



# Cloud Management Services for Red Hat Enterprise Linux

Managing Security w/ RHEL environments

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Sr. Principal Product Manager



## Context & what's happening in the market?

5 mins

## Red Hat Smart Management

5 mins

## Review of Vulnerability & Compliance App within Cloud Management Services for RHEL

10 mins

## Demo

10 mins

## Discussion & future use cases

15 mins

# Data breaches steadily increasing year over year. 2017 set a record!!

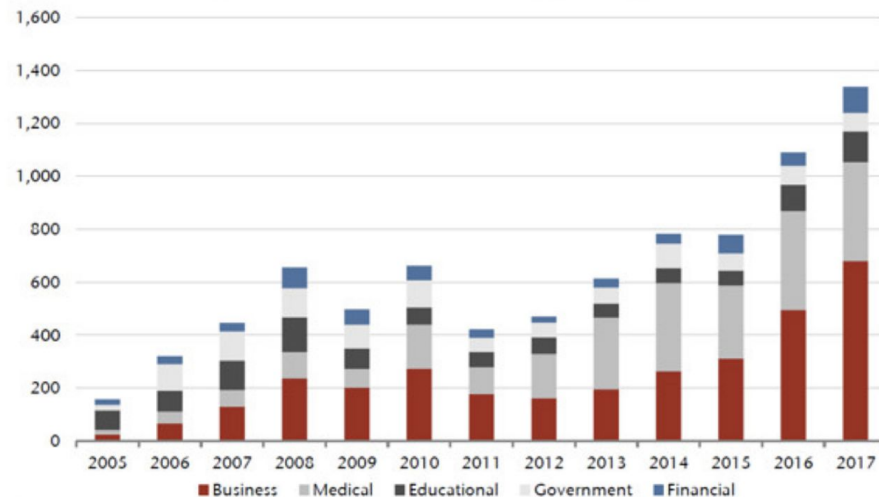
By this count, the number of significant breaches topped 1,300 last year, versus fewer than 200 in 2005



By  
**VICTOR  
REKLAITIS**  
MARKETS WRITER

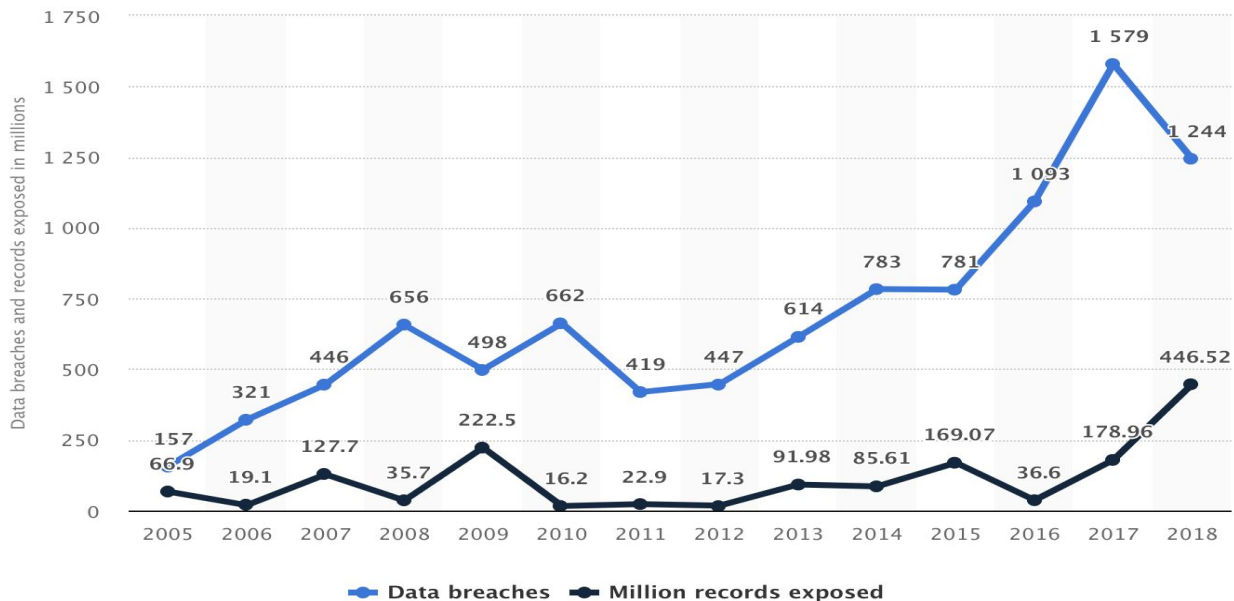
**Chart 9: Increasing number of data breaches (by entity)**



