BACKBOX
SOLUTION BRIEF

Agentic NetOps

Positioning NetOps Teams for the Future of AI-Driven Infrastructure

Solution Highlights

- AI is reshaping network operations, and the organizations that embrace it responsibly will gain a decisive competitive edge.
- Kilter AI advances NetOps teams from performing basic automations to delivering AI-enabled, human-in-the-loop operations.
- Kilter AI delivers trustworthy AI insights, recommendations, and automation creation, without the risk of self-healing AI outages.
- Kilter supports 180+ vendors with 3,000+ pre-built automations, providing the foundation for agentic AI.

40%
of I&O tasks will be augmented by GenAI by 2027

50%
of organizations will use agentic NetOps by 2030

60%
of IT leaders plan AI-enabled network automation in 2 years

(Gartner)

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The Challenge

NetOps teams face an unprecedented convergence of pressures. The number of CVEs published annually has exceeded 48,000 — a 20% increase year-over-year — while hackers now exploit vulnerabilities in days rather than months. Meanwhile, the emergence of advanced AI tools like Mythos, capable of autonomously discovering and chaining vulnerabilities into working exploits, has fundamentally altered the threat landscape.

At the same time, today's networks are more complex than ever, with multi-vendor environments, cloud-managed devices, distributed infrastructure, and ongoing configuration drift. These challenges demand attention from teams already stretched thin by "keep the lights on" tasks. Manual processes simply can't keep up.

- **Speed Is the New Risk:** Threat actors exploit vulnerabilities at machine speed. Manual workflows, including reviewing CVEs, identifying affected devices, and building remediation plans, can take weeks, leaving organizations exposed.

- **Complexity at Scale:** Multi-vendor networks require separate automation frameworks for each device type. There is no universal standard, and even minor configuration errors can cascade into widespread outages.

- **Skills & Resource Gaps:** Over 80% of comprehensive network automation initiatives will be shelved by 2028 due to persistent skills scarcity. Teams need tools that reduce the expertise barrier, not increase it.

What is Agentic NetOps?

Agentic NetOps uses goal-driven, autonomous AI agents equipped with capabilities like memory, planning, and real-time sensing to manage network tasks independently. Unlike traditional automation scripts that follow rigid rules, agentic AI can reason, adapt, and act. It doesn't just inform; it executes the next step.

Gartner predicts that over the next three to five years, AI agents will increasingly take over specific network operational tasks while humans assume supervisory, management, and policy-setting roles. Automation is the foundation: without it, agentic AI has nothing to act on.

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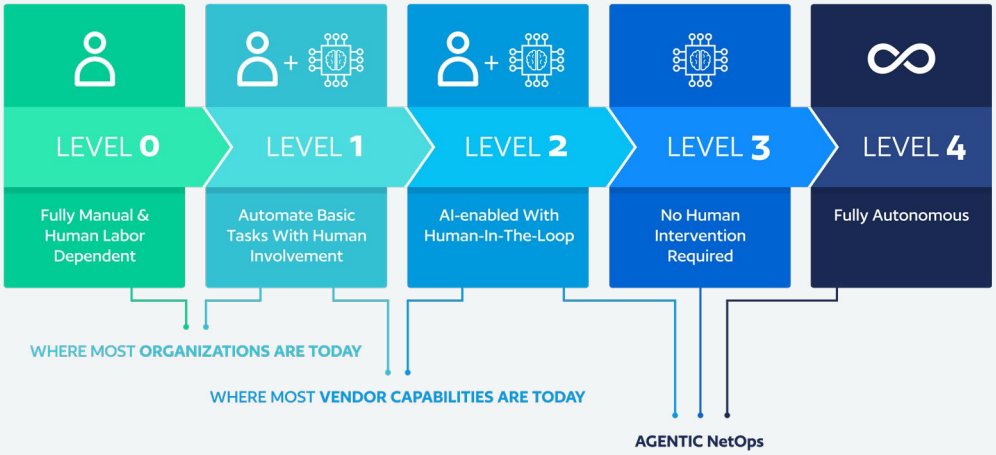
The Road to Agentic NetOps

