



Red Hat Summit 2019 Announcements and Smart Management

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Summit 2019

- **New LOGO and Font!**
 - 2 year journey
- **IBM acquisition update**
 - Still on track 2019



Red Hat

Summit 2019

- **Satellite 6.5 released**
 - RHEL 8 Support
 - Full FIPS mode
 - Infoblox IPAM integration
 - Export Content Views
 - Supported on AWS, GCE, Azure, Alibaba, and IBM Clouds
- **RHEL 8!**
 - 18-30% faster than RHEL 7
 - Appstream
 - Native CNCF container tooling
 - Insights included

Summit 2019

- **RHEV / RHHI 4.3 released**
 - Integration with latest OpenStack SDN
 - Support for IBM Power9 Architecture
 - Ansible Roles included for management
 - Graphical Migration tooling included

Summit 2019

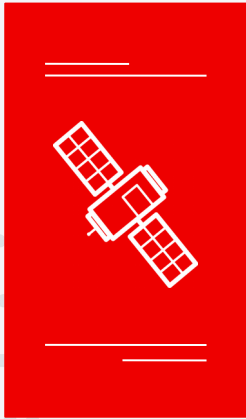
- **Red Hat CodeReady Workspaces for OpenShift 4**
 - Web UI for developers
- **Microsoft and Red Hat Partnership Extended**
 - ARO – Azure Red Hat OpenShift – Fully Managed
- **OpenShift 4 – release May 2019**
 - Red Hat CoreOS
 - Operators and OperatorHub
 - Full Stack Automation

Summit 2019

- **Red Hat Smart Management**
 - Includes Red Hat Satellite/Capsules
 - Includes new RHEL cloud management service
 - <https://cloud.redhat.com>

Red Hat Smart Management

Red Hat Satellite



+

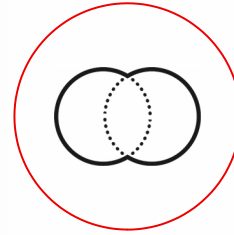
Cloud management services for Red Hat Enterprise Linux



Vulnerability



Compliance



System comparison

Management Flexibility

Offering Red Hat Management on-premises or in the cloud

Red Hat Satellite

Requirements for resource set up and configuration

Addresses on-prem or disconnected environment

Limited to viewing hosts registered to the individual Satellite servers

Use cases:

Content management, patching, configuration, subscription management, provisioning

Cloud Management Services

No requirements for resource set up and maintenance

Adopt new features faster with a software-as-a-service preference

Single view of all hosts across your RH infrastructure

Use cases:

Vulnerability, Compliance, System Comparison

Smart Management Packaging gives access to both Satellite AND cloud management services

What do I get for Satellite with Smart Management?

Quantity 50 of MCT3718 - Satellite Infrastructure Subscription

Enabling you to Scale out your Satellite deployment to best suit your needs.

- Need a Satellite for Test/Dev?
- Need a Capsule in the cloud?
- Need load-balanced Capsules?
- Need an air-gapped synchronization host?

No Problem.

Red Hat Insights

Now included with all Red Hat Enterprise Linux subscriptions

Buy



Red Hat
Enterprise Linux

Get



Red Hat
Insights

Red Hat Insights assesses your Red Hat Enterprise Linux environment to help you proactively identify and remediate threats, avoiding outages and unplanned downtime.

How Insights Helps You

Complexity is risk

80%

Percentage of commercial application outages caused by software failure and operational complexity

Carnegie Mellon

\$336 k/hr

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

Gartner

\$15 m/yr

Mean annualized cost of cybercrime deference and remediation for large US-based corporations

Ponemon
INSTITUTE

65% of CompTIA customers thought they were significantly behind in training and capabilities needed to manage their next generation infrastructure.



Red Hat Insights

PREDICT RISK. GET GUIDANCE. STAY SECURE.

