RED HAT INSIGHTS

Automate risk management and remediation

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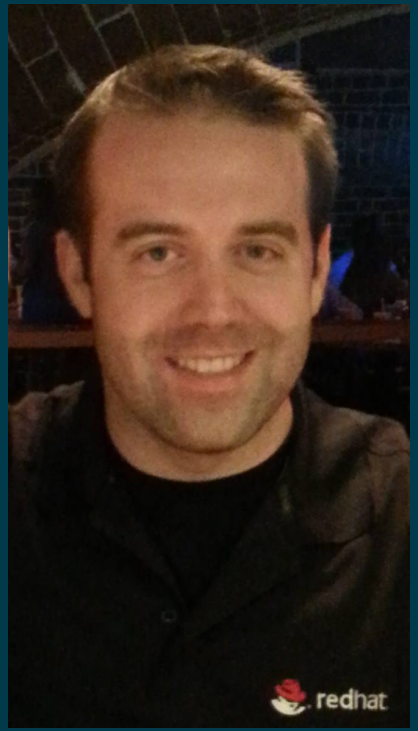
Will Nix - wnix @ Red Hat



Public Sector Information Systems Management

- Reduce complexity in hybrid secure environments
- Automate workflow and streamline management

Red Hat Strategic Customer Engagement

- Work closely with customers like you
- Design and implement proactive solutions with Red Hat's strategic partners and customers

Red Hat Management Business Unit

- Develop service used for proactive risk management through predictive and prescriptive analytics

AUTOMATION AGENDA

- INSIGHTS OVERVIEW
- AUTOMATION OPTIONS
  - AUTOMATE RISK REPORTING
  - AUTOMATE DEPLOYMENT
  - AUTOMATE REMEDIATION
- TOWER SETUP & DEMO
- Q&A

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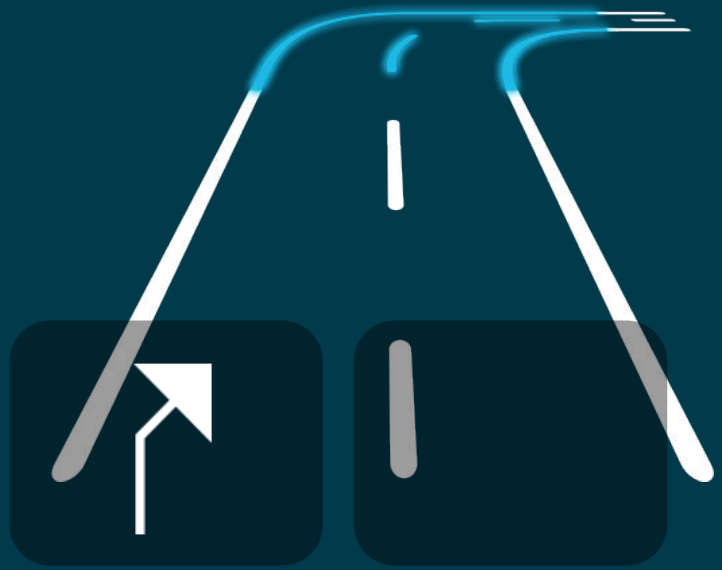
RISK REMEDIATION MADE SIMPLE



Automatically tailored recommendations and remediation down to the per-host level

Generate Ansible playbooks or scale with Tower

Create and share maintenance plans to better coordinate responses within your team

> *22 percent of disasters are caused by human error*

QUORUM DISASTER RECOVERY REPORT

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COMPLEXITY IS RISK

80%

Carnegie Mellon

Commercial application outages are caused by software failure and operational complexity

336 $ k/hr

Gartner®

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

15 $ m/yr

Ponemon Institute

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

65%

CompTIA®

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

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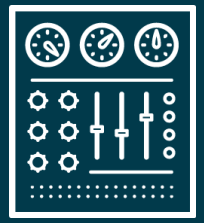
ANALYZING INFRASTRUCTURE RISK

RESPONSE

Are you confident that you can quickly respond when vulnerabilities strike?



TOOLS

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

COMPLIANCE

Are you certain that systems are compliant with various internal infosec and package security requirements?