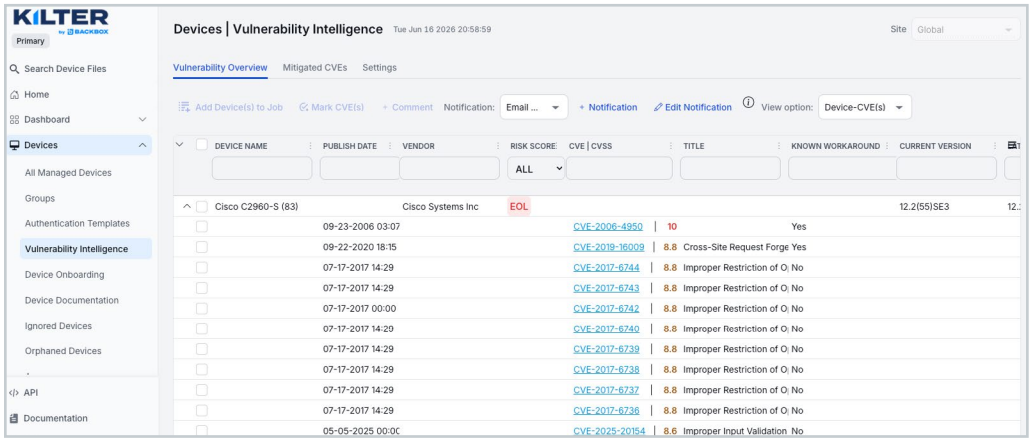


The Solution

BackBox has been developing the data foundation and automation engine that agentic NetOps needs for over a decade. The Kilter platform combines AI-enriched vulnerability data, multi-vendor automation, and a human-in-the-loop design philosophy to responsibly drive network teams toward autonomous operations.

ENRICHED DATA AGGREGATION

A normalized, AI-curated data feed that combines CVE data from CISA, NCD, NIST, and vendor advisories, providing teams with a single source of truth instead of relying on fragmented, manual lookups.



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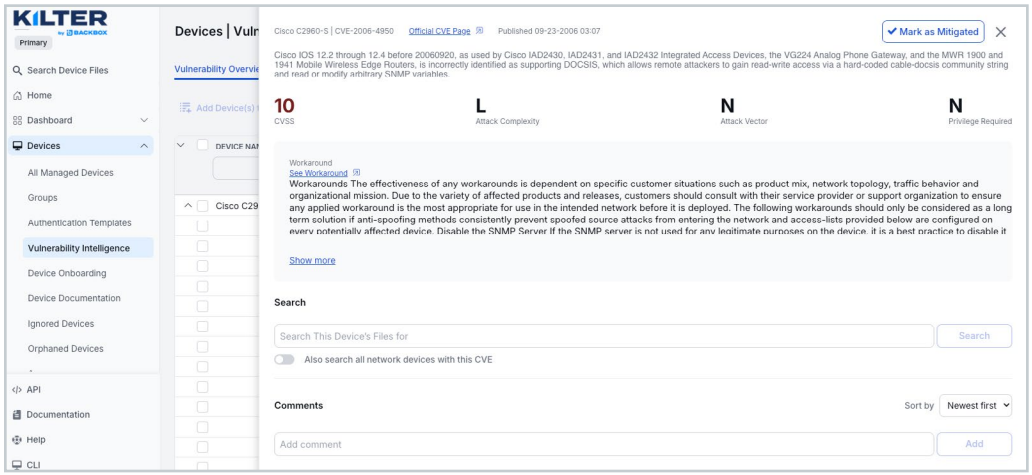
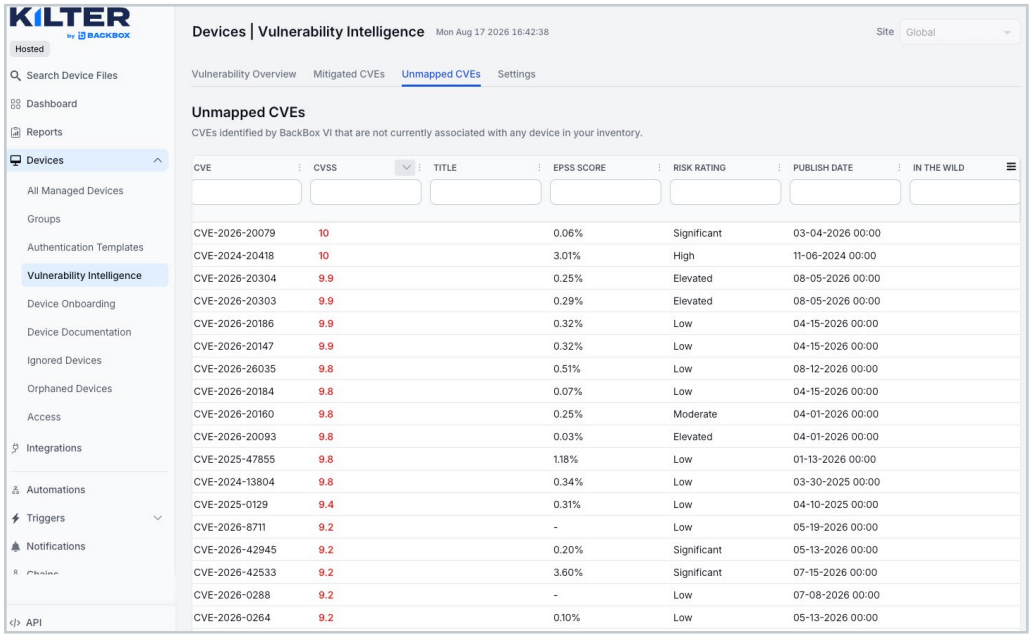
CVE WORKAROUND INSIGHTS

Kilter uses AI to analyze vendor-published workarounds and translate them into clear, context-aware remediation guidance. By identifying which CVEs have validated workarounds, Kilter helps teams reduce risk faster and avoid unnecessary full-device upgrades when a targeted mitigation is available.



