Fortinet Innovative Edge-to-Core Protection With HPE and Pensando

Protect Critical Infrastructure With HPE, Fortinet, and Pensando

Cybersecurity Threats Require Automated Defenses

The accelerating frequency of cyber crimes confirms that the attack surface is expanding. In a connected world, attacks that reach inside the network can cause the most damage.[1] This is complicated by expectations that 60% of endpoint detection and response solutions will include data from multiple security control sources by 2025.[2]

Today's enterprises require a multilayered and end-to-end security strategy and solutions. Hewlett Packard Enterprise (HPE), Fortinet, and Pensando have teamed up to provide a holistic end-to-end orchestration solution for enterprise environments and data centers to help customers overcome security challenges and prepare for unforeseen future ones.

Challenges of Complete Security

Some organizations are challenged with resource prioritization to provide adequate end-to-end security solutions and rely on disparate sets of security tools. Securing enterprises and data centers will continue to get more challenging as the attack surface expands:

AI-powered cybersecurity.
Without artificial intelligence (AI)/machine learning (ML) tools, IT teams must manually sift through overwhelming threat alerts. **45% of companies** report having too many false positives.[3]

An expanding attack surface.
The remote workforce, the rapid increase in endpoint devices that were not previously connected, and the Internet-of-Things (IoT) **broaden the attack surface**.

Lack of IT visibility.
About 68% of companies say that IT teams lack visibility into all the activities of users and devices. 57% of companies consider that as their primary security gap.[4]

Infrastructure security gaps.
IT security infrastructure in **62% of companies** have gaps that allow attackers to penetrate their defenses.[5]

Insider threats.
76% of IT decision makers felt that working from home blurred the lines between personal and work devices.[6]

Data explosion.
43% of companies say that their security solutions can't keep up with data growth.[7]

Security skill-set gap.
There are not enough skilled cybersecurity professionals to fill the current industry demand.
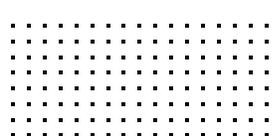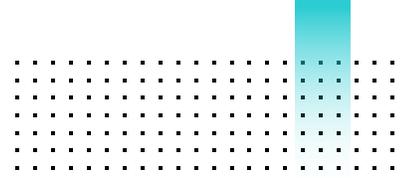
Protection You Can Trust

The teaming of HPE, Fortinet, and Pensando is a unique opportunity to offer customers unmatched security and automation for critical infrastructures at the individual port level. Bringing the HPE, Fortinet, and Pensando solutions together allows for innovative edge-to-core protection along with global orchestration capabilities. The solution elements include HPE servers, storage, Pensando DSC, PSM integrated for protection by Fortinet Security Fabric, FortiGate, FortiEDR, and FortiAnalyzer.

HPE Secure Compute Lifecycle. This solution enables complete lifecycle protection for HPE Gen 10 servers. The best-known aspect of the offering is HPE's Silicon Root of Trust, the fingerprint for every HPE ProLiant server. With the HPE Silicon Root of Trust, protection starts when the server attempts to boot. If an anomaly is detected, the boot process is aborted, and the customer is alerted to take corrective action. The power of the HPE solution stems from the fact that when intruders can't access the system, they can't cause damage.

Fortinet's networking security leadership. Fortinet's next-generation firewall (NGFW) FortiGate offerings, a family of networking firewalls, protect against internal and external threats. The highly scalable FortiGate offerings provide complete visibility across the attack surface and protect against lateral attacks. Fortinet NGFWs enable organizations to manage security risks efficiently, enhance business continuity, and deliver optimal customer experience.

FortiSOAR is a holistic Security Orchestration, Automation, and Response solution designed to efficiently respond to the ever-increasing influx of alerts, repetitive manual processes, and shortage of resources. This allows customers to prevent malware infection with machine learning antivirus, detect and defuse potential threats in real time, and automate response and remediation procedures with customizable playbooks.

Pensando Distributed Services Card (DSC). The purpose-built server NIC cards are available for HPE servers in two models of 25G and 100G. Available as a factory-installed option with HPE servers, the Pensando DSCs take over the security functions of classic security appliances. Having fully distributed, purpose built, DSCs in the servers, allows for granular control and visibility throughout the data center. The combination of HPE Silicon Root of Trust and Pensando DSCs delivers unmatched edge security. The Pensando innovative solution offers additional benefits, including:

- **Free up host CPU resources.** Compute-intensive security functions are offloaded to domain-specific hardware. Customers can reclaim more CPU resources for applications.

- **Improve visibility.** Utilize always-on telemetry for better insight into network behavior.

- **Versatile support.** Use for virtual machines, bare metal workloads, and containerized workloads.

- **Single point of enforcement.** All server traffic traverses the DSC node, where policy and encryption can be consistently applied.

- **Ironclad protection.** Strict host isolation is enforced by HardGap™ technology that protects the DSC from compromise in the presence of an attack on the server.

Better Together

HPE, Fortinet, and Pensando offer customers complete protection for enterprise on-premises and cloud solutions. The joint offerings are protected from the moment the server starts, whenever a user accesses an endpoint at the edge to the furthest point of the cloud footprint. The partners deliver cutting-edge solutions that protect customer data anywhere and scale deployments to support business growth. The combined solution offers granular east-to-west and north-to-south control and automated response across the data center.

For additional information about the products and solutions mentioned, contact hpesales@fortinet.com.

1, 3–5, 7. Ponemon Institute June 2020. "The 2020 Study on Closing the IT Security Gap: Global."
2. Gartner May 2021. "Magic Quadrant for Endpoint Protection Platform."
6. HP Wolf Security 2021. "Blurred Lines and Blindspots."