FORTINET

CASE STUDY

Leading Spanish Bank Expands and Enhances Service through Fortinet Secure SD-WAN

CaixaBank is a leading provider of retail banking services in Spain and Portugal, serving over 20 million customers through approximately 5,000 branches. With a long-term vision centered on quality, proximity, and specialization, CaixaBank plays a key role in the sustainable economic growth of the region, through innovative products and services adapted to the varied needs of its customers.

Digital Innovation and Economic Efficiency

Continued commitment to innovation has enabled CaixaBank to become a leader in digital banking, with more than 11 million customers now accessing its services through digital channels.

To support this transition in the most sustainable, scalable, and cost-effective way, CaixaBank embarked on a series of digital transformations, including the migration of key services to the cloud, a redesign of its wide area network (WAN) to a new software-defined WAN (SD-WAN) architecture, and the use of 5G mobile technology to expand its presence in remote rural areas as well as to increase service quality and network resilience.

Fast, Reliable, and Secure Branch Networking with Fortinet Secure SD-WAN

With the growing need for high-speed digital services across an expanding number of regional branches, SD-WAN has improved the user experience and application response times while significantly reducing operating expenses.

The hub and spoke architecture of the previous network, based on multi-protocol label switching (MPLS), meant that all traffic was backhauled through a central firewall. But while this topology worked fine for the applications running at the bank's central data center, it quickly became a bottleneck as the bank started to migrate services to the cloud.

By replacing costly MPLS links with readily available broadband internet access, application response times and overall communications costs would be reduced. But with the expanded potential cyberattack surface, the bank also realized that greater security controls would need to be integrated into whatever solution it chose.

After evaluating a shortlist of potential solutions, CaixaBank selected the Fortinet Secure SD-WAN solution, built on the advanced SD-WAN functionality integrated into the core operating system of the FortiGate Next-Generation Firewall (NGFW). For the larger branches, the bank also deployed FortiSwitch high-performance LAN switches.

Thanks to a system-level integration between the FortiGate and FortiSwitch, the advanced protection and central management capabilities of the FortiGate NGFW

CaixaBank

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Manager,
Networks and Data Centers,
CaixaBank

Details

Customer: CaixaBank

Industry: Financial Services

Location: Spain

Number of Secure SD-WAN Locations: 5,000

Business Impact

- Reduced network communications costs by 50%

- Enhanced protection through unified network security from the WAN edge to the access layer

- Increased application performance and resilience through SD-WAN

are extended from the WAN edge to the branch access layer, greatly simplifying administration and enabling the creation of a unified security posture.

"Fortinet Secure SD-WAN not only proved the most cost-effective solution we looked at," recalls CaixaBank's manager for networks and data centers, "but the close integration of networking and security in a single device also made it the fastest to deploy and by far the easiest to manage."

The solution's single-pane-of-glass management, which combines both security and network layer visibility into a single centralized console, were further extended through the addition of FortiManager.

"With 5,000 sites needing secure interconnection, the FortiManager zero-touch provisioning option saved us a huge amount of time and resource," explains the network manager. "Instead of having to send out engineers to manually configure each device, centrally created configuration templates could be applied automatically as soon as they were connected, allowing us to complete the entire deployment in just 18 months."

To simplify the process of reporting and regulatory compliance, and to help the team optimize application performance and bandwidth usage across the SD-WAN, CaixaBank also deployed Fortinet's advanced logging, reporting and analytics solution, FortiAnalyzer.

To ensure operational continuity at all times, both FortiManager and FortiAnalyzer were deployed in a high availability configuration, as were the FortiGate NGFWs and switches in larger branches at key locations across the WAN.

For increased resilience of the network, wireless backup links were added using FortiExtender in all branches. With both dual SIM and dual modem options available, FortiExtender enables wireless WAN connections of the FortiGate via 5G or LTE to up to four different ISPs for maximum flexibility and coverage. FortiExtender can also provide enhanced resiliency through critical services such as Virtual Router Redundancy Protocol and traffic isolation across carriers.

Mobile Banking Services

CaixaBank Mobile Banking Offices are a fleet of 21 air-conditioned buses transformed into mobile branches that travel from town to town, providing banking services to small villages.

Being able to connect up to four ISPs through FortiExtender allowed CaixaBank to upgrade its Mobile Banking Offices from a traditional satellite connection (Hispasat) to a full Fortinet 4G/5G solution (FortiGate, FortiSwitch, and FortiExtender). This upgrade provided more bandwidth, lower latency, and easier setup at every stop of the bus, and improved management of the overall solution.

Business Impact (cont.)

- Enabled the expansion of service coverage through innovative new mobile branch solution

Solutions

- FortiGate Next-Generation Firewall

- Fortinet Secure SD-WAN

- FortiExtender

- FortiSwitch

- FortiManager

- FortiAnalyzer

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Looking Ahead

Having successfully completed the first phase of digital transformations, CaixaBank is now looking to extend its use of Fortinet networking and security infrastructure to the bank's international subsidiaries.

"The Fortinet Secure SD-WAN solution has improved application performance, increased service continuity, and cut the cost of network communications by almost 50%," concludes the bank's head of networks and data centers. "As we now continue on this path of digital innovation, we look forward to continued collaboration with Fortinet and its partners."

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