



CASE STUDY

Dominican Republic Government Agency Modernizes and Secures Its Worldwide Dependencies with Fortinet Secure SD-WAN



The Ministry of Foreign Affairs of the Dominican Republic (MIREX) is responsible for developing and implementing the country’s foreign relations policy. Today, with 116 international locations worldwide including embassies, consulates, diplomatic representations, and commercial offices, MIREX is the government department with the largest representation and legal framework. Its role is to provide services to citizens, diplomats, and its own staff, through its five vice-ministries.

In 2019, MIREX undertook a technological transformation process aligned with a state policy mandating that Dominican institutions modernize administrative, financial, and operational management of all services provided to citizens. It thus designed a strategy to meet its communication, security, and information management requirements in compliance with its data protection responsibility, and sensitive information management.

Focus on Security

MIREX’s main challenge regarding its digital transformation process was to create a secure and centralized communication platform to connect all locations around the world. Preliminary analysis showed that the backbone of the department was a call manager system, which had already completed its life cycle and needed replacement. The network infrastructure was outdated and no longer supported by the manufacturer, resulting in lack of availability issues. Likewise, there were security gaps due to inefficient antivirus and firewall solutions.

Additionally, international offices’ networks exhibited security failures; sometimes websites were compromised and the IT department had no control over the connected devices or over the Wi-Fi networks.

MIREX decided to implement a hyper-convergent data-center model with computer security as one of its crucial features, as well as change the connectivity and security framework in its remote locations. “The security issue was critical,” says Vinicio Montero, head of ICT operations, MIREX. “We needed a robust and secure network with the capability of providing the power and stability to handle all Ministry services provided worldwide. We wanted to change to a data center, as well as a more integrated communications infrastructure with security as a priority.”

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Details

Customer: Ministry of Foreign Affairs of the Dominican Republic (MIREX)

Industry: Government

Location: Dominican Republic

Business Impact

- Integrated solution to provide routing, security, and intelligent traffic steering
- Single management to provision and control WAN edge, branch network including security, and process policies
- Compliance with high security regulations of the Dominican Republic government and regulations required by all countries where Dominican Republic has embassies or consulates

An Integrated and Unified Platform

MIREX developed an integrated communications platform to be able to oversee and manage everything from one place. After analyzing different options in the market, the Fortinet Security Fabric was the proposal that stood out in terms of functionality, integration of communications with security, and centralized administration capabilities. The cost-benefit ratio was also largely favorable.

Currently, the MIREX central office in Santo Domingo provides visibility over the whole network and control of accesses and devices, in addition to the traffic of data. Tools such as FortiSandbox, FortiADC, and FortiSIEM operate in a coordinated and integrated way to offer all the protection required by the Ministry, while FortiAnalyzer and FortiManager provide centralized and simplified management. MIREX benefits from an improved security posture via FortiSandbox integration with the Secure SD-WAN solution, as this enhances the robustness with an automated breach protection approach against zero-day attacks over wide-area network (WAN) connectivity.

However, the most notable change has been in the remote locations of MIREX worldwide. Before using the Fortinet Secure SD-WAN solution, each site required a switch, router, and firewall to provide connectivity and security. Today, a single FortiGate connects all traffic to the private cloud through a single communication and security device, providing consolidation capabilities, advanced networking, routing, and firewall in a single appliance. “In the traditional model, it is necessary to install many components, making a deployment extremely costly. We realized that Fortinet technology allows us to have all services integrated in a single and high-performance equipment,” said Montero. The solution has been implemented in 26 locations. By 2021, 70% of all locations will have this technology and the plan is to have 100% in the next two years.

Using this platform, MIREX securely connects its entire network across the globe, can view system performance reports, and configure automated responses in case of cyber threats. Furthermore, it can comply with the high security standards required by all countries where the Dominican Republic has embassies, as well as with the security regulations of the national government. “The capability of traffic being routed and managed securely by Fortinet’s robust and integrated platform makes us feel confident,” says Montero.

Montero adds, “This implementation has allowed us to turn MIREX into the service center of the Dominican Republic towards the world. National diplomacy, commercial representatives, tourism promotion entities, and the consulates that provide services to our citizens around the world rely on our secure network platform.”

Business Impact (contd.)

- Visibility, control, and automated response at the same level across all the dependencies
- Optimized and simplified tasks for IT workforce
- Cost savings and increased performance

Solutions

- Fortinet Secure SD-WAN
- FortiGate
- FortiSandbox
- FortiADC
- FortiSIEM
- FortiManager
- FortiAnalyzer

“Fortinet SD-WAN value proposal is unique. We found a solution that allows us to have a robust cybersecurity platform and at the same time to have all switching and routing services integrated. The capability of traffic being routed and managed securely by Fortinet’s integrated cybersecurity platform makes us feel confident.”

– Vinicio Montero, Head of ICT Operations, MIREX

A Forward-looking Solution

MIREX has been able to redefine its organizational IT structure thanks to the Fortinet solution. Previously, the department was fragmented in terms of functions and specializations. With this integrated proposal, the Ministry optimized its workforce and streamlined workflows, since security and network professionals work as a single team. The implementation was also especially cost-effective; the Ministry estimated that it saved two-thirds of what another provider would have cost.

In addition, MIREX gained efficiencies in security management thanks to a simplified management platform. Moreover, the department emphasizes that while other providers offer a business model based on working on all network and security issues with many devices, Fortinet provides an integrated approach. “Fortinet SD-WAN value proposal is unique. We found a solution that allows us to have a robust cybersecurity platform and at the same time to have communications and networking integrated,” highlights Montero.

In the near future, MIREX's goal is to complete the current solution deployment in all locations abroad, as well as to complete the IT infrastructure to have total local and remote redundancy. It also plans to improve the local infrastructure, including the integration of FortiVoice to migrate its telephony system and integrate it into the Fortinet Security Fabric platform.



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