

SOLUTION BRIEF

Monitor Your Data Wherever It Lives

Lacework FortiCNAPP: A Single Platform for Visibility into Hybrid Environments

Executive Summary

Cloud migration is speeding up. According to McKinsey, large enterprises aspire to have roughly 60% of their environments in the cloud by 2025.¹ Yet tomorrow is not today. Today, 43% of workloads still run in on-premises data centers.² Some estimates claim that over 70% of organizations are operating in some sort of hybrid environment made of some mix of public clouds, private clouds, and on-premises infrastructure.³

Even though companies' most sensitive data often resides on-premises, an overemphasis on cloud computing has left traditional infrastructures neglected. The innovation of modern security solutions has mostly been reserved for the cloud, often leaving on-premises teams with aging and outdated legacy capabilities ill-equipped to handle modern threats.

At the same time, the actual task of cloud migration often leaves data at risk, as siloed security tools leave visibility gaps when data is migrated from place to place.

The Lacework FortiCNAPP Solution

The Lacework FortiCNAPP platform offers unified visibility and security for hybrid environments, bridging the gap between on-premises and cloud workloads—and maintains this visibility even as data moves from on-premises environments to cloud environments. Both cloud and on-premises workloads benefit from modern security features within the platform, including advanced threat detection that uses ML-based anomaly detection to pinpoint known and unknown threats. Because Lacework FortiCNAPP was built for the cloud, its security agent is extremely lightweight, scalable, and manageable, especially when compared to traditional on-premises security agents.

By unifying protection across diverse environments, Lacework FortiCNAPP ensures simple, consistent risk management and workload monitoring, unifies security teams, and offers seamless visibility wherever data resides.

A Lightweight, Stable Agent

The Lacework FortiCNAPP platform boasts one of the most lightweight security agents in the industry, stable in both cloud and on-premises environments. The agent supports every major Linux distribution, Windows servers, every major container runtime, every major container orchestrator, and serverless runtimes like Amazon AWS Fargate and Google Cloud Run. With the Lacework agent, fleet management is simple; the agent is extremely scalable and auto-updates, which means minimal maintenance for teams as environments grow or shrink.



Challenges

- On-premises workloads are often secured by outdated legacy technologies incapable of detecting modern threats.
- Siloed processes and technologies cause rifts within security organizations.
- Security teams lose visibility of sensitive data when moved to the cloud.
- Traditional on-premises security solutions often lack visibility into Kubernetes.

Lacework FortiCNAPP benefits

- It provides consistent visibility into risks and threats across both cloud and on-premises environments, even as data migrates from place to place.
- A lightweight, scalable, auto-updating agent can be deployed across cloud and on-premises environments.
- It offers full visibility into Kubernetes workloads, whether cloud or on-premises.



Our agent was designed to consume the least CPU while analyzing as much data as possible. It collects essential data without causing system disruptions, providing a clear view of what’s happening in real time. The Lacework FortiCNAPP agent intelligently observes, filters, aggregates, deduplicates, and compresses data that feeds into its unified knowledge graph, which in turn powers runtime alerting and enriches context across various findings and alerts, including vulnerability management.

