Security & Proactive Response with Insights

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# SECURITY IS RISK MANAGEMENT



## COMPLEXITY CREATES RISK

80%

336 k/hr

**65**%

#### Carnegie Mellon University

Commercial application outages are caused by software failure and operational complexity.

## Gartner

The median cost of downtime for a production application for a large enterprise

## CompTIA

Customers thought they were behind in training and capabilities needed to manage their next gen infrastructure.



## COMPLEXITY CREATES RISK

# DO NOT BECOME ASTATISTIC





## ANALYZING INFRASTRUCTURE RISK

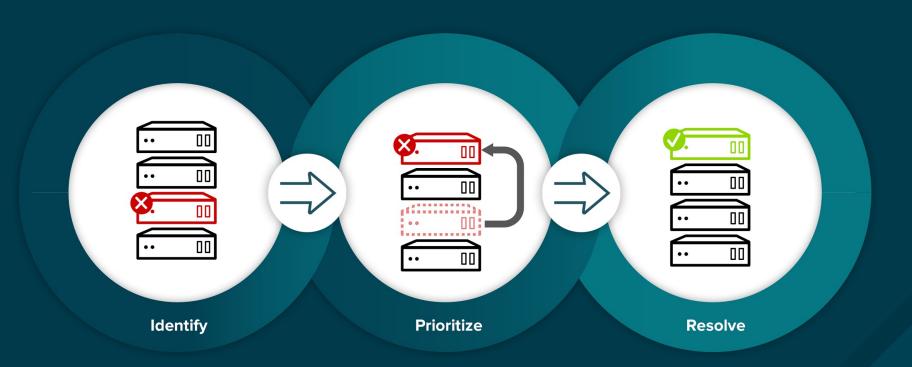
**TOOLS -** Are you comfortable that your tooling and processes will scale as your environment scales?

**RESPONSE** - Are you confident that you can quickly respond when vulnerabilities strike?

**COMPLIANCE -** Are you certain that your systems are compliant with various infosec and audit requirements?



## MANAGING INFRASTRUCTURE RISK







## MODERN SYSTEMS MANAGEMENT

Red Hat Insights (RHI) is based on four main concepts:

- Proactive Systems Management
- Lightweight Data Collection
- Clear, Tailored, and Actionable Intelligence
- Insights Powered By Red Hat

## INTEGRATED INTO TOOLS YOU ALREADY USE

RED HAT INSIGHTS



RED HAT





## FULL STACK ANALYSIS







## REAL WORLD RESULTS

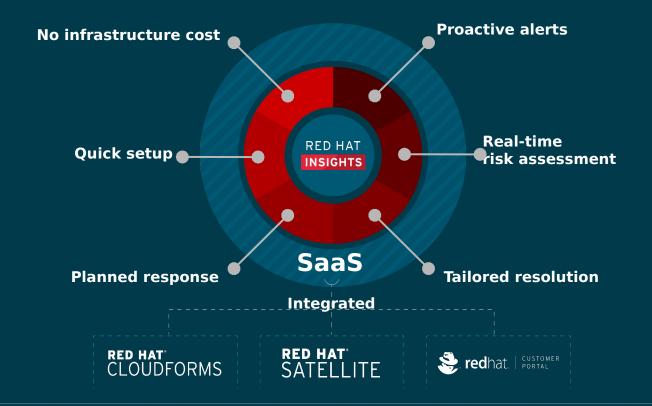
"Insights helps our teams be more proactive at resolving critical issues before they occur. The reliability of Insights saves us time and labor intensive tasks.

We no longer have to look at individual systems because we have one system with insight into our entire infrastructure."

-- Jason Cornell, AutoTrader / Cox Automotive



Operational analytics from Red Hat empowers you to prevent downtime and avoid firefighting while responding faster to new risks.

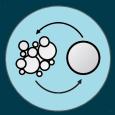




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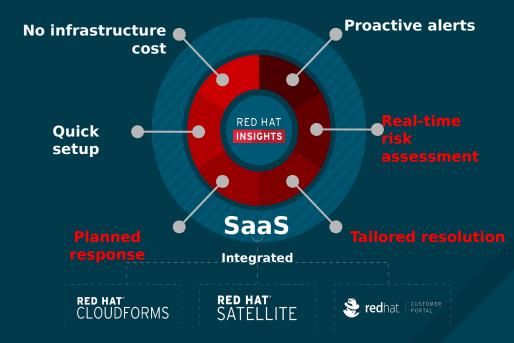
MOVES YOU FROM REACTIVE TO PROACTIVE SYSTEMS MANAGEMENT



DELIVERS ACTIONABLE INTELLIGENCE FROM THE OPEN SOURCE LEADER



INCREASES VISIBILITY
OF INFRASTRUCTURE RISKS
AND THE LATEST SECURITY
THREATS





Insights requires no additional infrastructure to manage. Simply install the RPM and begin analyzing for problems.

