

Graybar, a Fortune 500 electrical wholesale and supply chain specialist, uses Red Hat Enterprise Linux 8, Red Hat Insights, and Red Hat Smart Management to automate and remediate vulnerability assessments and manage compliance, patching, and provisioning.

Graybar Boosts IT Infrastructure Automation and Management with Red Hat Enterprise Linux

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Introduction

Graybar is a North American Fortune 500 distributor of electrical, communications, and data networking products and a provider of supply chain management and logistics services. Graybar serves the construction market; the commercial, institutional, and government (CIG) market; and the industrial and utility markets. Its products and services support new construction, infrastructure updates, building renovation, facility maintenance, and original equipment manufacturing.

As a provider of inventory and supply chain management solutions, Graybar required a Linux operating system (OS) that delivered best-in-class security, reliability, and performance for modern edge solutions. Moreover, it sought an OS that simplified deployment, day-to-day operations, and workload portability across the datacenter and cloud infrastructures. Red Hat Enterprise Linux (RHEL) specializes in deployments for hybrid and multicloud environments, automation, and security. These capabilities rendered it the obvious choice for Graybar.

Implementation

Graybar now leverages RHEL as its sole Linux distribution after completing a migration from a third-party Linux OS to RHEL in 2021. A principal driver for the migration was to take advantage of RHEL's feature set increase. RHEL's focus on hybrid and multicloud environments, automation, and security was especially relevant to its use of edge-based computing infrastructures.

SOLUTION SNAPSHOT

ORGANIZATION:

Graybar, an electrical wholesaler and supply chain management specialist

ORGANIZATIONAL CHALLENGES:

- » Implementation of a Linux OS with best-in-class security, reliability, and performance
- » Identification of configuration and security vulnerabilities in workloads and systems
- » Automation of compliance assessments

SOLUTION:

Red Hat Enterprise Linux 8, Red Hat Insights, and Red Hat Smart Management

PROJECT DURATION:

Ongoing

BUSINESS BENEFITS:

- » Diminished need for IT resources due to data-driven alerts and notifications
- » Enhanced capabilities for managing infrastructure for multicloud, complex, edge-based deployments that lead to better project delivery
- » Improved compliance that enables focus on business objectives

Standardizing on RHEL also allowed the company to harness the breadth and depth of RHEL's automation-related functionality as exemplified by its streamlined image-building capabilities, expanded Ansible integration, web console performance metrics, and automated security and compliance-related analytics. In addition, RHEL enabled Graybar to improve its workload performance as well as manage deployments at scale.

Red Hat Insights is an efficiency and risk management solution that is included with a subscription to RHEL. Graybar uses Red Hat Insights to receive alerts and notifications about application configuration issues as well as remediation recommendations. In the event that remediations can be automated, Red Hat Insights provides recommendations from the playbook-based Red Hat Ansible Automation Platform.

Another tool that Graybar uses to manage its RHEL deployment is Red Hat Smart Management, which includes Red Hat Satellite and cloud management services for Red Hat Enterprise Linux. Red Hat Satellite enables patching, provisioning, content management, and subscription management of Red Hat infrastructure whether it is deployed on premises or via the cloud. Meanwhile, Red Hat Smart Management's cloud management services include vulnerability, compliance, and system comparison functionality that assesses the health of a Red Hat Enterprise Linux deployment.

Challenges

The principal challenges faced by Graybar involved understanding the abundance of new features in the most recent version of RHEL that they implemented. The new functionality required Graybar to invest additional time and resources to fully understand their value. That said, Graybar noted that the extra investment of time required for the implementation of the new version of RHEL was amply mitigated by the richness of its corresponding feature set. Moreover, the implementation was streamlined and simplified by the high quality of Red Hat's documentation.

Another key challenge was managing the volume of data generated by Red Hat Insights and Red Hat Smart Management. Once Graybar's infrastructure operators became accustomed to managing alerts and notifications generated by both solutions, they were able to transform the profusion of data into actionable business intelligence that optimized the operational health of RHEL-related workloads and infrastructures.

Benefits

Ease of Migration and Vibrancy of the Red Hat Developer Community

Ease of migration was one of the benefits cited by Graybar. The process of moving Linux-workloads deployed on a third-party Linux distribution to RHEL was seamless due to the solution's expansive capabilities for facilitating migrations. When migrating these workloads, Graybar built new RHEL-based infrastructure and subsequently transferred relevant workloads to the new environment with zero downtime. Graybar noted that RHEL made it easy for the workload migration to occur with no disruption to its IT and business operations.

