals with sustainable mining techniques
- ▲ Aging infrastructure is expensive to update
- ▲ Multi-vendor environment makes it difficult to connect products
- ▲ The need for data where stable communication is not available

RESULTS

- ▲ FlexEdge integrated multi-vendor environments into a digital strategy
- ▲ FlexEdge future-proofed the environment for changing needs
- ▲ The open platform lets the customer choose the system architecture they need
- ▲ Cyber-security was greatly enhanced

DEFINITION OF PROBLEM

A multinational mining company was looking for a way to safely manage its environmental responsibilities over thousands of square kilometers, prioritizing sustainable mining techniques. Its environment was composed of a multitude of different products from different vendors that were difficult to connect to one another and difficult to future-proof against changing needs.

THE SOLUTION

Red Lion's products are known to modernize aging infrastructure. Red Lion's FlexEdge is designed to empower its users to connect to virtually anything within their system. Because this powerful product offers a scalable solution to integrate complex multi-vendor environments into digital transformation strategies, organizations are able to access a future-proof solution for their changing application needs.

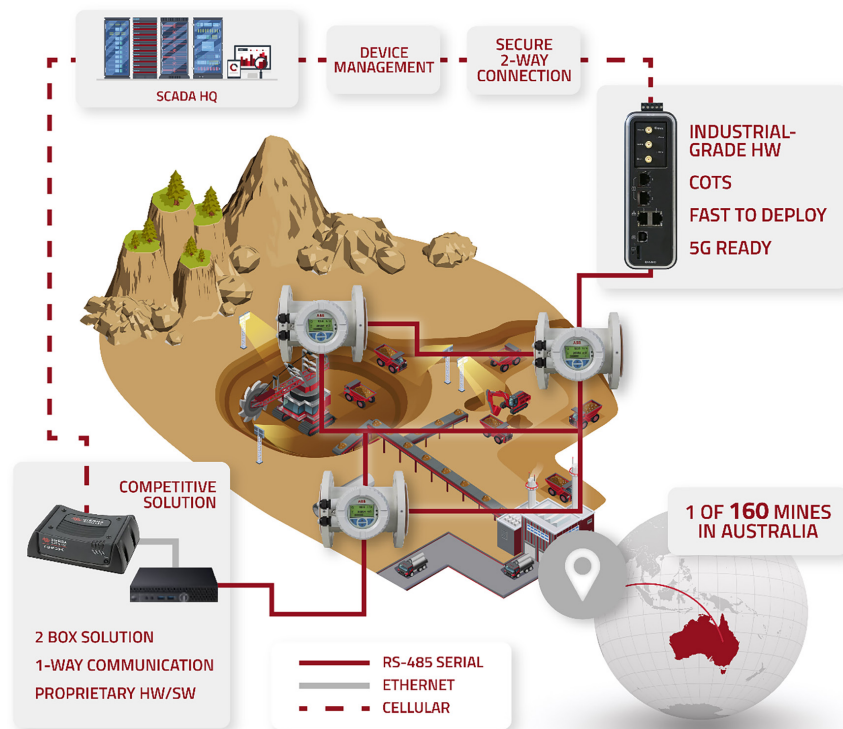
With forward-thinking modular connectivity, FlexEdge can support any combination of 4G LTE with GPS, Wi-Fi, Ethernet, USB, Serial, and a wide range of I/O. FlexEdge is an open platform that enables customers to choose the system architecture that bypasses the burden of existing software limitations while embracing evolving cybersecurity challenges. This is a massive task for mine operators to overcome today.

FlexEdge makes implementation straightforward, repeatable, reliable, secure, and scalable through Red Lion's mass deployment HTML dashboard tool, SixView Manager. What binds everything together is Red Lion's Crimson software, which configures everything from firmware, VPN, protocol conversion, ladder logic control, data logging, and web pages.

THE RESULT

With hundreds of environmental field sensors strategically positioned around their mine site connected to FlexEdge gateways, the company was able to capture the environmental dust and water quality metrics it needed for internal and regulatory reporting purposes. Due to the remote location of the mine, all data was buffered in case of communication issues, and was fed into a cloud historian. This data enabled the mining company to create dashboards and helps facilitate more informed business decisions that helped to maintain its sustainability and regulatory compliance. The mine operator was able to overcome a variety of major challenges with Red Lion's FlexEdge gateways and powerful Crimson® software due to the extensibility of the platform, 300+ industrial protocols, advanced networking capabilities, and support for modular communication and I/O.

Companies looking to enhance operational excellence will find new opportunities in data analytics from transparent information flows. Investing in a product like FlexEdge will allow the system to adapt and grow with the business over time. As today's technology becomes obsolete, Red Lion's R&D team continues to develop new interfaces to match future needs.



FLEXEDGE™

GRIMSON®



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Red Lion has been delivering innovative solutions to global markets since 1972 through communication, monitoring and control for industrial automation and networking – enabling companies worldwide to gain real-time data visibility that drives productivity. Red Lion is part of Spectris plc, the productivity enhancing instrumentation and controls company. For more information, please visit www.redlion.net

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