MAPPED & UNMAPPED CVE VISIBILITY

See mapped CVEs (affecting your devices now) alongside unmapped CVEs (potential future exposure), enabling proactive risk management instead of reactive firefighting.



CVE	CVSS	TITLE	EPSS SCORE	RISK RATING	PUBLISH DATE	IN THE WILD
CVE-2026-20079	10		0.06%	Significant	03-04-2026 00:00	
CVE-2024-20418	10		3.01%	High	11-06-2024 00:00	
CVE-2026-20304	9.9		0.25%	Elevated	08-05-2026 00:00	
CVE-2026-20303	9.9		0.29%	Elevated	08-05-2026 00:00	
CVE-2026-20186	9.9		0.32%	Low	04-15-2026 00:00	
CVE-2026-20147	9.9		0.32%	Low	04-15-2026 00:00	
CVE-2026-26035	9.8		0.51%	Low	08-12-2026 00:00	
CVE-2026-20184	9.8		0.07%	Low	04-15-2026 00:00	
CVE-2026-20160	9.8		0.25%	Moderate	04-01-2026 00:00	
CVE-2026-20093	9.8		0.03%	Elevated	04-01-2026 00:00	
CVE-2025-47855	9.8		1.18%	Low	01-13-2026 00:00	
CVE-2024-13804	9.8		0.34%	Low	03-30-2025 00:00	
CVE-2025-0129	9.4		0.31%	Low	04-10-2025 00:00	
CVE-2026-8711	9.2		-	Low	05-19-2026 00:00	
CVE-2026-42945	9.2		0.20%	Significant	05-13-2026 00:00	
CVE-2026-42533	9.2		3.60%	Significant	07-15-2026 00:00	
CVE-2026-0288	9.2		-	Low	07-08-2026 00:00	
CVE-2026-0264	9.2		0.10%	Low	05-13-2026 00:00	

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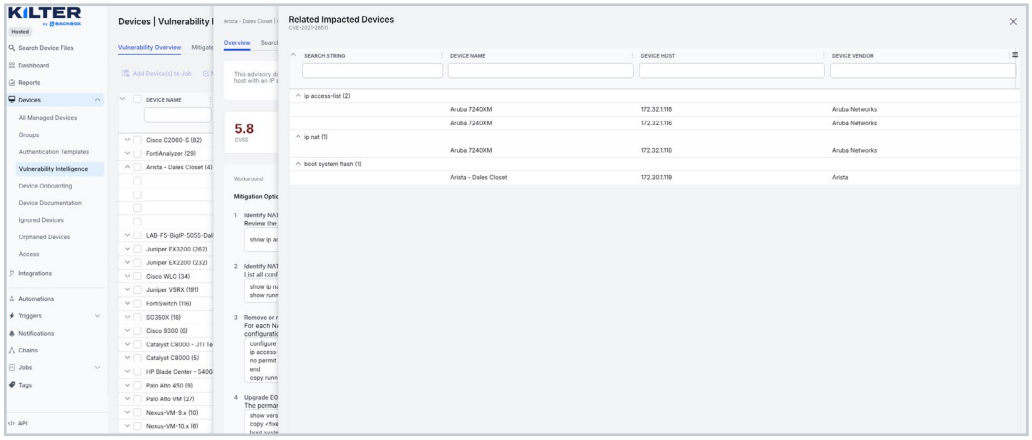
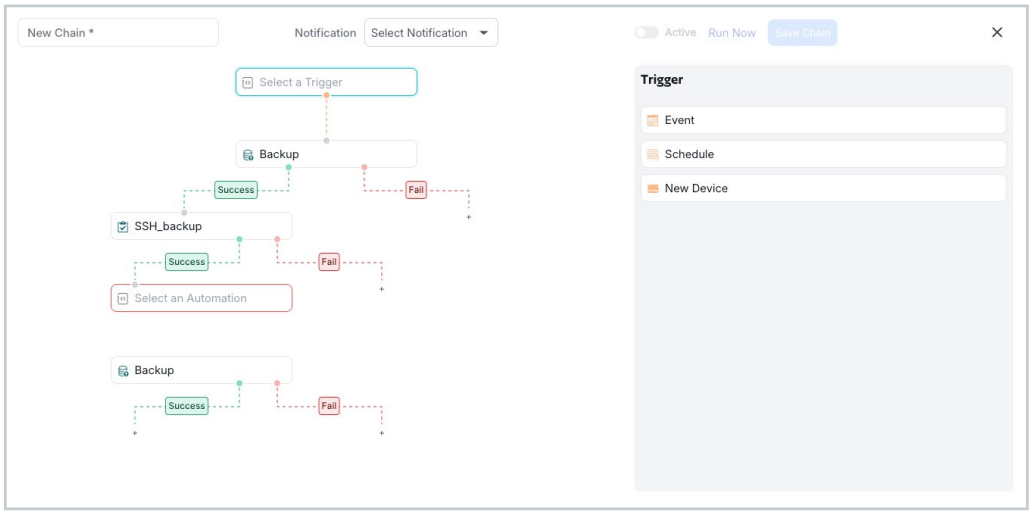
MULTI-VENDOR COMPLIANCE CHECKS