PREDICTIVE I.T. ANALYTICS

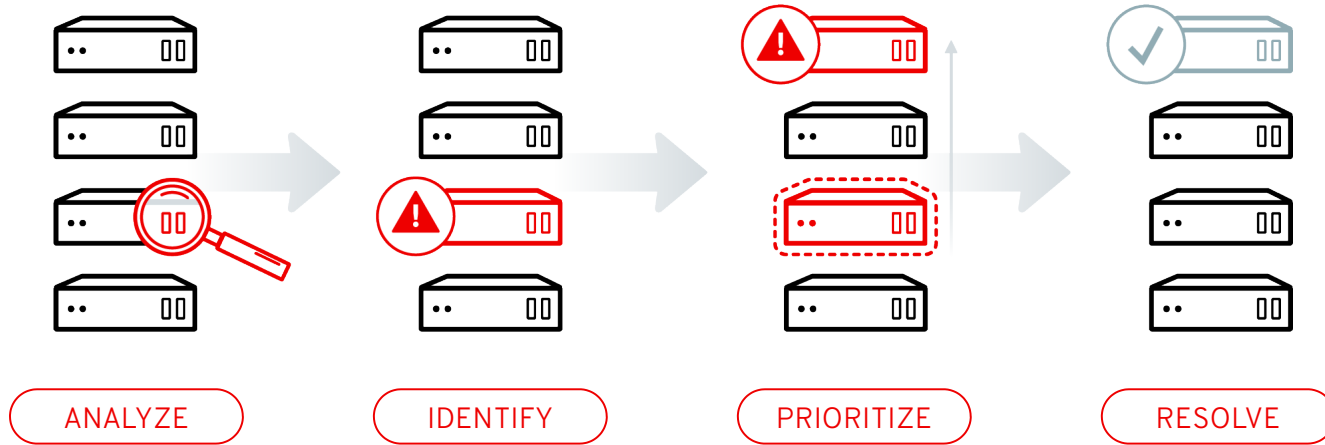
AUTOMATED EXPERT ASSESSMENT

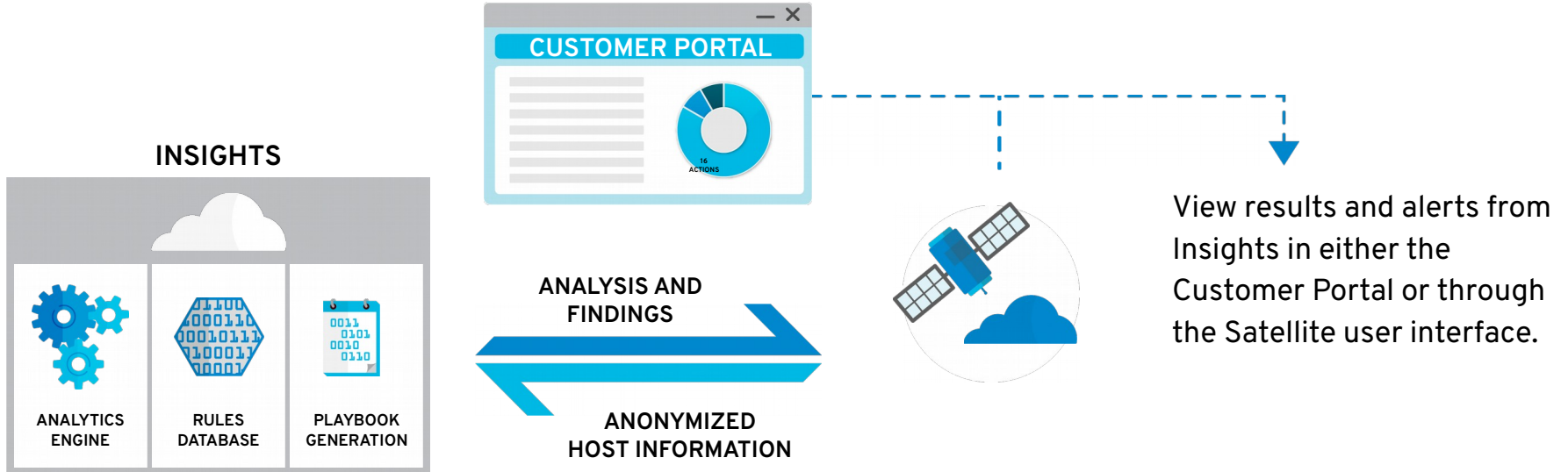
SIMPLE REMEDIATION

Customer Stories

- Insights was able to immediately identify 10 issues on an Oracle RAC system that has been **plaguing a customer for 6 months**.
 - Oracle RAC systems are EXPENSIVE. Why not keep them running at **optimal** capacity?
- One prospect swore their 2,000 servers were up-to-date.
 - A demonstration of Red Hat Insights showed them that **400 of their servers were not up-to-date**, and therefore at **risk**.