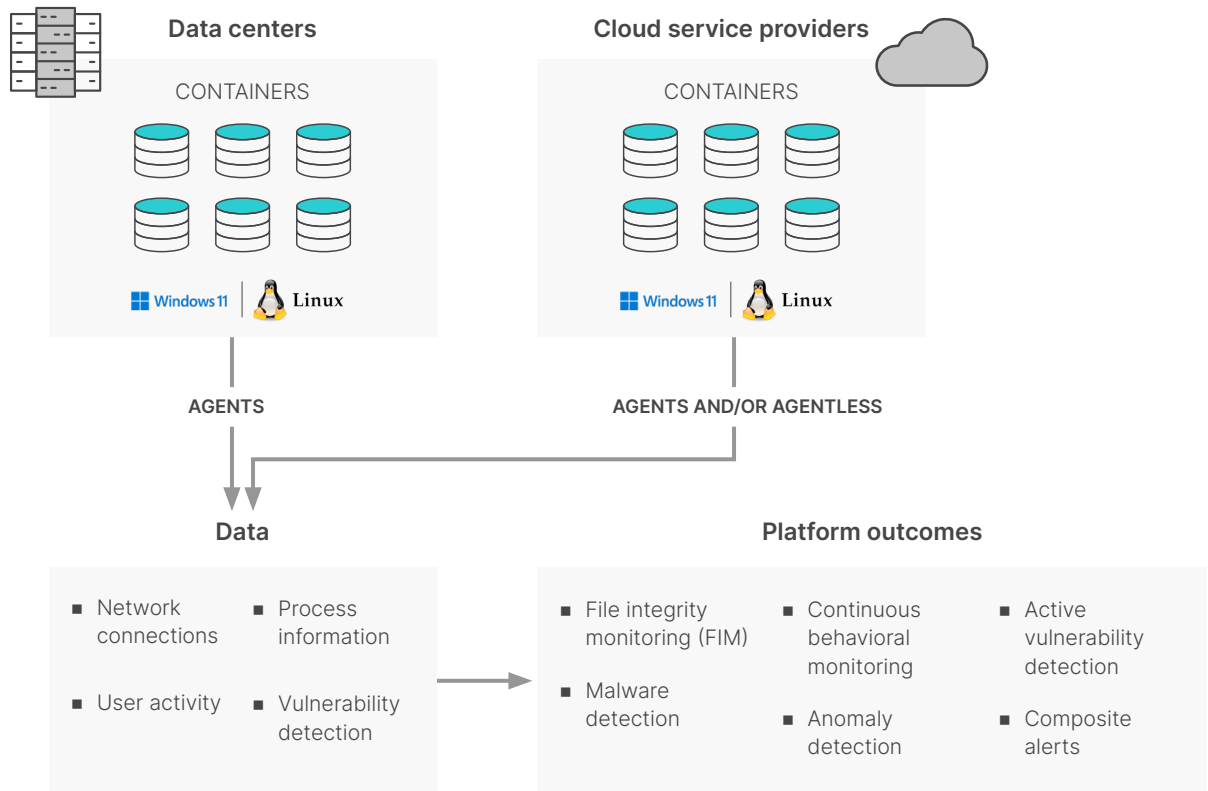


Figure 1: Lacework FortiCNAPP analyzes data from both cloud and on-premises environments in a single platform.

Active Vulnerability Detection

Without the right tools, when a security team notices an application vulnerability, it’s difficult to determine whether that issue in the package is actually tied to running software. Flagging inactive vulnerabilities to developers can ultimately waste time for development teams, which can naturally lead to friction with security teams.

Using active vulnerability detection from our agent, you can automatically identify vulnerable software packages that are active. This capability, which is compatible with Linux workloads, significantly reduces noise from inactive vulnerable packages and refocuses developer time on work that creates value for the business. This capability gives teams the context to determine the most important items to fix that will reduce their overall risk instead of spending time fixing vulnerabilities that don’t really matter.

Known and Unknown Threat Detection

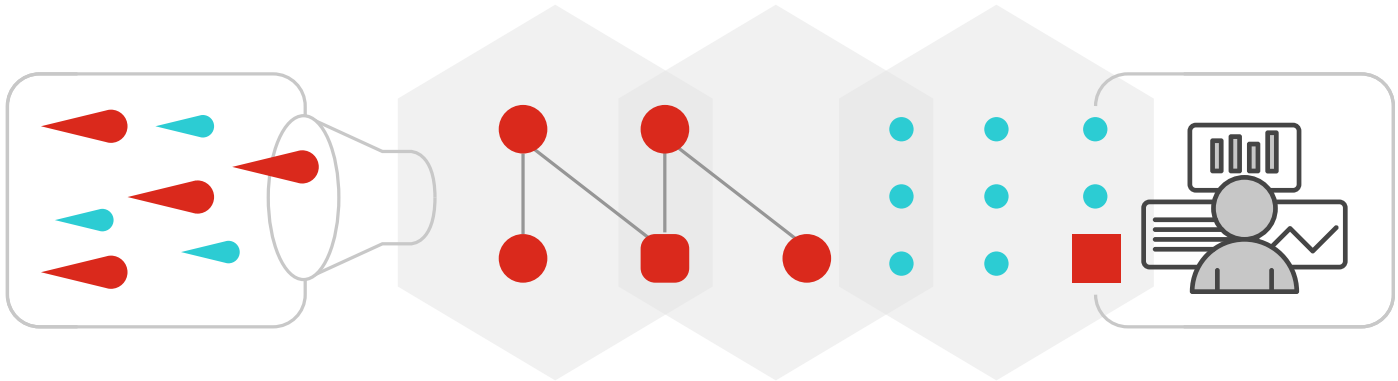
The Lacework FortiCNAPP platform delivers automated anomaly detection to detect threats in hybrid environments, whether or not the threats are tied to known rules or signatures. The platform uses agent-based and agentless data ingestion methods to continuously analyze hundreds of terabytes of data around processes, applications, APIs, files, users, and networks. Then, our patented ML-based anomaly detection technology correlates and analyzes different datasets, building a baseline for normal activity. After that, any abnormalities that fall outside of that baseline are surfaced and labeled based on criticality.

This layered approach discovers new behaviors without the need for human intervention. The platform takes a data-driven approach to security; the more data it analyzes, the smarter it becomes. This automated intelligence drives better efficacy and a higher return on investment.



The Power of the Lacework FortiCNAPP Platform

The Lacework FortiCNAPP platform ingests data, analyzes behavior, and detects anomalies across an organization's hybrid environment without relying on rules. This patented approach significantly reduces noise and turns millions of data points into prioritized, actionable events.