Source: Jefferies, Identity Theft Resource Centre

Jefferies

# Number of data breaches & records exposed is increasing



© Statista 2019

# Regulations and penalties are on the rise

CONFIDENTIAL Designator



# CHALLENGES COMPLIANCE OFFICERS EXPECT IN 2018

Figure 22: The greatest compliance challenges I expect to face in 2018 is/are:



o Source: Thomson Reuters Regulatory Intelligence – Cost of Compliance 2018

# Red Hat Insights

Now included with all Red Hat Enterprise Linux subscriptions

Buy



**Red Hat**  
Enterprise Linux

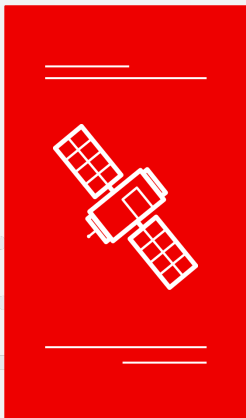
Get



**Red Hat**  
Insights

# Red Hat Smart Management

Red Hat Satellite



+

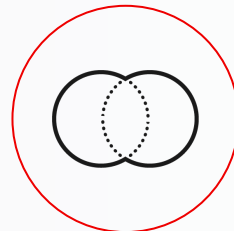
Cloud management services for Red Hat Enterprise Linux



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:**

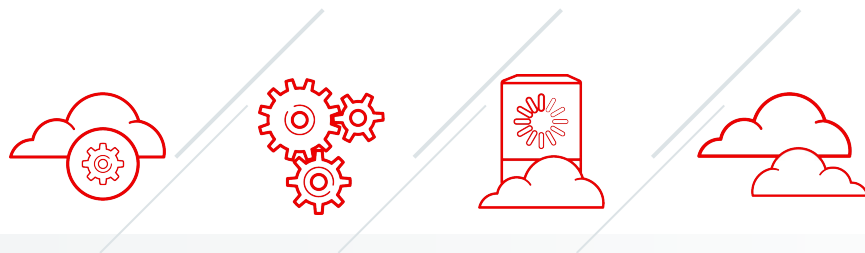
Vulnerability, compliance, system Comparison

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



# Cloud Management Services for Red Hat Enterprise Linux

# Cloud Management Services for Red Hat Enterprise Linux



- Cloud-based management of Red Hat Enterprise Linux hosts
- Managing instances on-premise and in multi-cloud environments
- Focusing on the functionality that customers need
- Offering key benefits of Software-as-a-Service

# Software as a Service Benefits



No infrastructure  
to maintain



Register Once



Easy Setup



Always on the  
latest version

Easier to access and scale capabilities

## Manage my Red Hat infrastructure



### Red Hat Insights

Predict Risk. Get guidance. Stay secure.

[Open](#) →



### Cloud Management Services for Red Hat Enterprise Linux

Operate and protect your Red Hat platforms.

[Open](#) →



### Red Hat OpenShift Cluster Manager

Manage your highly available public and private clouds.

[Open](#) →

## Support and resources

[Get support](#)

[Contact customer service](#)

## About

[Red Hat Insights](#)

[Red Hat Smart Management](#)

[Red Hat OpenShift](#)

## Feedback



[Tell us about your experience](#) using Red Hat Cloud Services software, and how we can improve.

# Red Hat Insights

All Smart Management customers will have Insights through their Red Hat Enterprise Linux Subscription

# Red Hat Insights

Included with your Red Hat Enterprise Linux subscription

## Assesses

customer's Red Hat environments

## Remediates

findings with prescriptive remediation steps or an Ansible playbook

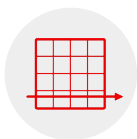
## Insights

rule contributions directly from Red Hat subject matter experts

Identifying risks for Availability, performance, stability and security

# 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



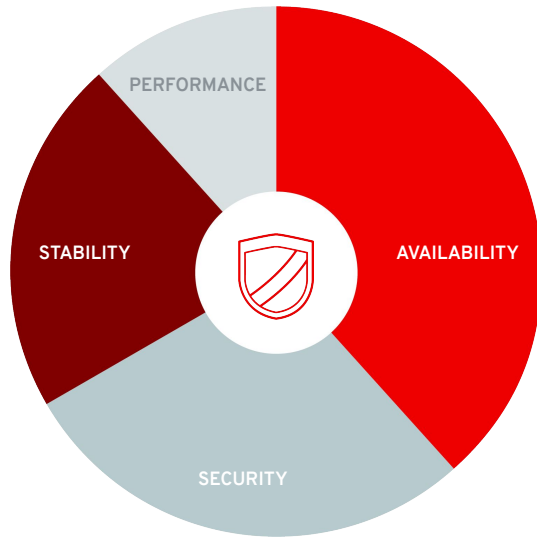
## Recommended action

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



- **Availability** 38.6%
- **Security** 28.1%
- **Stability** 21.7%
- **Performance** 11.6%