Managing infrastructure risk

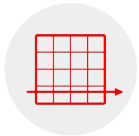




Red Hat Insights Capabilities

Key risks discovered

Tailored resolution steps included for resolution



Performance issue

Network interface is not performing at maximum speed



Recommended action

Check cable, connections, and remote switch settings



Security risk detected

Privilege escalation



Recommended action

Apply mitigation and update the kernel



Availability

OpenShift operations fail if insufficient CPU or memory



Recommended action

Increase CPU and/or memory reservation



Stability

Filesystem has exceeded 95% capacity

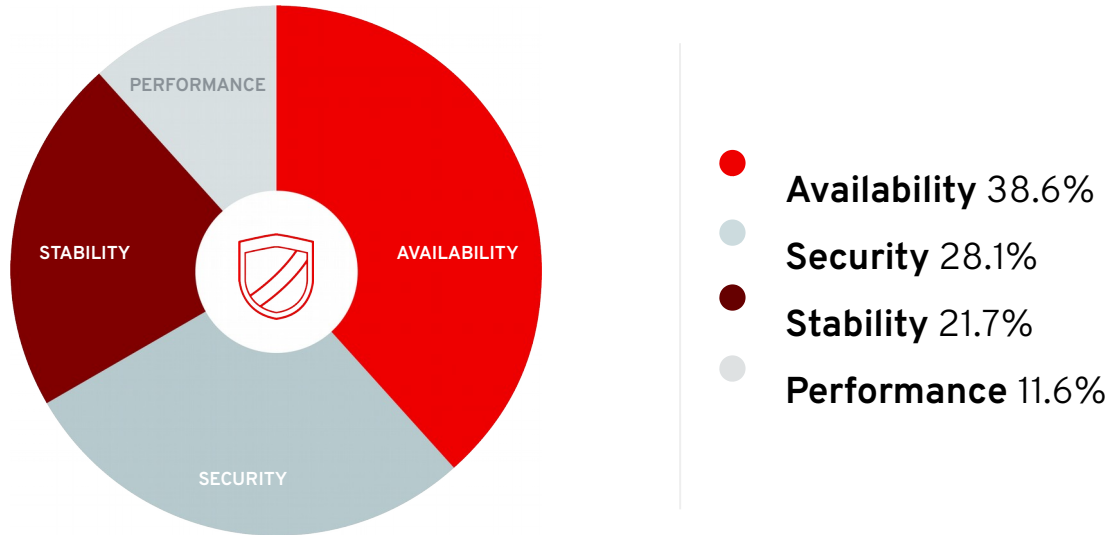


Recommended action

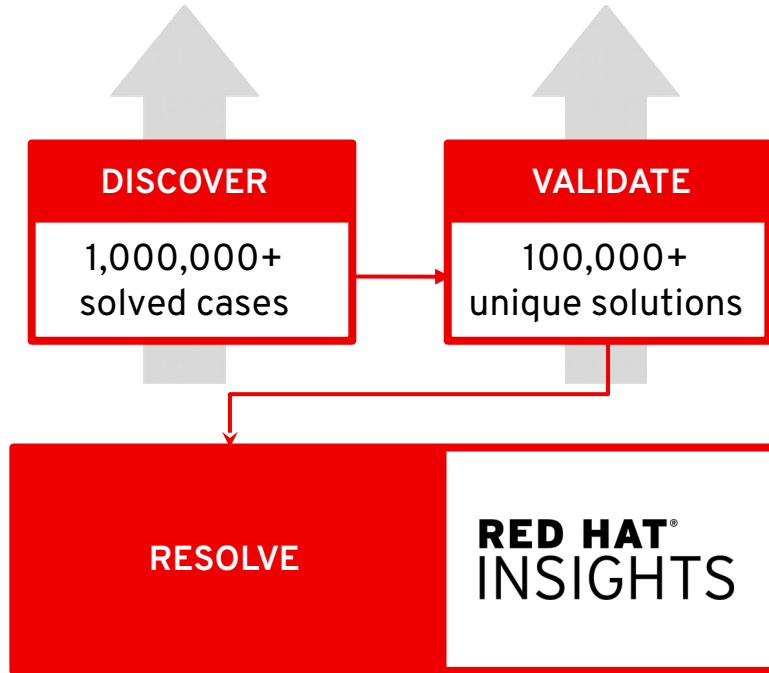
Increase free space on the host.

More than just security

Red Hat Insights has more than 600 rules—here is how they stack up across categories



Value of experience



- Continuous identification of new risks driven by unique industry data
- Based on real-world results from millions of enterprise deployments

“85% of critical issues raised to Red Hat® support are already known to Red Hat or our partners.”

