

Supporting your growth. Securing your journey.

Enabling rapid progress with an adaptive, business-wide Security Fabric that delivers free data flow within complex pharmaceutical ecosystems





As is the case for most of the business world, Covid-19 has rapidly accelerated digitization. This is no different for the pharmaceutical industry, where data and digital technology transformation is having a significant impact on organizations. Unfortunately, with increasing digital change comes growing threats of cyber-attacks, and this is something that pharma organizations must address with greater authority.

That is not to say that pharmaceutical organizations are ignorant to security threats. The industry has long-held concerns about migrating to the cloud, and how the increasing array of endpoints inevitably provides more potential for security breaches.

Nevertheless, the pandemic has mostly fast-tracked change that already needed to happen. The trend for connected medicine, a requirement for more digital technologies and infrastructure, an increasing reliance on ecosystems and partnerships, and the need to deliver more customer-centric approaches is a call that the industry cannot ignore. Moreover, the use of AI and other robotics, which are making pharma businesses vastly more effective and efficient, also demand huge amounts of data, along with cloud capabilities in order to leverage them.

All of this requires security to be prioritized. Mass remote working, which comes with its own risks, may have become obligatory for many workforces, but the need to integrate vulnerable, legacy Operational Technology, and the rising value of pharmaceutical intellectual property have seen the industry identified as a vulnerable and lucrative target.

Attitudes and perceptions of risk can be inconsistent. The events of the past year have placed huge pressure on accelerating the development and production of medicines but achieving these goals so quickly can bring with it high risk. With intellectual property often worth billions of dollars, and organizational reputations on the line, speed cannot be at the expense of security, nor should it be considered a problem that sits solely on the shoulders of IT.



An end-to-end yet incrementally deliverable and actionable approach to cyber security within complex pharmaceutical ecosystems

Fortinet can partner with pharmaceutical organizations to enable greater protection by delivering actionable security across IT and Operational Technology (OT) environments. With our adaptive and business-wide Security Fabric, we can support requirements for an ecosystem-wide approach to security, compliance, and continuous validation with a **broad, integrated, and automated** security platform.



We provide end-to-end segmentation and protection throughout increasingly digital pharmaceutical value chains. Protection extends from research, prototyping and approval to manufacturing, distribution and the patients being treated. Protection encompasses the entire cyber-physical environment of your data, data centers, carriers, users, critical infrastructure and ecosystem, including partners, distributed offices, and remote workers.

The platform can be implemented in an incremental way that is relevant to organizations of different sizes, with a comprehensive suite of solutions that can include security for network, application, cloud, and mobile environments, with endpoint security, AI-driven threat protection and Zero-Trust access.

Making security an actionable business priority through deep understanding and an end-to-end, yet incrementally deliverable approach

We know that the pharmaceutical industry as a whole faces many challenges. But with these challenges come opportunities too. It is critical that pharmaceutical organizations have a partner with a practicable approach to augmenting security, bringing consistent and complete risk mitigation, total assurance and the ability to thrive as they grow, merge, divest and acquire new businesses. This demands a partnership that delivers multiple strengths: addressing the shortcomings of siloed and patchwork infrastructures, maintaining a relevant security posture without compromising continuous manufacturing, and enabling pharmaceutical organizations to fully embrace the opportunities that digital transformation and innovation bring.

With Fortinet's adaptive business-wide Security Fabric, we can meet the requirements to:

Accelerate Digital and business transformation and support global growth, by sustaining security within your complex and increasingly cloud-enabled ecosystems. We provide comprehensive security and protection for data across historically air-gapped IT and OT boundaries. The single, integrated platform supports secure ecosystem-wide SD-WAN connectivity. This brings visibility of the entire digital attack surface to enable better risk management, reduces complexity, and enables disparate systems to speak to each other with a consistent security policy in place.

Enable integrity in R&D and manufacturing with secure distributed working and secure endpoints. We can protect your collaborative ecosystem, regardless of device or network, through the visibility of data, and control of credentials plus Multi-Factor Authentication alongside actionable intelligence. Our next generation endpoint security provides real-time automated endpoint protection, detection and response, while our platform and firewall capacity enable safe throughput and processing of IP publicly identifiable information.