Ingest

The platform collects data on activity related to:

- API calls
- User behavior
- Application launches
- Running processes
- Network behavior

Analyze

The platform's anomaly detection engine uses data to:

- Create groups for analysis
- Create a baseline from activity

Detect

The platform's anomaly detection engine detects changes and risks to:

- Identify unusual behavior
- Identify malware from the threat feed

Inform

Platform visualizations and alerts provide context to:

- Investigate more quickly
- Integrate with response tools

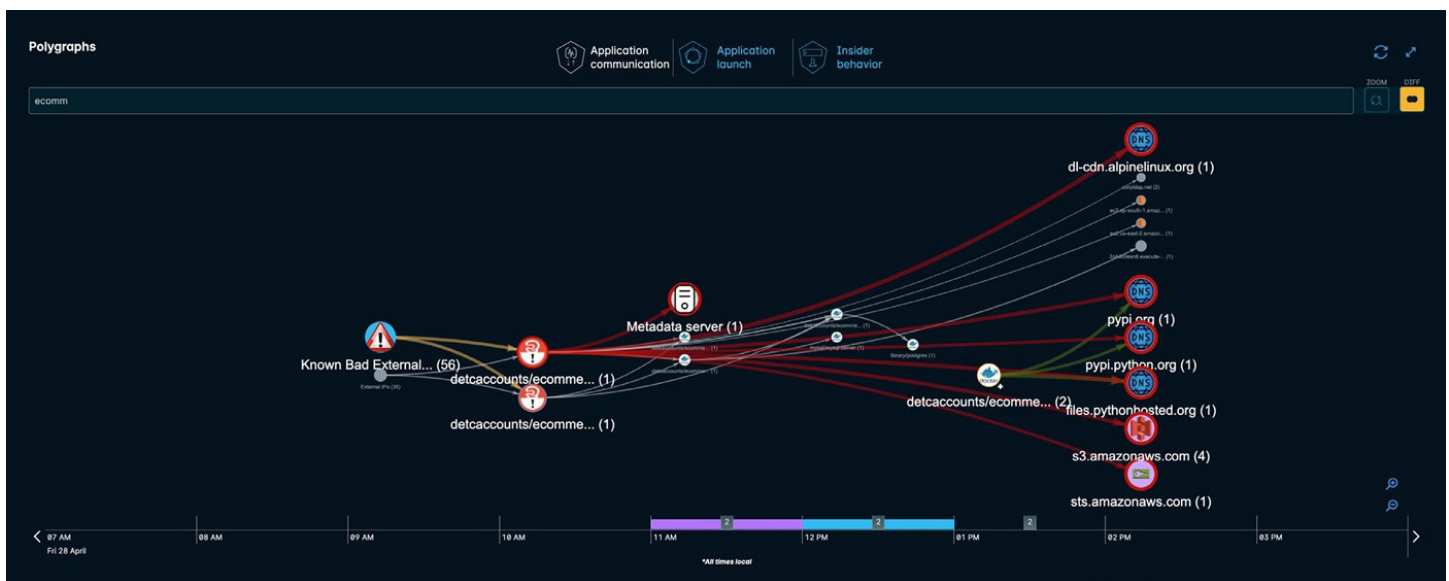


Figure 2: Lacework FortiCNAPP maps all activities and communications throughout your hybrid environment.



Advanced Host Intrusion Detection

Within the Lacework FortiCNAPP platform, security teams can monitor activity within hybrid environments in several ways. Lacework FortiCNAPP offers continuous file integrity monitoring in which the platform monitors for changes in files and directories in near real time. Lacework FortiCNAPP users can choose to watch for file and directory creation, deletion, modification, and move or attribute changes in specific folders or on particular files. This way, security analysts can monitor critical files or directories for change control, files for indications of tampering, and directories for evidence of malware.

The Lacework FortiCNAPP platform also offers deep network and process monitoring. As our platform analyzes your cloud and on-premises data, it plots a detailed map of your network and process activity. Then, when abnormal activities occur, the platform clearly marks them as anomalous and allows users to track how they have moved throughout your environment.

Low Maintenance, High Impact

Because Lacework FortiCNAPP is a Software-as-a-Service platform, teams experience all the benefits of a cloud-hosted application, whether their data is in the cloud or on-premises. The platform is accessible from the internet, which means ubiquitous access from anywhere in the world. Its components (including its agent) can be auto-updated and are simple to maintain, which means a lighter lift for security admins.

An added benefit of using Lacework FortiCNAPP across hybrid environments is security team development. By having on-premises and cloud security teams working within the same platform, security personnel working on traditional infrastructures can begin to upskill for the cloud. Lacework FortiCNAPP can develop these teams into cloud security admins as they encounter cloud data and concepts daily.

¹ McKinsey Digital, [Projecting the global value of cloud: \\$3 trillion is up for grabs for companies that go beyond adoption](#), November 28, 2022.

² Mike Loukides, [The Cloud in 2021: Adoption Continues](#), O'Reilly, December 7, 2021.

³ Flexera, [2024 State of the Cloud Report](#).