Graybar has also benefited from the vitality of the Red Hat developer community. Its members offer insight into how Red Hat's solutions are used across a multitude of industry verticals and use cases. Graybar now has access to more information about ways in which RHEL, Red Hat Insights, and Red Hat Smart Management have been implemented. Moreover, the company views the vibrancy of Red Hat's developer community as a key differentiator that sets the vendor apart from other Linux providers.

Automated Vulnerability Assessments and Remediation Guidance

Graybar's infrastructure operators now receive push-based notifications that speed resolution of configuration issues, minimizing any harmful consequences. The advanced analytics delivered by Red Hat Insights accelerate resolution of configuration, performance, and security issues by identifying them and providing guided recommendations about remediation where possible. Infrastructure operators can take a more proactive approach to the management of workloads deployed on RHEL using expedited, data-driven issue resolution.

Another key benefit of Red Hat Insights is that its recommendations free up senior, expert-level technicians to work on higher-value tasks. Infrastructure teams can reallocate head count associated with managing the configuration, performance, and security of RHEL deployments. Graybar estimated that using Red Hat Insights helped it to add an extra team member to its infrastructure operations team, thereby reducing the labor required to administer its RHEL implementation by 20%. Moreover, the advanced analytics-based notifications delivered by Red Hat Insights are likely to lead to more accurate issue identification and resolution.

Patching, Provisioning, Vulnerability, Compliance, and Configuration Analytics

In addition to Red Hat Insights, Graybar uses the Red Hat Smart Management platform to manage RHEL-based infrastructures. The platform's Red Hat Satellite product allows its operators to manage complex, hybrid cloud environments from a single pane of glass. Meanwhile, the company uses Red Hat Smart Management's vulnerability, compliance, and system comparison functionality to understand vulnerabilities in its RHEL-related systems and workloads. Its vulnerability assessments provide a deeper level of granularity that identifies whether systems have been affected by common vulnerability and exposures (CVEs) and also features push-button remediation. This ability to execute remediations on demand provides Graybar infrastructure operators with enhanced operational agility since remediation can be executed from the Red Hat Smart Management console. Graybar also uses the solution to assess the compliance of its systems. Finally, Smart Management helps identify configuration-related drift by comparing systems with one another.

The conjunction of Red Hat Smart Management's patching and provisioning functionality and its cloud management services enable Graybar to analyze and manage patching and provisioning, vulnerability, compliance, configuration, and other issues related to RHEL environments across hybrid cloud and multicloud environments. Managing complex RHEL deployments across a multitude of environments provides Graybar with a powerful set of tools for ensuring the health of its RHEL-based infrastructures and workloads.

Methodology

The project and company information contained in this document was obtained from several sources, including information supplied by Red Hat and questions posed by IDC directly to Graybar employees.

About the Analyst



Arnal Dayaratna, Research Vice President, Software Development

Dr. Arnal Dayaratna is Research Vice President, Software Development at IDC. Arnal focuses on software developer demographics, trends in programming languages and other application development tools, and the intersection of these development environments and the many emerging technologies that are enabling and driving digital transformation. Arnal's research examines how the changing nature of software development relates to broader trends in the technology landscape.

MESSAGE FROM THE SPONSOR

For over 20 years, Red Hat Enterprise Linux has provided a flexible and stable foundation to support hybrid cloud innovation. It enables users to build, deploy, and manage applications and critical workloads more efficiently. This builds security and compliance into the infrastructure from the time of development and more easily maintains stability throughout the production life cycle.

Red Hat Insights is a suite of hosted services that provides advanced analytics to identify and prioritize security, business, and operational risks so IT teams can increase uptime and optimize spend.

Red Hat Satellite streamlines Red Hat Enterprise Linux life-cycle management tasks like provisioning, patching, and executing playbooks that fix what Red Hat Insights finds.

Red Hat provides a consistent experience across physical, virtual, cloud, and edge deployments so IT teams can operate with complete confidence and trust using a platform that empowers innovation and increases operational efficiency. Learn more about [Red Hat Enterprise Linux](#).

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