

Pulse Policy Secure

A Zero-Trust Secure Access Framework for the Industrial Internet of Things

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Overview

With the advent of Industry 4.0, smart factory floors are leveraging the Industrial Internet of Things (IIoT) and Behavioral Analytics, and cloud computing to detect anomalous device behavior and boost factory floor efficiency. Despite these advances, factory floor repairs still often require technicians to visit the factory which leads to prolonged production outages.

A powerful framework for NAC visibility and enforcement

Manufacturers are redesigning their security architectures to protect their IT and OT infrastructure under a united zero-trust security umbrella. It gives OT teams a tool to discover, profile and secure the smart devices operating within their environment. It provides a way to automate the infrastructure demarc between IT and OT to expand the use of zero-trust policies in both domains for maximum security while also providing added value to address practical issues such as rapid factory floor repair for maximum factory floor uptime.

Pulse Secure Release 9.0 combines VPN and NAC technologies to provide a single zero-trust security umbrella for blended IT and OT environments while also delivering greater efficiencies for manufacturing.

Problems We Solve

Zero-Trust IoT Framework

Trust no device inside or outside of the enterprise perimeter unless verified

Network Profiling

Discover and profiles manufacturing floor IIoT systems, such as SCADAs, PLCs and HMIs

Behavior Analytics

Detect anomalous device behavior for potential malware and domain generation algorithm (DGA) attacks.

End-to-end compliance

Comprehensive management from endpoint to datacenter identifying unauthorized devices and applications while remediating on demand.



Visibility

Profile devices and establish complete network visibility



Automation

Secure access policies are auto-provisioned to next-generation firewalls



Authentication

Users and Devices are authenticated based on role



Compliance

Assess and remediate device security compliance policies



Secure Access

Support contractors gain remote secure access to troubled floor systems

Diagram 1: Zero Trust Secure Access Framework



Secure access auto-provisioning

Automate secure access control to devices including IoT through Pulse Policy Secure 3rd party integrations with next-generation firewalls via API, Syslog, and IF-MAP protocol. Configure access-policies to restrict authorized user access to IoT devices.



Self-provisioned onboarding

Simplify deployment with automated, self-service onboarding of laptops, smartphones, and tablets independent of user location or device ownership (e.g., BYOD, COPE).



Flexible deployment

Deploy and scale using multi-purpose physical (PSA series) or virtual (VMware, Hyper-V & KVM) appliances. Simplify and scale deployments with an embedded RADIUS Server, IF-MAP Server, and EMM platform.



Behavior Analytics

Enhanced security detects anomalous behavior for managed and unmanaged devices including IoT. Identify user/device traffic patterns to detect potential malware and domain generation algorithm (DGA) attacks.



Native unified client

Deliver an intuitive user experience via the multifunction Pulse Client, which can be used both for NAC and remote VPN access and provides real-time posture assessment for compliance enforcement.



Network Profiler

Dynamically identify and enable automatic and custom classification of both managed and unmanaged endpoint devices including IoT, to provide operational visibility, reporting and policy-based controlled access to networks and resources based on the user, device, applications and other attributes.

About Pulse Secure, LLC

Pulse Secure, LLC is a leading provider of access and mobile security solutions to both enterprises and service providers. Enterprises from every vertical and of all sizes utilize the company's Pulse virtual private network (VPN), network access control (NAC) and mobile security products to enable end user mobility securely and seamlessly in their organizations. Pulse Secure's mission is to enable open, integrated enterprise system solutions that empower business productivity through seamless mobility. IoT-Webinar

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