– RED HAT GLOBAL SUPPORT SERVICES

Get ahead of key security risks

Don't wait for your security team to tap you on the shoulder

› Security > NetworkManager DHCP vulnerable to remote code execution (CVE-2018-1111)

Impact Likelihood Total Risk Risk of change: **Very Low**

› Stability > New Ansible Engine packages are inaccessible when dedicated Ansible repo is not enabled

Impact Likelihood Total Risk Risk of change: **Very Low**

› ⓂStability > Kdump crashkernel reservation failed due to improper configuration of crashkernel parameter

Impact Likelihood Total Risk Risk of change: **Moderate**

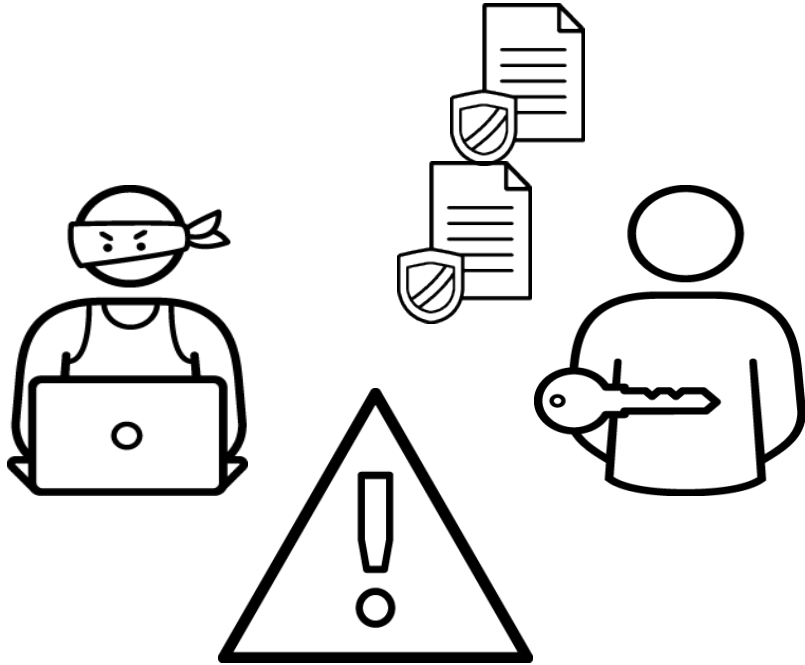
- Prioritizes security response by analyzing runtime configuration and usage

- Automates security analysis, beyond just CVEs

“...when a vulnerability is released, it's likely to be exploited within **40-60** days. However, it takes security teams between **100-120** days on average to remediate...”

– KENNA SECURITY GROUP

Concerned about your Insights data security?

