

# Automation for security and compliance

Meet, maintain, and verify compliance for defense contractors

# Red Hat solutions for automating security and compliance:

- Red Hat Enterprise Linux
- Red Hat Ansible Automation Platform
- Red Hat Insights
- Red Hat Smart Management
- Red Hat OpenShift
- Red Hat Advanced Cluster
   Management for Kubernetes
- Red Hat Quay

# Security challenges for defense contractors

Department of Defense (DoD) contractors face many urgent challenges, including the need to:

- Mature their cybersecurity posture. To stay ahead of rapidly evolving threats, organizations must gain a better understanding of their overall risk profiles.
- Verify implementation of cybersecurity controls and processes. These standards are necessary
  to continuously detect and remediate configuration drift and reduce human error.
- Limit expense while adding capabilities. Reaching, maintaining, and continually verifying compliance without adding tremendous cost is a challenge.
- Adopt a holistic approach to security. Organizations need to move from linear waterfall project
  management and manual security checks to agile DevSecOps and automated diagnostics and
  mitigation.

### Verify compliance and protect information with technical requirements

Protecting sensitive information remains a top priority within the DoD and the public sector. Emerging cybersecurity models tackle this challenge by:

- **Measuring cybersecurity risk**. Some information is more sensitive than others, requiring increased security controls.
- Moving toward a holistic approach to security. Network security is not enough to keep threat actors outside the expanding perimeter. Standardized processes and security-minded behaviors are essential to protecting information.
- **Verifying continual compliance via third-party assessment.** Organizations may require companies in their supply chain to prove compliance via an independent third-party validation exercise.

#### Why Red Hat?

- Increased security. Our solutions meet stringent federal security requirements.
- **Reduced costs**. Our subscriptions can cost less than proprietary software licenses and support government contracts.
- **Partner ecosystem**. Red Hat maintains a partner ecosystem with thousands of products and services that are tested, supported, and certified to perform with Red Hat® technologies.
- **Open source leader**. We are a leading proponent and developer of open source software, and we work closely with the open source community to deliver solutions to help your organization succeed.
- **Experience.** We have extensive expertise working with government agencies across the U.S. to modernize their application development processes.



Changing cybersecurity dynamics call for a holistic approach to security, with automation as a key part of the security and compliance strategy.

Configuration of networks and various security and networking tools can be performed in a common language.

# Build an effective automated security and compliance strategy

Red Hat technologies provide visibility and control, and they help ease, accelerate, and lower the cost of compliance.¹ Red Hat provides trusted, certified, stable, and supported enterprise open source software, and we partner with cloud, network, and storage ecosystem companies to ease integration. The Red Hat portfolio features tools that can help meet technical security requirements and maintain compliance with products built on open source with a known life cycle.

Red Hat technologies can help you meet and maintain compliance with security requirements.

#### Infrastructure software

Red Hat Enterprise Linux® provides a security-focused operating system with built-in tools to help protect your environment, including Security Content Automation Protocol (SCAP). Since 2008, Red Hat has led the open source community that defines and builds tools for SCAP,² a security hardening solution for the operating environment certified by the National Institute of Standards and Technology (NIST). SCAP is shipped with **prebuilt** security profiles to help you comply with industry standards, like PCI DSS, DISA STIG, and HIPAA,³ and offers the ability to build custom profiles.

Red Hat Enterprise Linux is a stable, reliable foundation for automation and includes Security-Enhanced Linux (SELinux), which defines access controls for the system users, applications, processes, and files.

#### **Automation and management**

Red Hat Ansible® Automation Platform provides a simple, flexible, agentless automation language for your environment, from systems and applications to tools and processes. You can control who can make configuration changes and easily see who made the changes—and when those changes were made. Rather than replacing your existing security solutions and tools, Ansible Automation Platform can join them together. Ansible Automation Platform helps enable integration and interoperability of security technologies across your hybrid multicloud environment.

Red Hat Insights proactively assesses Red Hat Enterprise Linux environments to identify risks to operations and security and provide guidance on how to resolve these risks quickly before they result in larger issues.

Red Hat Smart Management combines the power of Red Hat Insights and Red Hat Satellite, which delivers complete life-cycle management, with a graphical user interface (GUI) to help you more securely manage any environment supported by Red Hat Enterprise Linux—from physical machines to hybrid multiclouds.

# **Container platforms**

Red Hat OpenShift\* and Red Hat Advanced Cluster Management for Kubernetes make it possible to manage a globally distributed application platform with a standardized workflow for deployment, upgrade, patching, and security auditing.

Red Hat Quay container image registry provides storage and helps you build, distribute, and deploy cryptographically signed containers. Gain more security over your image repositories with automation, authentication, and authorization systems.

<sup>&</sup>lt;sup>1</sup> Red Hat overview. "Improve and automate compliance with Red Hat and OpenSCAP," October 2019.

<sup>&</sup>lt;sup>2</sup> Red Hat blog. "Red Hat OpenSCAP Under Evaluation to Meet SCAP 1.2 NIST Standard," March 13, 2013.

<sup>&</sup>lt;sup>3</sup> Payment Card Industry Data Security Standard (PCI DSS), Defense Information Systems Agency (DISA) Security Technical Implementation Guides (STIG), Health Insurance Portability and Accountability Act (HIPAA).



#### Services and support

We also offer training, support, and consulting services for our highly regulated and security-conscious customers. These services help you get the most out of your technology investment.

#### Learn more

Automation, containerization, infrastructure life-cycle management, and proactive operating environment assessments can help DoD contractors meet their evolving compliance challenges.

To learn how Red Hat can help you maintain the security, privacy, and stability of your systems, visit redhat.com/gov.

Additional resources:

Red Hat ATO pathways

Red Hat official Ansible roles for Compliance as Code

Red Hat Knowledgebase for Common Criteria, FIPS 140-2, STIG, USGCB, USGV6 (DoD IPv6), Section 508, and more

Red Hat security data including Open Vulnerability and Assessment Language (OVAL) definitions

North America 1888 REDHAT1 www.redhat.com

Europe, Middle East, and Africa 00800 7334 2835 europe@redhat.com

> Asia Pacific +65 6490 4200 apac@redhat.com

**Latin America** +54 11 4329 7300 info-latam@redhat.com



facebook.com/redhatinc @Redhat linkedin.com/company/red-hat

# **About Red Hat**

Red Hat is the world's leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500. As a strategic partner to cloud providers, system integrators, application vendors, customers, and open source communities, Red Hat can help organizations prepare for the digital future.