Manage security risk with Red Hat Insights
Gain visibility into Red Hat Enterprise Linux environments

Overview
The mission is very clear for security executives: manage security and compliance risk to keep your company out of the headlines and to preserve your organization’s reputation. This requires you to protect company data and maintain the trust of stakeholders such as customers, partners, and suppliers.

Yet, as technology and business leaders are adopting open hybrid cloud initiatives, environments are growing in size and complexity with sprawling deployment platforms across public or multiclouds, private clouds, and existing large on-premises estates. There are an increasing number of risks to manage across all of this, and your team may not be growing at the same pace. This delivers an ongoing challenge you have to address.

You must look for ways to work smarter and not harder. Manual methods will not keep pace with this amount of change. Tools that help you analyze, prioritize, and remediate issues, as well as report the status are essential to your strategy. In fact, these steps—analyze, prioritize, remediate, and report—are recommended best practices for security and compliance management.

The Red Hat approach: Putting insights into action
Red Hat® Enterprise Linux® is trusted by organizations of all sizes to run existing and new applications. Red Hat, a leader in the security community, has built robust security capabilities into Red Hat Enterprise Linux. Subscriptions to this platform already include Red Hat Insights as a proactive IT analytics tool that includes vulnerability, compliance, and internal policy management services. Insights helps you assess, prioritize, and address the security and compliance risks that matter.

Assess and prioritize vulnerability risks for your environments
The first area where analytics-driven security management can help is in assessing and prioritizing the many Common Vulnerability Exceptions (CVEs) and Red Hat security advisories and recommendations to see which apply across your hybrid estate. With a large volume of advisories, manual analysis methods are not efficient and may leave the organization at risk. Across all of these security information sources, you must first understand which apply to your environments, the severity of each one, the risk they pose, and how or whether they are important to your specific environments.

For example, a CVE may apply on several of your servers. With Red Hat Insights, your team has access to knowledge and expertise at their fingertips. They can see which environments are potentially impacted by that CVE, as well as the industry-accepted Common Vulnerability Scoring System (CVSS) and Red Hat’s proprietary impact score for that CVE. The Red Hat impact score represents Red Hat knowledge about how a CVE will impact a Red Hat Enterprise Linux instance. Your team can use all of this knowledge to assess the priority of a threat to your environment and assign its own status within Insights, enabling triage and assessment of the CVE. If the servers in question are production servers, then you may decide to remediate the issue and indicate
“scheduled for patch” in your status. These user-defined fields allow for customization that makes it easier for your organization to efficiently visualize and act on security risks throughout the life cycle of the CVE.

With the expertise and knowledge provided by Insights, you are better able to stay abreast of evolving threats because you can add a more effective and consistent management process around security assessment and triage, and this may help to lower the total cost of ownership.

**Stay in compliance with security policies across your environments**

The Compliance service in Red Hat Insights allows your organization to easily and effectively manage regulatory security policies to which your infrastructure must adhere. The Compliance service works behind the scenes with OpenSCAP, an open source tool that is included as a part of your Red Hat Enterprise Linux subscription.

Using this Compliance service, policies can be easily configured to start measuring compliance across your Red Hat Enterprise Linux environment. These environments can be periodically scanned against the policies, with the results uploaded to Insights for better visibility. With this service, your team can see an overall percentage of compliance to policies and delve into each host to analyze specific passes and failures for each policy. The ability to remediate issues via Ansible Playbooks helps to improve efficiency.

For internal security mandates designed by your security team, Insights allows you to define and monitor for these policies, alerting teams when a Red Hat Enterprise Linux environment is out of compliance. Manual analysis steps are reduced and teams have the right tools to better manage and align Red Hat Enterprise Linux systems with compliance requirements.

**Help teams collaborate to remediate risks fast and at scale**

Assessment and prioritization of security issues is a key first step, but the ultimate goal is to better protect your data and environment by quickly resolving known issues. This requires your team to work with other groups to reach resolution for a specific threat. When you have methods to provide specific information about affected hosts with resolution steps, the collaboration is more targeted, and remediation is faster and more accurate.

Red Hat Insights enables resolution of Red Hat-provided recommendations through manual remediation steps or through Ansible Playbooks that can be downloaded for resolution at scale. When Red Hat Smart Management is used, you can remediate issues more simply from within Insights. You can also download and use playbooks through Red Hat Ansible Automation Platform. With both solutions, remediation is fast, consistent, and can be done comprehensively at scale.

When you are addressing a key threat such as the “Dirty Cow” vulnerability, time to resolution is essential. By remediating vulnerabilities across a large environment with a single playbook, you minimize time spent in urgent firefighting mode. Teams can return to higher value projects more quickly, and you are better able to bring fast closure to the issue.
Ensure effective reporting

Security programs typically require communication of the security stance across a variety of stakeholders. Effective reporting helps you deliver necessary information at the right level of detail to the C-suite, auditors, or across your technical teams. Insights supports CVS/JSON exports and has executive-level reporting. It also allows customization of reports via public REST APIs. With the available reporting options, you can provide necessary reports while still ensuring staff productivity.

Table 1. Benefits of Red Hat Insights vulnerability, compliance, and policies services

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Details</th>
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<tbody>
<tr>
<td>Easily manage security risks across a hybrid environment with the Red</td>
<td>Implement Red Hat Smart Management to enable rapid resolution from within Insights or use Red</td>
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<td>Hat management portfolio</td>
<td>Hat Ansible Automation Platform to remediate threats at scale and automate other tasks as well.</td>
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<td>Easily assess and prioritize security vulnerabilities impacting Red Hat</td>
<td>Use analytics to triage CVEs efficiently to determine which threats are important to your environments and prioritize them for your organization.</td>
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<td>Enterprise Linux</td>
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<td>Stay ahead of regulatory security compliance</td>
<td>Easily configure and manage external regulatory security compliance on Red Hat Enterprise Linux through OpenSCAP.</td>
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<td>Monitor and track internal security mandates</td>
<td>Monitor for any internally designed policies, from security and compliance to operational processes.</td>
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<tr>
<td>Deliver reports at the right level of detail</td>
<td>Equip your teams to quickly create required reports at the right level of detail for the role, from executives to IT professionals to auditors.</td>
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Foster improved security risk management best practices

As the global security landscape evolves, best practices encourage you to understand and assess risks as they apply to you, then resolve them quickly. Insights comes in to continuously assess your environments so your teams always have a clear focus on the threats that matter.
Red Hat Enterprise Linux stands out as the platform that includes analytics and automation tools to help you more comprehensively visualize your security and compliance stance and take the necessary actions necessary. Red Hat Insights, Red Hat Smart Management, and Red Hat Ansible Automation Platform are a modern basis for more predictable security risk management processes.

**Get started with a smart platform choice**

With Insights deployed, you can become more confident and efficient in operations, resulting in improved business value. The installation process for Insights is simple. Install and register a client, review threats on a cloud-based visual dashboard, and remediate identified risks using the provided guidance. Your team can get started quickly at redhat.com/insights.