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FortiGate 4200F Delivers a World-class Secure Telehealthcare Experience

Massively Scalable Security, at 10x the Performance of Competitors

Overview

Healthcare service providers need to be able to expand and adapt their security to changing business conditions at a moment's notice—and that was true before the COVID-19 pandemic forced organizations to adapt to remote work scenarios sometimes well outside of their comfort zone.

It's time for healthcare organizations with enterprise scalability needs, especially hospitals, pharmaceutical companies, and research organizations, to provide a network connectivity experience that balances—not compromises on—security and performance.

Secure Telehealthcare Requires More

New trends such as 5G are transforming what's possible by enabling hyperconnectivity between users and other users, users and machines, and machines and other machines. All of these connections require hyper speed and hyper scale. Because of the speed at which user traffic is growing in every industry—propelled by the rate at which applications, workflows, communications, and transactions need to take place—a number of organizations find themselves needing to make trade-offs between security and performance, not wanting traditional security tools to grind connectivity, and therefore the overall user experience, to a halt.

> Telehealth and other remote services all require encryption to safeguard confidential healthcare information. With a Security Compute Rating of 6x for SSL inspection (including TLS 1.3), FortiGate 4200F delivers the industry's best price/performance.

In healthcare, organizations are seeing these trade-offs amidst the rapid push to embrace telehealthcare solutions such as remote examinations, remote consultations, and a range of nonclinical engagements. In any of these use cases, performance and scalability are key to an ideal user experience that's also secure. Unfortunately, most security solutions are simply unable to provide speed and scale at an affordable price—forcing organizations to purchase security solutions with minimal performance and scalability headroom.

Security solutions, especially firewalls, should never be a bottleneck. FortiGate 4200F can solve these challenges in healthcare by enabling accelerated segmentation, ultra-scalability, top performance, and low latency. No healthcare organization should ever have to make the impossible choice between performance and protection.

FortiGate 4200F: Delivering Critical Business Outcomes for Healthcare

FortiGate 4200F, powered by Fortinet's seventh-generation processor (NP7), radically increases the speed, scale, and performance for large enterprise data centers. The 4200F delivers the best performance-to-power ratio to securely drive digital innovation and meet the huge capacity and performance demands of critical business operations across a wide variety of verticals and large enterprises including financial services, healthcare, education, advanced research, and high-velocity ecommerce.

The following examples underscore strategic FortiGate 4200F use cases for healthcare organizations:

- **Telehealthcare services require massively scalable remote access:** In healthcare, like other industries, speed translates to productivity. The FortiGate 4200F offers the industry's highest security compute rating of 7.5x for IPsec encrypted performance and allows organizations to implement business continuity plans and new remote services.

- **Healthcare companies managing internal security risks:** Providing trusted application access and achieving compliance and privacy requires enterprises to secure access and segment at scale. Telehealth and other remote services all require encryption to safeguard confidential healthcare information. With a Security Compute Rating of 6x for SSL inspection (including TLS 1.3), FortiGate 4200F delivers the industry's best price/performance.

- **High-velocity telehealthcare providers handling event-based connection bursts:** Managing previously unseen levels of capacity and support for up to tens of millions of user connections per second is mandatory for virtual business. With a Security Compute Rating of 13x for connections per second, the FortiGate 4200F provides high-performance security to handle escalating business needs without compromising user experience.

- **Advanced pharmaceutical research and healthcare organizations that require support for elephant flows:** Today's data centers struggle to securely transfer huge datasets (e.g., 1TB files) for activities such as artificial intelligence/machine learning (AI/ML) simulations used within cutting-edge research. The FortiGate 4200F allows the rapid transfer of large datasets by supporting multiple 100Gbps elephant flows.

- **Healthcare providers that must segment massively scalable virtual networks:** Traditional software-based Virtual Extensible LAN (VXLAN) solutions have low performance and high latency, which increases time to service. Augmented Reality healthcare services and other new technology applications require secure, low-latency, high-reliability capabilities. FortiGate 4200F offers hardware-accelerated VXLAN to enable secure and super-fast communication without affecting performance.

The Industry's Best Firewall Performance—By Far

The following table shows a comparison between Fortinet FortiGate 4200F and that of major firewall competitors.

Specification	Fortinet FortiGate 4200F	Industry Average	Security Compute Rating	Palo Alto Networks PA-5260	Check Point Security Gateway SG-26000	Cisco Firepower FPR-4125	Juniper SRX54001
Firewall	800Gbps	96Gbps	8x	64Gbps	106Gbps	80Gbps	135Gbps
IPsec VPN	210Gbps	28Gbps	7.5x	27Gbps	40Gbps	14Gbps	30Gbps
SSL Inspection	50Gbps	8Gbps	6x	N/A	N/A	8Gbps	N/A
Concurrent Sessions	450M*	28M	16x	32M	10M	25M	45M
Connections Per Second	7 M*	529K	13x	450K	550K	265K	850K

Refers to hyperscale license enabled.

Conclusion

In 2020, as workforces and user interactions rapidly shifted to a remote setup, the lack of performance and scalability of integrated firewall and virtual private network (VPN) solutions challenged organizations when scaling their secure remote access programs. Those who deployed traditional firewalls simply could not scale across multiple applications, meaning they were forced to upgrade or even install completely separate appliances. But performance and security should never be a trade-off, and with Fortinet solutions, they never are. Learn more about FortiGate 4200F for secure telehealthcare and drive great patient outcomes with unprecedented scale—at unprecedented TCO.

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