

NETWORK CONFIGURATION MANAGEMENT: MODERNIZATION WITHOUT COMPLEXITY





Network configuration management (NCM) has been vital to network operations for over two decades.

NOW, NCM INTERSECTS WITH SECURITY AND COMPLIANCE – **AND TRANSFORMATION IS ESSENTIAL**



The good news is that these areas work together to **strengthen network cyber resilience**. But they also bring new challenges that traditional NCM often cannot address.





Core Challenges with Traditional NCM

 <p>Manual Intervention & Human Errors Monitoring config changes and implementing updates manually is time-consuming, prone to errors, and doesn't scale.</p> <p>Nearly 40% of orgs suffered a major outage caused by human error ¹</p>	 <p>On-Premises & Cloud Environments Managing configurations and mitigating risk across diverse environments is challenging.</p> <p>84% of orgs report rising network outages, with device configuration changes the most common cause ²</p>	 <p>Limited Security Device Support Need Firewalls are often excluded from the scope, resulting in inconsistent management and increased vulnerability.</p> <p>60% of firewalls fail critical compliance checks ³</p>	 <p>Need for Continuous Compliance Lack of automation capability to shift from point-in-time audits to real-time compliance assessments and rapid adjustments.</p> <p>Only 30% of enterprises automate network activities ⁴</p>
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Imagine being able to transform NCM to help network teams tackle challenges, coordinate efforts, and adapt to increasing security threats and audit cycles.

NCM TRANSFORMATION, GROUNDED IN AUTOMATION

BACKBOX DELIVERS:

 <p>ENHANCED PERFORMANCE & SCALABILITY</p> <p>Eliminates device polling, automating NCM across thousands of devices</p>	 <p>API-FIRST INTEGRATION</p> <p>Integrates with third-party systems and workflows to simplify config management across complex networks</p>	 <p>NO-CODE AUTOMATION</p> <p>Provides a library of pre-built automations and no scripting required to create and customize tasks</p>	 <p>EXTENSIVE MULTI-VENDOR SUPPORT</p> <p>Automates functions across network and security devices from 180+ vendors</p>
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KEY FEATURES

- Configuration Drift Detection & Remediation**
Compares current configs with previous to identify potential issues; can automatically restore compliance.
- Automated Backups & Restore**
Ensures configs are backed up and verified; enables 1-click restore
- Automated OS Upgrades**
Upgrades device firmware for security compliance; supports multi-step and HA-pair upgrades.
- Compliance & Vulnerability Management**
Configurations meet internal policies, industry standards like CIS and DISA STIGs, and are protected against known threats.
- ServiceNow Integration**
Syncs devices with ServiceNow for enhanced discovery and closed-loop ticketing and resolution.



What Network Teams Gain

- ✓ REDUCED MANUAL WORKLOAD
- ✓ FEWER MISCONFIGURATION INCIDENTS
- ✓ FASTER VULNERABILITY REMEDIATION
- ✓ CONSISTENT COMPLIANCE POSTURE
- ✓ SCALABLE HYBRID NETWORK MANAGEMENT
- ✓ LESS AFTER-HOURS FIREFIGHTING

CASE STUDY: Automation in Action

A customer needed to update licenses for 92 firewalls in their network. Using BackBox, they automated the bulk configuration change in 20 minutes. Running the automation took another 10 minutes **reducing the total time from about 10 hours to 30 minutes and eliminating potential human errors.** [Read more about this case study.](#)



¹ Source: Uptime Annual Outage Analysis Report 2025 ² Source: Digi Network Outages Press Release ³ Source: FireMon Insights Firewall Press Release ⁴ Source: Gartner Automation is Key Press Release

LEARN HOW TO TRANSFORM YOUR APPROACH TO NCM

Watch a [QUICK DEMO](#) of the BackBox platform or, contact a BackBox expert to request a [CUSTOMIZED DEMO](#) and see our solution in action.