Summit 2019

- New LOGO and Font!
- 2 year journey

- IBM acquisition update
- Still on track 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 / RHFI 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
• Red Hat Smart Management
  • Includes Red Hat Satellite/Capsules
  • Includes new RHEL cloud management service
  • https://cloud.redhat.com
Red Hat Smart Management

Cloud management services for Red Hat Enterprise Linux

- Vulnerability
- Compliance
- System comparison

Red Hat Satellite
# Management Flexibility

Offering Red Hat Management on-premises or in the cloud

<table>
<thead>
<tr>
<th>Red Hat Satellite</th>
<th>Cloud Management Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Requirements for resource set up and configuration</strong></td>
<td><strong>No requirements for resource set up and maintenance</strong></td>
</tr>
<tr>
<td><strong>Addresses on-prem or disconnected environment</strong></td>
<td><strong>Adopt new features faster with a software-as-a-service preference</strong></td>
</tr>
<tr>
<td><strong>Limited to viewing hosts registered to the individual Satellite servers</strong></td>
<td><strong>Single view of all hosts across your RH infrastructure</strong></td>
</tr>
<tr>
<td><strong>Use cases:</strong></td>
<td><strong>Use cases:</strong></td>
</tr>
<tr>
<td>Content management, patching, configuration, subscription management, provisioning</td>
<td>Vulnerability, Compliance, System Comparison</td>
</tr>
</tbody>
</table>

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

$336k/hr  
The median cost per hour of downtime for a production application for a large enterprise

$15m/yr  
Mean annualized cost of cybercrime deference and remediation for large US-based corporations

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

ANALYZE → IDENTIFY → PRIORITIZE → RESOLVE
View results and alerts from Insights in either the Customer Portal or through the Satellite user interface.
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

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

- 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

- Infrastructure
  - Server Data Anonymization
  - Minimal Network Impact
  - Results Tailored to Each Host
  - Remediation Steps
  - Playbooks
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

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
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.

<table>
<thead>
<tr>
<th>Rule</th>
<th>Likelihood</th>
<th>Impact</th>
<th>Total Risk</th>
<th>Systems</th>
<th>Anisible</th>
</tr>
</thead>
<tbody>
<tr>
<td>OpenSSH vulnerable to remote password guessing attack (CVE-2015-5600)</td>
<td></td>
<td></td>
<td></td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Kernel key management subsystem vulnerable to local privilege escalation (CVE-2016-0728)</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Kernel vulnerable to privilege escalation via permission bypass (CVE-2016-5195)</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Kernel vulnerable to man-in-the-middle via payload injection (CVE-2016-5696)</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
INSIGHTS PLANS WITH ANSIBLE PLAYBOOKS

Solve common issues through Ansible Automation
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?
For more info, visit: https://access.redhat.com/insights/info
Insights Resources

Webpages and Docs:

  - Get Started with Insights - [https://access.redhat.com/products/red-hat-insights/#getstarted](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/](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.