

5 reasons to automate your network operations

Network automation delivers benefits for organizations of all sizes

As organizations adopt modern IT technologies and environments, network infrastructure management becomes increasingly complex. [Network operations \(NetOps\)](#) teams need to maintain availability, ensure security, and meet application and user demand while implementing strategic initiatives that support critical business operations. Trying to achieve these goals using manual processes can lead to operational inefficiencies, increased risk of human error, longer mean time to resolution (MTTR) for issues, and significant downtime.

Network automation offers a transformative solution to these challenges. By streamlining and simplifying processes—including time-consuming, error-prone configuration and management tasks—network automation can help your organization optimize operations, reduce costs, and improve overall network performance. In fact, organizations that use an enterprise platform for building and operating network automation at scale experience 38% higher overall network management team efficiency.¹

Here are 5 ways that your business can benefit from network automation.

1 Reduce operating costs

Networks require significant investments in infrastructure, maintenance, and security to provide reliable connectivity and performance for critical applications and users. Network automation streamlines common maintenance tasks, maximizing your investments and giving your team more time to focus on strategic initiatives that deliver real business value. By ensuring consistent network configurations across on-site datacenters, public cloud environments, and edge deployments, network automation decreases the risk of costly and unexpected downtime due to human error. And event-driven automation capabilities help you detect and respond to network outages—without manual intervention—to increase the reliability and performance of essential services.

2 Increase knowledge and skills

Isolated knowledge and skills within NetOps teams can lead to operational inefficiencies, delays in issue resolution, and increased security risks. Hands-on experience with network automation

technologies and workflows can help your team learn new skills and develop expertise, improving their ability to manage infrastructure deployments effectively and efficiently. With access to automated processes that simplify complex network management operations, new employees can become productive and proficient in less time. And with standardized, automated processes across multiple technologies, you can reduce dependencies on highly specialized—and often limited—knowledge and expertise.

3 Boost operational efficiency

Robust, resilient network operations can simplify infrastructure management and speed service delivery. Network automation streamlines essential activities to eliminate routine, repetitive tasks and boost the efficiency of Day 2 operations. By automatically testing and deploying changes, you can increase network reliability and performance for critical applications. With automated network configuration and management across hybrid and multicloud environments, your business can efficiently deploy new applications and services to meet changing market demands.

¹ IDC Business Value White Paper, sponsored by Red Hat. “[The Business Value of Red Hat Ansible Automation Platform](#).” Document #US51839824. March 2024.

4 Mitigate security risks

Security threats and vulnerabilities pose significant challenges for NetOps teams. Network automation lets you react to potential risks in less time, improving MTTR for security issues and overall protection for sensitive applications and data across your environment. Integrating event-driven automation with network monitoring, telemetry, and management solutions allows you to detect and remediate security issues before they become critical IT incidents. And by automating infrastructure upgrades, updates, and patching, you can ensure that your network operates with the latest security and performance enhancements to reduce vulnerabilities and improve reliability.

5 Improve compliance

Adherence to corporate, industry, and government policies can help you mitigate legal and regulatory risks and enhance trust with stakeholders. A consistent, centralized repository for network automation content simplifies policy enforcement and change tracking by maintaining consistent configurations across your environment. Automatic validation of network changes ensures that your

infrastructure complies with established standards while minimizing the risk of misconfigurations. Through efficient task auditing and detailed change logging, network automation provides a continuous, reliable record that streamlines regulatory reporting. And by automating drift notifications and remediation tasks, you can efficiently identify and correct potential issues, keeping your network consistent with regulatory standards and internal policies.

Automate with Red Hat

A foundation for building and operating automation at scale, [Red Hat® Ansible® Automation Platform](#) lets you create and orchestrate complete workflows to support your business goals. Automate everything from individual network tasks like device configuration updates to complex processes that involve multiple network teams to entire workflows that cross IT domains. Build, scale, and deploy automation across your entire organization with a common, human-readable language and governance controls. Streamline operations across your entire network—including multivendor virtual, physical, and cloud environments—using a single platform. With flexible, easy-to-use automation, you can define a simple, powerful path to network efficiency without leaving your existing processes and infrastructure behind.

Learn more about network automation

Read [Network automation for everyone](#) to learn how you can expand automation across your network and organization.

Discover the value of Ansible Automation Platform

See what analysts say about network automation in [The Business Value of Red Hat Ansible for Networking Efficiencies](#).



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