ANALYZING INFRASTRUCTURE RISK

WE CANNOT
JUST THROW PEOPLE AT THE PROBLEM,
WE NEED
TECHNOLOGY

RED HAT® INSIGHTS

RED HAT MANAGEMENT

Insights introduces automated risk management, reduces complexity, and allows you to *FIX* faster.

ANSIBLE by Red Hat®

AUTOMATE YOUR IT PROCESSES & DEPLOYMENTS

- Simple & powerful language
- No agents to install
- Scale with **Ansible Tower**

RED HAT® INSIGHTS

PREVENT CRITICAL ISSUES BEFORE THEY OCCUR

- Continuous Insights
- Verified Knowledge
- Proactive Resolution

RED HAT® SATELLITE

BUILD A TRUSTED & SECURE RED HAT ENVIRONMENT

- Manage the Red Hat Lifecycle
- Provision & Configure at Scale
- Standardize Your Environment

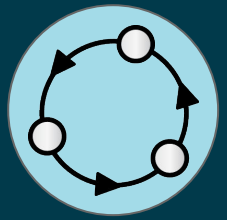
RED HAT® CLOUDFORMS

DELIVER SERVICES ACROSS YOUR HYBRID CLOUD

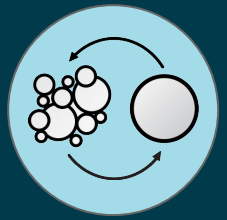
- Hybrid Cloud Management
- Self-Service Provisioning
- Policy-driven Compliance