Automatically evaluate device configurations across all managed vendors against policies and identify when a fix for one device type should be applied to similar devices from other manufacturers.



CVE WORKAROUND TO CHAINS

Use an AI-powered “Build Chain” action to instantly convert CVE workaround guidance into a structured, editable remediation workflow. This accelerates remediation and reduces manual effort while ensuring full control through review and approval before execution.



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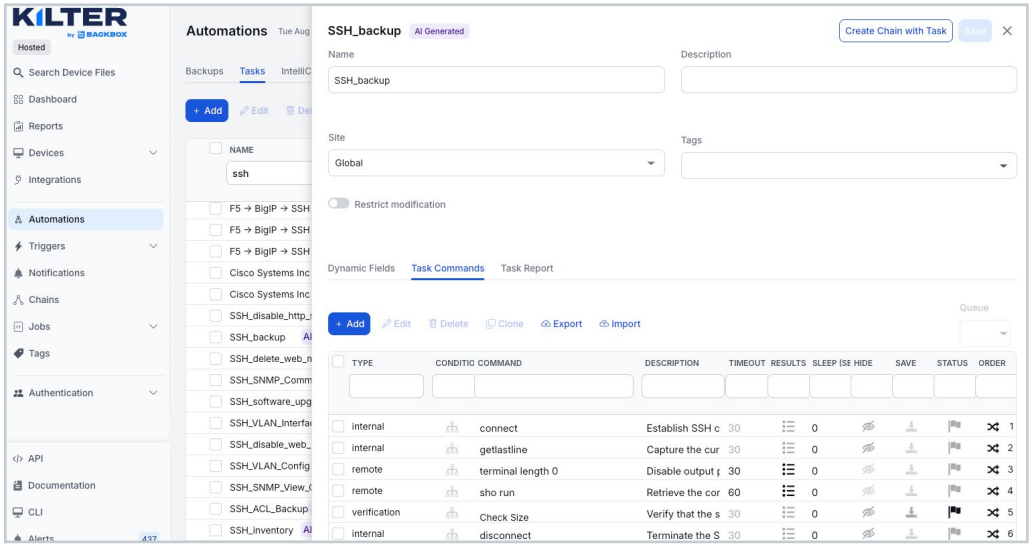
AUTOMATION CREATION ASSISTANT

Enter, paste, or upload CLI commands and use Kilter AI to instantly generate production-ready automation tasks and workflows. This reduces the time and complexity of building automations while ensuring accuracy, reusability, and full control through preview and approval before execution.



Key Use Cases

CYBERSECURITY RISK MANAGEMENT

Security teams receive messy, inconsistent vulnerability reports. Kilter normalizes this data, automatically verifies which CVEs affect your specific devices, surfaces workarounds, and generates remediation chains, reducing effort from weeks to hours.

AUTOMATION CREATION AT SCALE

Multi-vendor networks lack a universal standard. Kilter's Automation Creation Assistant turns CLI commands into structured, vendor-aware automation tasks and chains, allowing engineers without extensive scripting skills to create production-ready workflows.

MULTI-VENDOR RISK MANAGEMENT

When a vulnerable configuration is identified on a device, Kilter quickly surfaces similar configurations across your environment to help guide further investigation. This helps teams prioritize what to review next and take informed action, while keeping validation and decision-making firmly in human hands.

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About BackBox

Over 500 enterprises worldwide trust Kilter by BackBox as their preferred network cyber resilience platform. Kilter supports network devices from over 180 vendors, offering thousands of pre-built automations and a no-code way to create new ones. Kilter empowers teams with the confidence to automate critical network processes, maintain business continuity during disruptions, and recover swiftly. From backups and OS updates to configuration compliance and vulnerability management, Kilter ensures that automations deliver consistent, reliable outcomes.

To learn more, visit **backbox.com**