

CASE STUDY

Brazilian Business Group Optimizes Its Network and Security Infrastructure With the Fortinet Security Fabric

Empresas Lael Varella is a Brazilian holding company, operating in Minas Gerais, Espírito Santo, and Goiás the Central-West and Southeast regions of Brazil. Its founder and president, businessman Lael Vieira Varella, started in the transportation sector over 50 years ago. Today, the group has several companies with operations that cover truck sales, transportation, real estate, manufacturing, education, and health.

The complexity of managing the specific needs of each business segment led Empresas Lael Varella to seek a unified network and security solution. In the mid-2000s, the organization chose Fortinet technology to protect its systems and consolidate network security management.

“Fortinet gives me insight into the specific elements of the networks of our companies, and also allows me to unify them while offering me secure communications,” says Daividdi Morais, IT Supervisor at Empresas Lael Varella.

The group implemented a FortiGate Next-Generation Firewall (NGFW) in all its companies, with the support of Fortinet’s local partner, Brasiline Tecnologia, enabling Empresas Lael Varella to secure its networks with centralized management and protected communication for each business. Over time, the company added other technologies, such a LAN edge solution with FortiAP and FortiSwitch, for a higher level of wireless connectivity security and control.

Security and Availability for Multiple Businesses

Among all of the businesses under Empresas Lael Varella group, two specific companies experience significant operational improvements in the areas of security and network infrastructure.

Faminas is an educational institution that started in 2003. Its two campuses (with two more under construction) host 6,000 students, 1,200 professors, and about 400 administrative staff. The university offers 10 undergraduate programs and several courses, including medicine, business administration, accounting, dentistry, and psychology.

A growing user base and students’ accelerated consumption of internet resources prompted Faminas to adopt technologies that ensure stable and secure access to communications. “The business required high service availability, as it also needed to guarantee student access to remote education programs. We need a robust system that not only protects the educational platforms, but also ensures the users’ security and privacy. The Fortinet platform makes it possible for us to properly manage the network and keeps information secure,” says Morais.



EMPRESAS LAEL VARELLA

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Details

Customer: Empresas Lael Varella

Industry: Education

Secure SD-WAN locations: 15

Location: Brazil

Business Impact

- Unified security platform for companies in different industries
- Centralized network visibility and management
- Connectivity cost reduction of at least 60%
- Increased availability and speed to access business data

The school has over 1,000 interconnected computers spread across two campuses, which can be vulnerable to cybersecurity threats. Before using Fortinet, the university had to manually block applications—if it discovered vulnerabilities, each one was managed specifically from the server. Faminas also lacked information security for its internal data center and protection of the educational community's internet traffic. Today, all these threats are managed by FortiGate NGFW. The solution blocks suspicious applications and activities automatically and secures the data circulating within the school's network, powered by FortiGuard Labs threat intelligence services.

The Muriaé Cancer Hospital is another company that Empresas Lael Varella has modernized with the Fortinet platform. The 170-bed facility is one of the largest oncology complexes in the state of Minas Gerais, serving more than 158 municipalities and benefiting some 2.3 million people. The hospital has around 1,130 employees and performs more than 600,000 medical appointments per year. It also has a total area of 115,000 square meters and plans to open two more locations soon.

Due to its size and the sensitivity of the data it handles, the hospital requires permanent, fast, and secure communications. Currently, all the examination systems are digital—most of the medical applications being used record data online or consume resources hosted in the organization's. All hospital services are accessed via the internet for both medical staff and patients alike. The Fortinet NGFW provides them with secure and reliable communications that support business-critical applications and keep users always connected.

Centralized Management Optimizing Security

The Empresas Lael Varella's IT team also deployed FortiManager to manage its network security in a unified environment. Network administration for all the group's companies is handled from a single location, enabling the IT team to monitor and control each company's connectivity and security. With FortiManager, the organization can also evaluate network performance comprehensively and optimize resources. IT can deploy rules to multiple devices with a single panel of control and replicate standard processes quickly.

With FortiAnalyzer log management, analysis, and reporting, the team can also proactively prevent attacks. The IT team receives alerts about incidents in real time while the tool takes action to prevent information leaks or intruders from entering the network.

Secure SD-WAN as an Availability Solution

Ensuring all its companies are well-connected is essential for Empresas Lael Varella's communications ecosystem. The group has three data centers that host different services and make them available depending on the specific resource that is required. The Muriaé Cancer Hospital has a dedicated data center, while all other companies are hosted in a second data center. A third data center provides redundancy to the entire system. Ensuring that any of the companies can access the required digital resources can be challenging, considering that each of them has multiple locations communicating with the data centers.

For instance, hospitals—which intensively use video calls, telemedicine services, and digitized systems for medical examinations—need their links to operate smoothly and have their data protected. Unfortunately, the quality of Brazilian internet service led to connectivity and speed issues. To solve this, the group implemented Fortinet Secure SD-WAN technology through the FortiGate NGFW. This technology ensures the security and high availability of internal and external services in the group's many companies, whether for customer connections or for internet-based business services.

Solutions

- FortiGate Next-Generation Firewall
- Fortinet Secure SD-WAN
- FortiSwitch
- FortiAP
- FortiManager
- FortiAnalyzer

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Fortinet Secure SD-WAN improves connection speed as well. The solution enables intelligent use of the available resources, which also leads to cost savings. Empresas Lael Varella estimated a decrease in connectivity costs of at least 60% with the Fortinet solution. As a result, they can add more links to achieve greater speed, while Fortinet Secure SD-WAN automatically manages and optimizes the network channels depending on network traffic and applications prioritization.

“With Fortinet Secure SD-WAN technology, I’m able to control latency, availability, and load balancing of the network. This way, there are no unexpected interruptions if an internet provider has failures,” Morais points out.



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