RHEL 6.4+, RHEL 7+

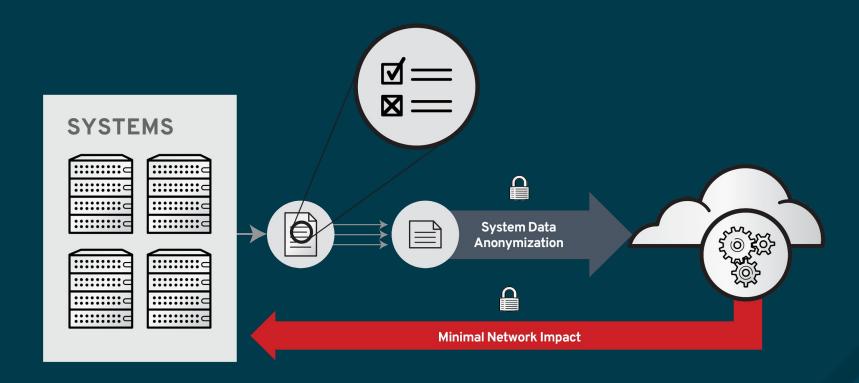
# yum install redhat-access-insights

# redhat-access-insights --register

Insights can be registered and report directly, or via an SSL proxy (typically Red Hat Satellite)



Insights requires no additional infrastructure to manage. Simply install the RPM and begin analyzing for problems.







- The ability to quickly alert on new problems arising across the board
- Adapt to many changing infrastructure configurations
- We're able to provide real-time risk assessment in Red Hat infrastructure
- Iterate quickly and add new features and functionality based on feedback

## **Container analysis**

Identify risks in container platforms, images, and containers

Continuous stream of updated checks

Simple remediations steps and guidance with awareness of state of container lifecycles

## OpenStack and RHEV support

Analysis of individual nodes, cluster manager, and overall cluster state

Data collection and communication via OSP Director and RHEV-Manager

#### **Action plans**

Identify, prioritize, and share maintenance plans to better bridge the gap between assessment and action

Insights recommended action plans, when new critical issues hit

#### Early Access Mode

Test out and provide feedback on new features while still in development

Switch seamlessly between stable and early access mode without re-registering systems



#### Security Response





#### Stay ahead of your security team

- Start planning your remediation before the security team starts asking questions
  - Insights helps you answer those question when they arise
- Plan your response around the most critical vulnerabilities and systems
- Know that issues were remediated properly
  - Insights check-ins





## Working with Red Hat Product Security

- Red Hat Product Security writes rules before embargo is lifted
- Insights Rule is Released on the day that the embargo is lifted
- Customers can start planning their response the day the vulnerability becomes public, with trusted guidance from Red Hat Software and Security engineers



Planning a response to DROWN OpenSSL Vulnerability

- OpenSSL DROWN (CVE-2016-0800)
- Special DROWN (CVE-2016-0800) + (CVE-2015-0293)
  - Much more efficient attack if you are vulnerable to both.





Prioritizing Special over General DROWN in the following categories:

- A service on a publicly routable IP address
- A service on a private IP address
- A server with the version of OpenSSL vulnerable to DROWN, but no known services are listening on routeable IP address.





## Assurance of remediation

- Run the Insights client to force a re-check of the system
- Wait until the next automatic check in



#### **Site-guidance**

Track site-wide trends in security response, technical debt, and deployment agility

Get site-wide recommendations based on statistically validated industry trends

#### **Full CVE Analysis**

Identify all of the Red Hat Security Errata that would apply to a host.

Currently Red Hat Insights detects the highly publicized vulnerabilities and those categorized as Critical by Red Hat Product Security

## **Compliance Checks**

Leverage OpenSCAP to display compliance checks for PCI-DSS and STIG.

## Ansible Playbooks

In a movement toward "fix-it for me" technology, we will begin generating Ansible playbooks which can be downloaded and used for remediation.





## Begin monitoring your infrastructure, for free, at

https://access.redhat.com/insights

