

OVERVIEW

As networks grow increasingly complex, the need for automation becomes more pressing than ever. Organizations are turning to automation to improve efficiency, reduce errors, and enhance network performance.

According to recent research by the Enterprise Strategy Group, "Networking teams are increasingly applying AI and automation to various use cases, such as network performance optimization, security threat detection, traffic analysis and optimization, network capacity planning, and load balancing.

"However, even as adoption increases, many organizations still face significant challenges in implementing and scaling network automation. This whitepaper explores some key obstacles companies encounter and how LogicVein's ThirdEye Suite can help address them.

LACK OF STANDARDIZATION

One of the biggest hurdles to effective network automation is more standardization across devices, configurations, and processes. With networks comprised of equipment from multiple vendors, each with its proprietary interfaces and commands, creating uniform automation workflows becomes extremely difficult.

THIRDEYE SOLUTION

ThirdEye provides a centralized platform with adapters for a wide range of network devices, allowing for consistent automation across heterogeneous environments.

ThirdEye Suite, with its centralized platform and adapters for a wide range of network devices, overcomes this challenge. Its unified interface ensures consistent automation across heterogeneous network environments, simplifying the automation process and improving efficiency.



CONFIGURATION DRIFT AND COMPLIANCE

A mid-sized company recently expanded its VMware environment but needed more tools to manage resource allocation and optimize performance across hosts and VMs.

As networks evolve, configurations drift from their intended state, leading to performance issues and security vulnerabilities. Maintaining compliance with internal policies and industry regulations becomes an ongoing challenge.

THIRDEYE SOLUTION

Offers automated compliance checks and configuration backup features to maintain desired network state and policy adherence.

ThirdEye Suite's robust compliance and configuration management capabilities are crucial in addressing this issue. Its automated compliance checks and configuration backup features ensure networks remain in their desired state and adhere to defined policies, providing a reliable solution for maintaining network compliance.

SECURITY CONCERNS

Automation can potentially introduce new security risks if not implemented carefully. Organizations often hesitate to automate critical network functions due to security concerns. ThirdEye Suite addresses this challenge with robust security features, including role-based access control, audit logging, and secure automation execution. Its compliance-checking capabilities also help ensure that automated changes don't introduce security vulnerabilities.

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LIMITED VISIBILITY

Many organizations need more visibility into their network infrastructure, making it challenging to identify automation opportunities and troubleshoot issues.

THIRDEYE SOLUTION

ThirdEye Suite provides comprehensive network discovery and mapping capabilities for precise, real-time views of the entire network topology.

ThirdEye Suite provides comprehensive network discovery and mapping capabilities, giving teams a real-time view of their network topology. This visibility is crucial for effective automation planning and execution.

SKILLS GAP

Implementing network automation often requires specialized skills in programming, scripting, and API integration. Many networking teams lack these skills, creating a barrier to adoption.

THIRDEYE SOLUTION

Offers an intuitive interface and pre-built automation templates to help bridge the skills gap for network teams.

ThirdEye Suite's intuitive interface and pre-built automation templates help bridge this skills gap. Its low-code approach allows network teams to implement automation without extensive programming knowledge.



SCALABILITY

As networks grow, scaling automation becomes increasingly challenging. Manual processes that work for small networks often break down at scale. ThirdEye Suite is designed for scalability, with features like bulk change management and automated device discovery that can handle large, complex networks. Its centralized management approach allows for consistent automation across the entire network infrastructure.

THIRDEYE SUITE SOLUTION

Designed for scalability with features like bulk change management and automated device discovery to handle large, complex networks.

INTEGRATION WITH EXISTING TOOLS

Many organizations need more visibility into their network infrastructure, making it challenging to identify automation opportunities and troubleshoot issues. They also struggle to integrate automation solutions with their existing network management tools and workflows.

THIRDEYE SUITE SOLUTION

ThirdEye Suite offers extensive integration capabilities, including API access and standard network management protocol support. This allows for seamless integration with existing systems and processes.

CONCLUSION

Network automation has become critical for organizations grappling with increasingly complex network infrastructures. While the benefits of automation are evident, including improved efficiency, reduced errors, and enhanced network performance, many organizations face significant challenges in implementing and scaling these solutions.

By offering a centralized platform with wide-ranging device compatibility, robust compliance management, enhanced visibility, user-friendly interfaces, strong security features, scalable architecture, and extensive integration capabilities, ThirdEye Suite provides organizations with the tools they need to overcome automation obstacles.

As networks grow in complexity and importance, the ability to effectively implement and manage automation will become a key differentiator for organizations. Solutions like ThirdEye Suite facilitate the transition to automated network management and ensure organizations can adapt to future networking demands with agility and confidence. Successful network automation is not just about implementing new technologies; it's about transforming network teams' operations, making them more efficient, proactive, and aligned with broader business objectives. By addressing the core challenges of network automation, ThirdEye Suite enables organizations to unlock the full potential of their network infrastructure, driving innovation and competitive advantage in an increasingly digital world.

SOURCE: THE ROLE OF AI & AUTOMATION IN NETWORKING | ENTERPRISE STRATEGY GROUP RESEARCH REPORT, BY JIM FREY AND EMILY MARSH, (AUG 2024).