# Vulnerability

Cloud Management Services for Red Hat  
Enterprise Linux

# Vulnerability

Remediate all Common Vulnerabilities and Exposures (CVEs) with errata

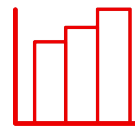
Vulnerability offers



**Assess and monitor** the risk of vulnerabilities that impact Red Hat products with operational ease



**Remediate** known Common Vulnerabilities and Exposures (CVEs)

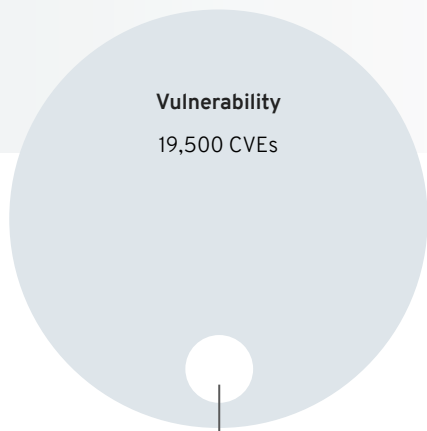


**Ability to generate** JavaScript Object Notation and CSV view-based **reports** to keep relevant stakeholders informed

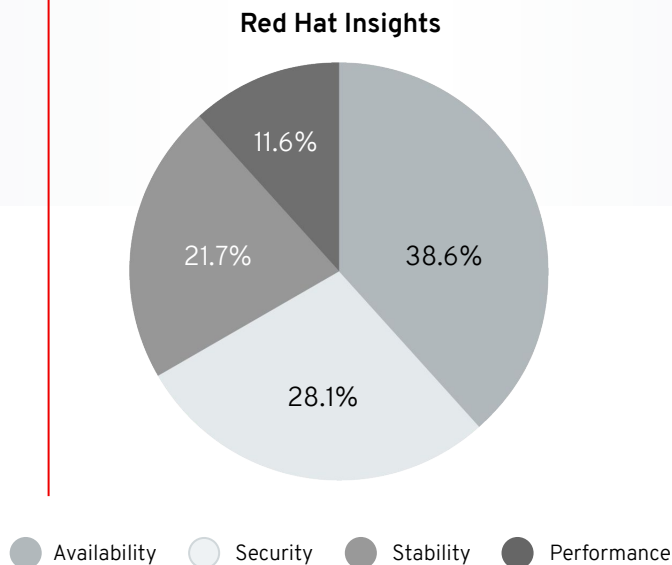
# Insights does this already, right?

Vulnerability is security-focused—all CVEs with errata

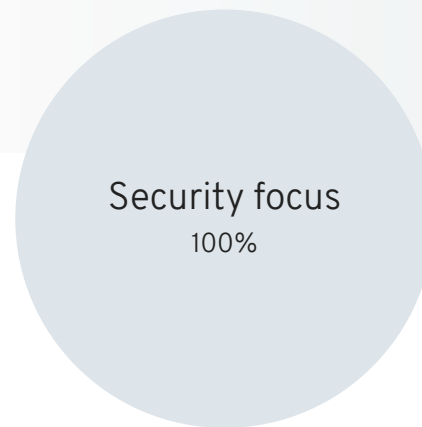
## CVEs covered



## Areas / Rules covered



## Vulnerability



# Compliance

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Enterprise Linux

# Compliance

Built on OpenSCAP reporting

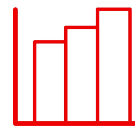
Compliance offers



**Assess and monitor** the degree/level of compliance to a policy for Red Hat products with operational ease



**Remediate** known issues of non-compliance in the Red Hat environment via Ansible playbooks based on business risk & relevance



**Ability to generate** JavaScript Object Notation and CSV view-based **reports** to keep relevant stakeholders informed

# System Comparison

Cloud Management Services for Red Hat Enterprise Linux

# System Comparison

Compare system profiles

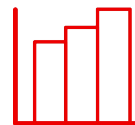
System Comparison offers



**Compare system configuration** of one host to other hosts



**Filter** displayed profile facts, highlighting areas that match, are different, or where information is missing.



**Ability to generate** CSV view-based output



# Architecture

Red Hat Insights &  
Cloud Management Services for Red Hat  
Enterprise Linux

## Customers environment



Insights client(s)



Hybrid cloud  
infrastructure

Customers environment

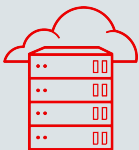
cloud.redhat.com | hosted on OpenShift Dedicated



