Protecting Critical Infrastructure Against Cyber Threats

Industrial plants and critical infrastructure sites across industries such as oil, gas, mining, chemicals, energy, manufacturing and defense, have become major targets for cyber-attacks. These environments use proprietary, mission critical, and sensitive ICS/SCADA networks and devices, challenging traditional IT security management solutions. Industrial sites also require remote access by vendors to provide timely support to their systems, introducing additional complexities in maintaining the security of the Operational Technology (OT) environment.

NextNine provides a solution for centralized security management of global SCADA/ICS environments, enabling companies to enforce security policies, reduce cyber risks, gain visibility into vulnerabilities and meet compliance requirements. In addition, the NextNine solution also provides centralized and secure remote access for internal IT and third party vendors and partners. The result is a robust, centrally managed and enforced OT security policy, automation of hardening processes with reporting of compliance to management and regulatory authorities.

How NextNine OT Security Management Works

NextNine’s OT Security solution architecture includes the Security Center system located at a company’s headquarters and Virtual Security Engines (VSEs), installed in each site. The Security Center enables OT Security personnel to centrally define their security policies, distribute and deploy them to the VSEs at the remote sites, together with rules for monitoring and reporting. The VSEs connect to the assets on the SCADA/ICS network, including workstations, network devices, PLCs, and other proprietary equipment, monitoring and enforcing its security.

Once the system is configured with security policies, it runs automatically, delivering continuous visibility across all sites, along with alerts on security vulnerabilities and compliance issues.

NextNine’s system provides complete user management capabilities, enabling the control of permissions and access rights down to the individual device level.

Who needs NextNine OT Security Management

Owners/operators of multiple plants or facilities in oil, gas, mining, chemicals, energy, manufacturing, defense and critical infrastructure.

Presence & Experience

- 5000 installations worldwide
- 5 of the 7 largest industrial vendors have standardized their solutions on NextNine
- 10 years of leadership in OT security
OT Security Management Suite

NextNine's security management system is a suite of six modular software packages and applications:

**Infrastructure**
This module provides the fundamental infrastructure of the platform and its mechanisms.

**Site Secure Access**
This module provides an industrial strength secure remote access solution. It enables protocols such as RDP and VNC to securely run in OT environments, while ensuring that all sessions are auditable and can be recorded. It includes fine granularity, supporting proprietary protocols, VPN, and file transfer capabilities. The solution further extends to provide a single, secure remote access point for vendors and partners, avoiding the risks associated with multiple, insecure proprietary tools used by such third parties.

**Site Security Monitoring**
This module enables OT Security managers to automate real time asset inventory for multiple remote sites from a single, centralized location, to manage events and to investigate alarms. This package provides insight into devices and their status and state, drill down into configuration parameters, and enables onboarding and decommissioning of assets. Information is viewable in a tree hierarchy, making drill down and search straightforward. In addition, the application receives and consolidates events from all assets in multiple sites, thus centralizing operations.

**Site Security Assurance**
This module assures the ongoing security of remote sites through automated configuration management and policy compliance. OT security managers centrally roll out qualified patches, antivirus and other updates, reducing the vulnerability window for both internal and external attacks. Throughout the process, the system generates compliance reports for management to meet regulatory requirements.

Additional capabilities include application white and black lists, site specific configuration of ports, services and applications and centralized collection and delivery of event logs for further analysis by a SIEM system.

**Reporting and Dashboards**
This module includes a set of reports and report generation capabilities, including built in and self-generated dashboards.

**Application Builder**
This module opens the Nextnine platform for development of additional applications, such as for customized security policies or compliance measurement.

“With NextNine, we gain complete visibility of our entire SCADA/ICS environment, enabling us to enforce our security policies, reduce cyber risks and meet compliance requirements.”