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Premier Romanian Bank Achieves 50% Reduction in Application Response Times With FortiGate Secure SD-WAN

With almost 1,000 branches, CEC Bank is the oldest and best-established bank in Romania. It is also one of the fastest-growing banks in the country. The catalyst for this latest phase of growth is the organization's digital transformation of the underlying services, technology, and infrastructure necessary for the bank to realize its full business potential.

As a result, in addition to its traditional role of supporting the face-to-face banking transactions of the nation's consumers and entrepreneurs, CEC Bank has become the first in Romania to offer 100% online onboarding of new consumer customers. This paves the way for a range of new mobile and internet banking services through its innovative new "CEC_IN" portal, and increases efficiency and profitability.

The Need for a Faster, More Reliable Network Infrastructure

As CEC Bank embarked on increasingly ambitious digital innovation projects such as the transition to full electronic document management, the launch of a new online portal or "Virtual Store" for access to new banking products, and the increased adoption of cloud and hybrid services, network traffic exploded in volume. Within just a year, the number of emails had doubled from 4 million to 8 million, video and teleconferencing via Microsoft Teams rose to a massive 150,000 meetings per year, and the number of documents being stored electronically jumped 70%.

But the communications network, based on multiprotocol label switching (MPLS), which linked the bank's almost 1,000 remote branches to the data centers and head office, was too slow and unreliable to support this increased traffic load.

"It was immediately apparent that the ongoing digital transformation of our services would need a parallel transformation of the network and security infrastructure underpinning them," explains Eduard Bîsceanu, director of information security and network administration at CEC Bank.

But it was not just a question of improving speed and reliability. As the complexity of the bank's IT workflows and their interactions increased, the team realized it needed a more flexible, automated approach to managing, adapting, and scaling the network infrastructure to meet their evolving needs. The new network would need to support legacy applications as well as newer cloud and hybrid services. It also needed to adapt in real time and with minimal human intervention, since the number of staff with the requisite network security skills was limited.

Furthermore, to maintain service continuity, the team would need the centralized visibility and control to monitor and measure systems and service delivery against defined thresholds and to identify and predict service-impacting trends.

CEC 🛡 Bank

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Details

Customer: CEC Bank

Industry: Financial Services

Location: Romania

Business Impact

- 8x increase in available bandwidth
- 50% reduction in application response times
- Greatly reduced operational complexity
- Increased profitability through launch of new services and efficiency gains

Transition to Secure SD-WAN

The architectural solution to all these requirements was to transition the infrastructure to a software-defined wide-area network (SD-WAN). As with any transition to SD-WAN, the benefits of providing direct access to cloud and internet resources at the network edge needed to be weighed against the security implications of bypassing previous centralized security checks as traffic is no longer backhauled to the data center.

CEC Bank therefore began its search for a solution comprising a combination of networking, security, and communications services that could support its goals. As a government-owned institution, this translated to a formal tender process.

After thorough evaluation of the responses followed by extensive proof-of-concept testing, the bank selected FortiGate Secure SD-WAN. "Both solutions in our final shortlist had the required functionality, but Fortinet demonstrated superior performance and manageability," adds Bîsceanu, "which we knew would be critical to maintaining service levels as the business grew."

By offloading CPU-intensive next-generation firewall (NGFW) security tasks to a dedicated security processing unit (SPU), the FortiGate NGFW can perform deep packet inspection of secure sockets layer (SSL)-encrypted traffic, identify thousands of different traffic types, and carry out all the associated processing without compromising overall throughput.

Rapid Deployment and Simplified Management

To streamline network deployment and simplify ongoing management, analysis, and reporting, CEC Bank deployed FortiManager and FortiAnalyzer, collectively known as the Fabric Management Center, allowing Bîsceanu and the team to monitor and control the entire network and security infrastructure from a central location.

"Being able to define granular, centralized policies and configurations and have them automatically applied as new equipment is deployed in the field proved invaluable," explains Bîsceanu. "Within just six months the entire roll-out of FortiGate Secure SD-WAN was complete, providing fast, reliable connectivity to our full range of applications and services to almost 1,000 branches." To simplify such large-scale deployments, the zero-touch provisioning function of FortiManager uses predefined device-provisioning templates and can even force all new installs and upgrades to only use predetermined firmware versions.

FortiManager also brings powerful SD-WAN management capabilities with intuitive workflows and simplified provisioning. Network administrators can set application-centric SD-WAN business policies to fine-tune traffic steering decisions based on performance service-level agreement targets for each WAN provider.

Admins can then use the SD-WAN monitoring dashboard to monitor application performance and bandwidth utilization per WAN link. FortiAnalyzer offers enhanced analytics views and SD-WAN assessment reports.

"Deploying FortiGate Secure SD-WAN in around 1,000 branches has not only allowed us to increase available bandwidth by a factor of eight, but by optimizing our use of that bandwidth and automatically re-routing traffic in the event of link failure, the improvement in user experience has been phenomenal," adds Bîsceanu. "Our staff are happy, our customers are happy, and the business is growing faster than ever."

Solutions

- FortiGate Secure SD-WAN
- FortiGate Network Firewall
- Fabric Management Center NOC
- Fabric Management Center SOC

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