Overview

Reduce human intervention when rolling out and maintaining secure and compliant IT infrastructure at the edge.

Challenges

- Manual configuration
- Mis-configuration
- Incorrect security

Solution

Blackrock Ansible Automation and Monitoring, Nautobot single source of truth, and Git version control for high integrity scripts.

Benefits

Eliminate the time lost with mundane and manual configuration and updating of edge devices. Ensure compliance with a standard golden configuration across all IT networked infrastructure and servers.

Executive Summary

Nautobot, is an open source Network Source of Truth from Network to Code, providing a data-driven approach to network automation and a platform that complements Blackrock Ansible Automation and Monitoring capabilities.

Network to Code enables enterprises across all industries and geographies to deploy data-driven network automation based on NetDevOps principles to improve reliability, efficiency and security while reducing costs.

IT Challenges at the Edge

Deploying and maintaining a secure fleet of edge infrastructure at scale is cumbersome. As time goes by, devices and configuration get forgotten, leading to inventory loss and configuration drift, and the potential exposure of the enterprise to cyber attacks on vulnerable devices in remote locations at the edge.

In addition, maintaining individual static configuration files per device, performing manual updates, and maintaining inventory records adds additional and unwanted burden on IT administration.

With Nautobot as a single source of truth, Git maintained scripts, and Blackrock Ansible automation, eliminate manual configuration and updating of devices at the edge.

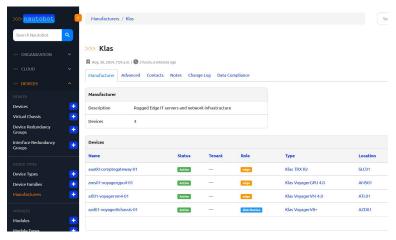


Figure: Efficiently manage large scale inventory deployments with golden configurations in Nautobot



BLACKROCK Case Study



Blackrock - Scalable Secure and Trusted Device Change Management Systems

Simplify edge device management at scale with a holistic solution of Blackrock Ansible automation, Nautobot source of truth (SoT), and Git-maintained Ansible playbooks. Reduce and minimize human intervention when rolling out and maintaining secure and compliant IT infrastructure at the edge.

The result is improved IT productivity by automating manual, mundane and repetitive tasks such as firmware and security updates at scale.

Nautobot - Source of Truth (SoT)

Easily manage and unify multiple sources of network data as a single Source of Truth to simplify data-driven network automation with Blackrock. Data-driven network automation with Nautobot provides flexibility, extensibility and control, catering to any network design.

Git - Source Control Management (SCM)

Blackrock works with the Git distributed version control system to retrieve project details (e.g. Ansible playbook, inventory scripts and any other data required for execution of the project) ensuring the highest degree of integrity in device configuration automation.

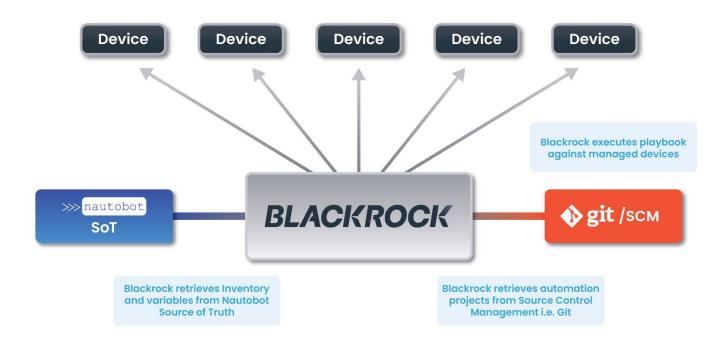


Figure: Blackrock provides seamless integration with trusted device inventory and change management systems

Conclusion

The combined solution of Blackrock, Nautobot and Git greatly simplifies the management of networked infrastructure at scale:

- Single source of truth for all device configurations
- Consistent security and compliance
- Intelligent inventory management system
- Reduces IT admin burden
- Improved productivity, minimal human intervention

For more information about Nautobot visit: https://networktocode.com/nautobot/

For more information about Klas visit: https://www.klasgroup.com/blackrock/