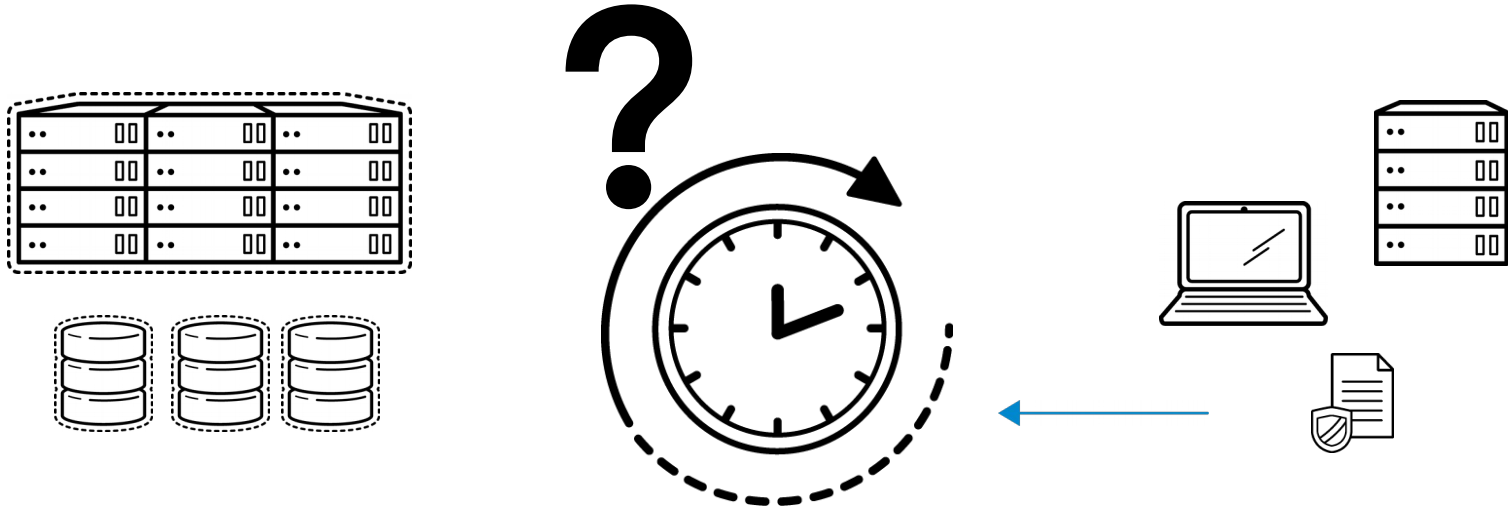


DATA SECURITY ASSURED

- Data encryption using LUKS
- Data sent over TLS
- Trusted certificate bundled
- Hostname and IP obfuscation available
- System information to be tailored

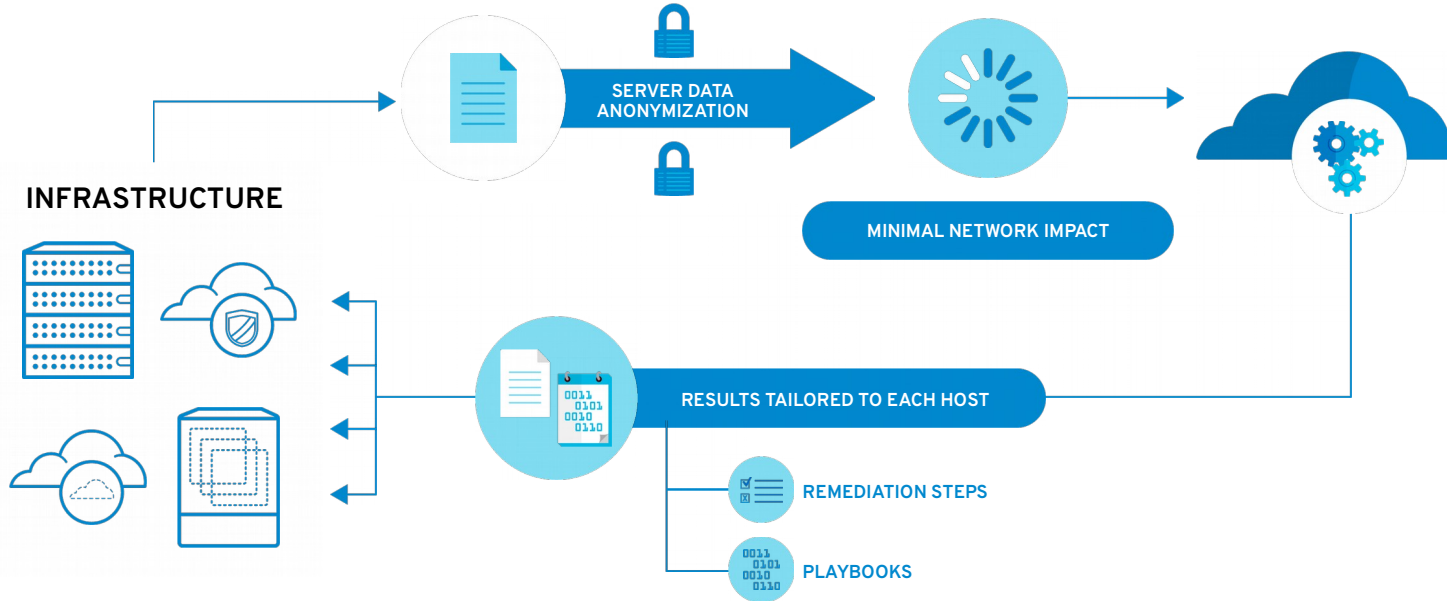
How long does Red Hat store your data?

Red Hat does not permanently store your data



Typically 24 hours / 2 weeks MAX

Architecture



How to use Red Hat Insights

Installation and registration

Simple and Straightforward



Step #1: Run (as root) # `yum install insights-client`

- Red Hat Enterprise Linux 8 customers will not need to perform this step - the Insights client is pre-installed.

