Fortinet and Opinnate Security Solution Provides Automated Firewall Management

Executive Summary

Opinnate is an automated firewall management system equipped with advanced reporting and monitoring features. It integrates with the Fortinet FortiGate Next-Generation Firewall (NGFW) and incorporates analysis, reporting, and monitoring features to elevate the overall security level of the infrastructure. Designed to handle routine operational tasks, Opinnate liberates resources so they can be used to address more advanced security issues.

Opinnate Automates Workflows and Conducts Thorough Analyses

In today's digital landscape, the constant influx of new firewall access requests and the accumulation of rules pose challenges. Manually adding rules becomes burdensome for companies grappling with a shortage of human resources, leading to routine operations that cause errors. Manually configuring new rules not only demands significant effort but also carries the risk of business downtime.

Opinnate Network Security Policy Management (NSPM) is a comprehensive multivendor solution for firewall analysis, optimization, and automation, seamlessly integrating with the Fortinet FortiGate NGFW. Opinnate addresses these issues by automating workflows through which policy changes can be done automatically.

Moreover, the growing number of rules on firewalls results in the proliferation of shadowed, unused, or overly permissive rules. Opinnate solves this issue by conducting thorough analyses to identify problematic rules and subsequently optimizing these situations through automated workflows. This approach ensures that rule optimization becomes a regular, weekly practice for companies, streamlining their firewall management processes.

Joint Solution

The Opinnate NSPM integration with Fortinet FortiGate NGFW provides a cutting-edge firewall automation solution that tackles routine operational tasks, freeing up resources to focus on more advanced security issues. The solution includes analysis, reporting, and monitoring features, enhancing the overall security level of the infrastructure.

Solution components

Opinnate NSPM is a comprehensive multivendor firewall analysis, optimization, and automation solution. It identifies problematic rules, fortifies them using automation workflows, and automatically implements policy changes by seamlessly integrating with corporate security policies, service desks, and approval processes. Additionally, the solution offers extensive and flexible reporting features, enabling the generation of compliance-ready reports.

Solution Components

- Fortinet FortiGate NGFW
- Opinnate NSPM

Solution Benefits

- Identify unused, shadowed, or permissive rules
- Leverage gained effort from policy management on other topics
- Initiate corporate security policy checks on firewall rules
- Generate compliance-ready reports
- Monitor permissive rules
- Deliver unparalleled security protection

FORTINET
FABRIC-READY

Fortinet FortiGate NGFWs provide industry-leading threat protection and decryption at scale with a custom ASIC architecture. They also deliver secure networking with integrated features like SD-WAN, switching and wireless, and 5G. Security and networking convergence eliminates point solutions and enables simple-to-use centralized management powered by FortiOS, a single operating system.

Solution integration

Opinnate seamlessly integrates with FortiGate NGFWs through API connectivity. The system gathers configuration data from FortiGate at intervals specified by the customer. Leveraging the collected data, the system conducts rule analysis and generates comprehensive reports. Rule management is facilitated through multiple interfaces and automation workflows. Moreover, the system captures syslog data (traffic and events) from firewalls, enabling permissive rule analysis and tracking of configuration changes.

Firewalls	Rules	Shadowed Rules	Expired Rules	Disabled Rules	Policy Conflict
8	2505	244	57	46	37

Log Disabled	Risky Rules	Permissive Critical	Permissive High	Permissive Medium	No Hit Rules
2337	516	221	32	10	2472