Provide comprehensive, sustainable and scalable security across cyber-physical IT and OT boundaries with an open, architectural approach and secure SD-WAN connectivity. This provides you with visibility, continuity, scalability, and transparency without interruption or interference throughout the digital value chain. At the same time, delivering high value performance versus cost, and lowering TCO through reduced integration complexity.

Support and meet compliance for the likes of GDPR, NIST, FDA, OECD, and more, with continuous validation to ensure operations meet auditor requirements. This means tangible scores against relevant standards and against peer organizations, and actionable information about how to prioritize and resolve compliance issues.

Protect Industrial Control Systems (ICS) and Supervisory Control and Data Acquisition Systems (SCADA) by seamlessly integrating OT security solutions with best-of-breed threat protection for IT environments across the data center, cloud and network perimeter.

This is all made possible by **adopting a holistic, single platform-orientated approach** based on solid end-to-end capability. This brings visibility and accessibility of data across systems to increase speed of response, while reducing the burden of alerts on IT/security staff and enabling effective reporting to the C-suite. In addition, the consistently secure single-platform approach **simplifies growth through mergers, divestitures and acquisitions**, securing new people and their networks while removing the need to integrate new systems, or retrain employees, and it provides you with 24/7 global support.

Being incrementally deliverable makes it possible to manage complexity, **augmenting current security approaches without the need to 'rip and replace'**. We can actively support deployment within developing security ecosystems, keeping pace with evolving threats and securing your journey.



Why Fortinet is the right partner to help pharmaceutical organizations derive the value from their ecosystems, innovative capacity, and operational capability

As the preferred cybersecurity partner for large, multi-national organizations in highly complex, highly regulated industries such as government, banking, and manufacturing, Fortinet is **the #1 cybersecurity company in the world**: the most deployed, most validated, most patented, and most integrated.

Fortinet's Security Fabric uniquely leverages deep expertise from OT and IT environments bringing the **ability to secure both modern and legacy equipment commonly found in pharmaceutical R&D and manufacturing**. Even in the most complex pharmaceutical landscape, we are able to secure proprietary data, aging and vulnerable manufacturing infrastructure—including precision plant runs that haven't been patched for years—without disrupting their processes. Ultimately, this helps to ensure the safety and health of patients.

With no siloes and no requirement for complex internal integrations, our Security Fabric is **a single, organically developed architecture** that is inherently more secure, and it offers:



The most secure SD-WAN connectivity for pharmaceutical organizations reliant on large data sets and distributed workforces.

Only our products offer the built-in, secure SD-WAN connectivity necessary for pharmaceutical organizations to be competitive including ruggedized options where required. We also bring round-the-clock global presence, infrastructure, and support, as well as our own global threat research team and in-house technologies to deliver rapid and coordinated response to threats.



Cross-vendor interoperability and visibility.

Where our firewalls and switches are deployed alongside those from other vendors, our integrations enable wider control and monitoring of data. We provide the Network Access Control visibility and device recognition needed in pharmaceutical operational technology.



The first open architectural approach to securing evolving IT infrastructure able to dynamically adapt without compromise across networked, application, cloud, or mobile environments.

Conclusion

Working together, Fortinet can support pharmaceutical organizations of all sizes to grow through secure flow of data across connected IT and OT environments and within the complex, evolving pharmaceutical ecosystems necessary for success. At the same time, pharmaceutical businesses can remain secure throughout their increasingly digital, customer-led and data-driven journeys. Trusted by over 450,000 customers, many of whom lead the way in highly regulated areas such as banking and government, you can draw on vast cross-industry experience and expertise in entirely data-driven, complex organisations.

With the Security Fabric you can overcome the challenges of maintaining data integrity, increasing operational efficiency, cost control, and compliance reporting across an infrastructure that has to rely on cloud, data, digitization, and partnerships more so than ever. With a single platform you gain consistent, complete risk migration and total assurance, as well as visibility of your entire, end-to-end security needs.



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