Step #2: Run (as root) # `insights-client --register`

More information including automation playbooks are available at:

- <https://access.redhat.com/insights/getting-started>

Man page available via `$ man insights-client`

Data collection

Very small amount of data and only data that is needed for rule analysis

Example files:

- `/etc/redhat-release`
- `/proc/meminfo`
- `/var/log/messages`
- `/boot/grub/grub.conf`
- `/boot/grub2/grub.cfg`
- `/etc/modprobe.conf`

We do not collect logs files, but rather the lines that match a potential rule (i.e. page allocation failure)



Commands:

- `/bin/rpm -qa`
- `/bin/uname -a`
- `/usr/sbin/dmidecode`
- `/bin/netstat -i`
- `/bin/ps auxcww`

Insights Use Cases

Key use cases

UPTIME & EFFICIENCY



- More infrastructure to manage, but no or limited hiring of new admins
- Moving to managed service provider
- Consolidating operations teams

SECURITY



- Scrambling to keep up vulnerabilities
- Proactive infrastructure hardening
- Security teams throwing unreasonable demands over the wall

Insights combines with other tools to enhance the Red Hat® Enterprise Linux® investment

- Insights + technical account manager (TAM) drives deeper customer conversations and delivers regular assessments.
- Insights + Satellite uses Insights to identify and prioritize risks and Satellite to patch so customers can fix things faster.

Insights & Ansible Integration

Security

Red Hat Insights not only detects security issues, it also strives to let you know whether these issues leave you in a vulnerable state. SSL exploits, remote access, and local privilege escalation issues can lead to compromised data and data loss. Review and resolve these security issues to ensure your systems and data are kept safe.

INSIGHTS PLANS WITH ANSIBLE PLAYBOOKS

Solve common issues through Ansible Automation

Rule	Likelihood	Impact	Total Risk	Systems	Ansible
OpenSSH vulnerable to remote password guessing attack (CVE-2015-5600)	High	High	Critical	16	Ansible
Kernel key management subsystem vulnerable to local privilege escalation (CVE-2016-0728)	Medium	Medium	High	1	Ansible
Kernel vulnerable to privilege escalation via permission bypass (CVE-2016-5195)	Medium	Medium	High	1	Ansible
Kernel vulnerable to man-in-the-middle via payload injection (CVE-2016-5696)	Medium	High	Critical	1	Ansible

- Overview
- Actions
- Inventory
- Planner
- Rules
- Executive Reports
- Configuration
- Customer Portal
- Logout

CriticalIssues (36753)

Actions

Systems

Playbook

OpenSSH vulnerable to remote password guessing attack (CVE-2015-5600)

Edit

Impact Likelihood Total Risk

INSIGHTS PLANS WITH ANSIBLE PLAYBOOKS

Solve common issues through Ansible Automation

Dnsmasq with listening processes vulnerable to remote code execution via crafted DNS requests (CVE-2017-14491)

Edit

Impact Likelihood Total Risk

System	Last check in	Status
rhaiclient.example.com	a day ago	✓

Download Playbook

Export CSV

Add actions

ANSIBLE & INSIGHTS

While Insights includes Ansible playbooks for risks, Insights alone can't perform remediation of the risks.

Insights

- Insights provides Ansible Playbooks for resolving many common risks.
- Dynamically generates Ansible Playbooks for risk remediation
- Playbooks can be downloaded and run via `ansible-playbook` or Satellite

Insights connected to Ansible Tower

- View identified risks in the Tower inventory
- Execute generated Ansible Playbook as a Tower job
- Use Tower for enterprise risk remediation

Resources & Next Steps

Getting started with Red Hat Insights



ALREADY A RED HAT® ENTERPRISE LINUX® CUSTOMER?

You have Red Hat Insights at no additional cost:

<https://access.redhat.com/insights/getting-started>



WOULD YOU LIKE TO LEARN MORE ABOUT RED HAT INSIGHTS?

<https://www.redhat.com/en/technologies/management/insights>

For more info, visit: <https://access.redhat.com/insights/info>

Insights Resources

Webpages and Docs:

- Red Hat Insights product webpage - <https://www.redhat.com/en/technologies/management/insights>
- Red Hat Insights Customer Portal Homepage - <http://www.cloud.redhat.com/insights>
- Red Hat Insights Customer Portal - <https://access.redhat.com/products/red-hat-insights/>
 - Get Started with Insights - <https://access.redhat.com/products/red-hat-insights/#getstarted>
- Red Hat Insights Documentation - https://access.redhat.com/documentation/en-us/red_hat_insights/1.0/

Thank you

Red Hat is the world's leading provider of enterprise open source software solutions. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500.



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