Insights client(s)



Common  
upload service



Hybrid cloud  
infrastructure

Core services

Customers environment

cloud.redhat.com | hosted on OpenShift Dedicated



Insights client(s)



Core services

Common  
upload service

Message  
queue

API  
authorization

Notifications

Metrics &  
monitoring

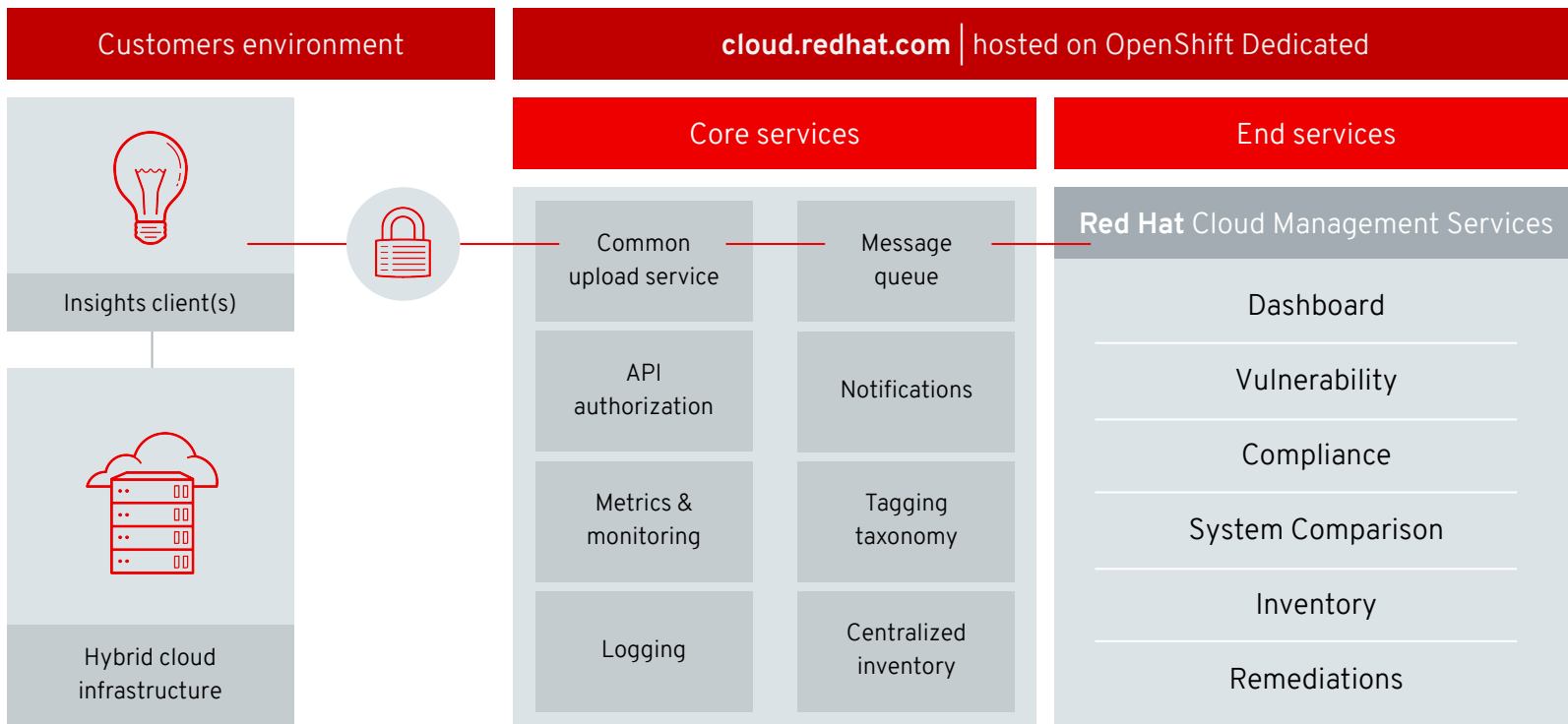
Tagging  
taxonomy

Logging

Centralized  
inventory



Hybrid cloud  
infrastructure



# Demo

Cloud Management Services for Red Hat  
Enterprise Linux

# Discussion

Future Use Cases & Customer Engagement

# Discussion

- Do you see value in this app and will you use it?
- What personas do you expect to use these services?
- What use cases would you like to see addressed?



# Customer Engagement & Feedback



- Want to participate in a pilot and provide feedback?
  - Cool Red Hat SWAG promised!!
- Have use cases you'd like to see incorporated?
- Mohit Goyal (Product Manager)
  - [mgoyal@redhat.com](mailto:mgoyal@redhat.com)

# Thank you

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