Average Risk Score

Low   Medium   High

Ticket Statistics
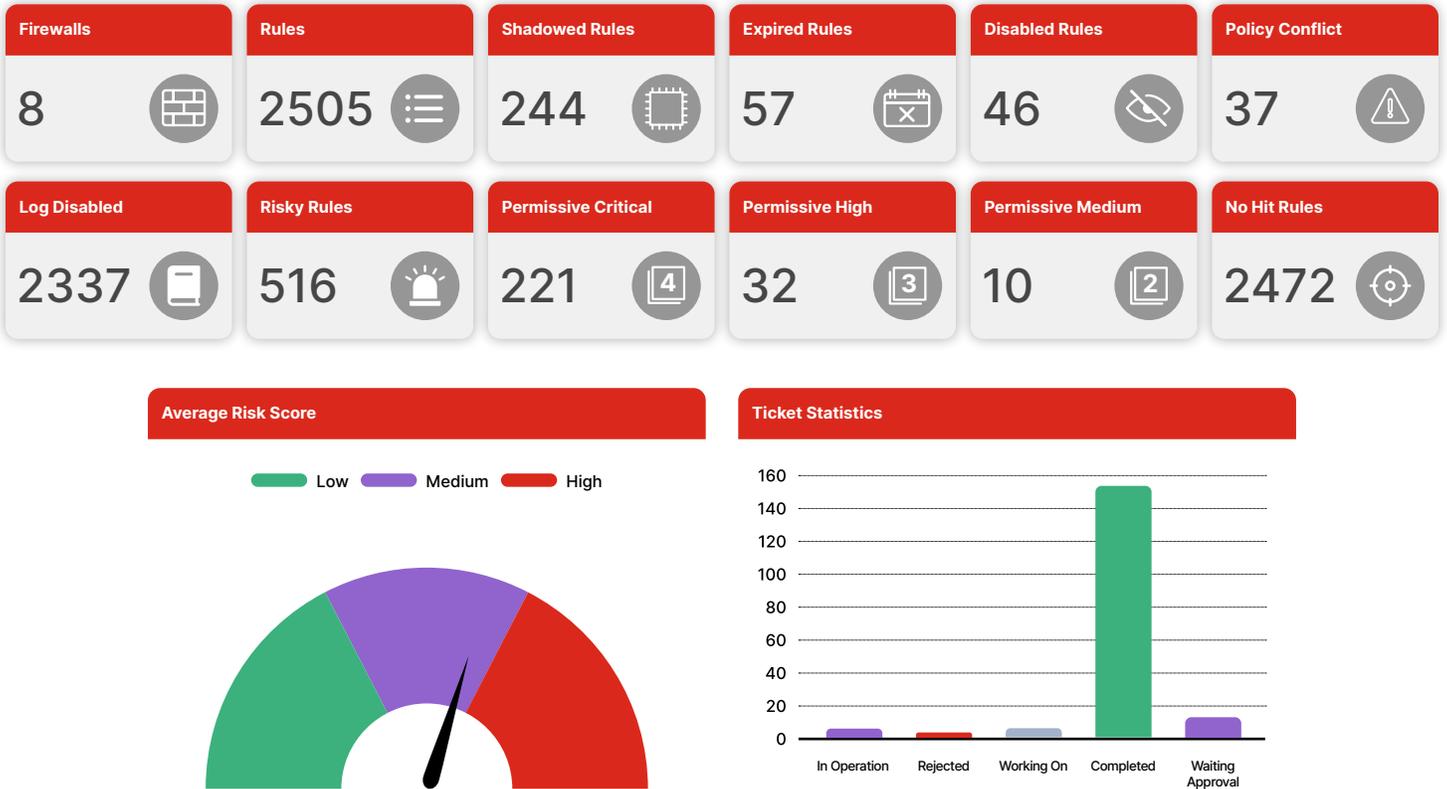
Figure 1: Opinnate NSPM integration with Fortinet FortiGate NGFW

Opinnate containers

vue-js   Python   Collector

Node.js   DB   DB

Syslog to Opinnate

API to Firewalls and networking devices

Firewalls

FortiGate NGFW Firewall

Switches
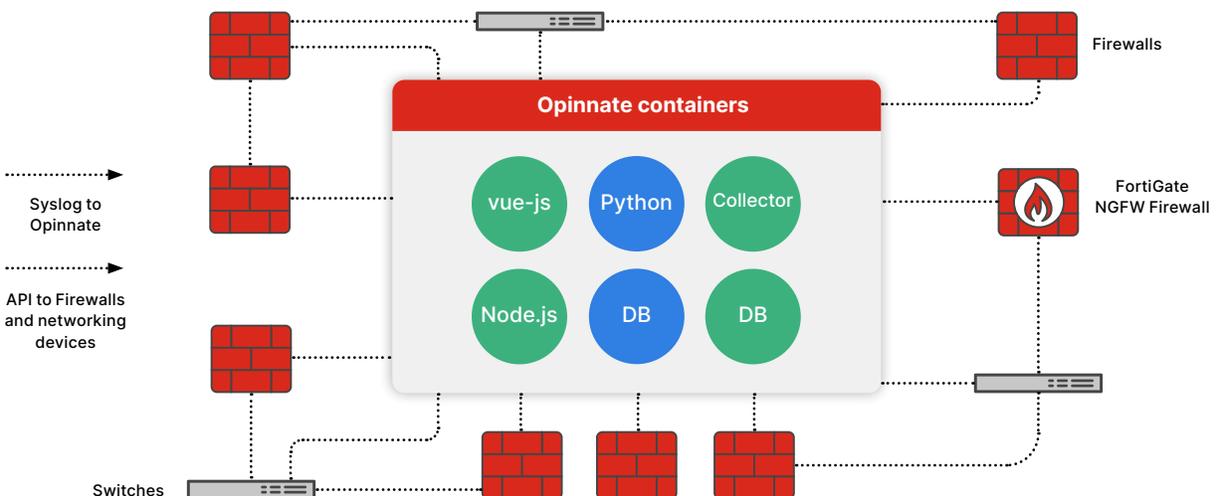
Figure 2: Opinnate architecture

Use Cases

Firewall rule automation

Seamlessly make policy changes automatically, complying with corporate security policies.

Firewall rule optimization

Disable or delete problematic rules on firewalls, singularize duplicated objects, and remove decommissioned server IP addresses from rules with APIs.

About Opinnate

Opinnate offers an innovative automation technology that tackles policy management holistically. Designed by security experts with decades-long executive and hands-on experience, the Opinnate platform addresses security policy management, policy analysis, policy optimization, and policy change operations under the same roof. It handles approval processes to offer an end-to-end customer experience. Opinnate stands out by removing dependencies on external tools and costly prior work.

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