RED HAT® INSIGHTS

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

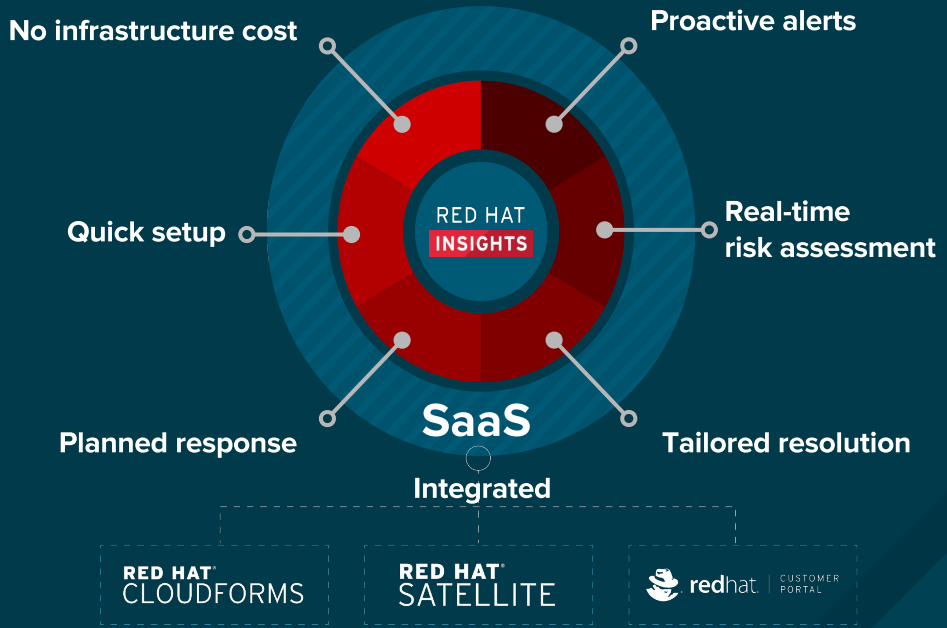


MOVES YOU FROM REACTIVE TO PROACTIVE SYSTEMS MANAGEMENT



DELIVERS ACTIONABLE INTELLIGENCE FROM THE OPEN SOURCE LEADER

INCREASES VISIBILITY OF INFRASTRUCTURE RISKS AND THE LATEST SECURITY THREATS



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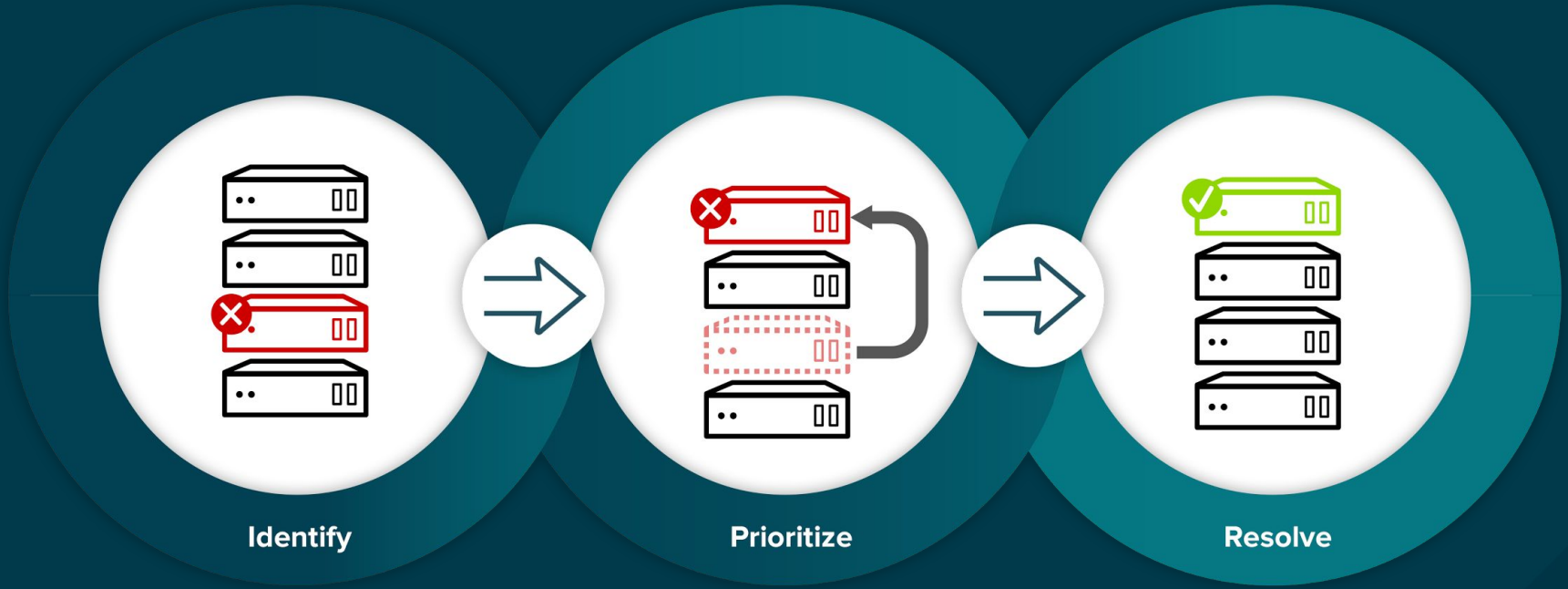
AUTOMATED RISK REPORTING



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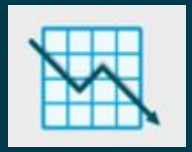
AUTOMATED RISK REPORTING

Insights enables automated reporting of risks in your infrastructure tailored to an individual system, or categorized into groups of actions.



Performance issue:
Networking interface is not performing at speed

→

Recommended action:
Check cable connections, adapters, or switch ports

Security risk detected:
Privilege escalation

→

Recommended action:
Update the kernel or perform active mitigation until maintenance window

Availability/Stability:
Unexpected behavior with syntax in body config

→

Recommended action:
Incorrect or missing quote used in variable assignment, use this recommendation instead

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AUTOMATED DEPLOYMENT

There are multiple ways to automate Insights deployment. We've provided several options for popular configuration management tools

Puppet
Chef
Ansible

Prefer another product or to install and register a system manually?

```
[root@server ~]# yum install redhat-access-insights
[root@server ~]# redhat-access-insights --register
```

If you have a web-based proxy between your system and the Internet, you can configure the Insights client to connect through it. For more information, refer to How to access Red Hat Insights through a firewall/Proxy.

If your system is registered with RHN Classic, an additional step must be taken to register to Red Hat Insights. For more information, refer to Registering Red Hat Insights with RHN Classic.

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AUTOMATED DEPLOYMENT

RED HAT® SATELLITE

- Puppet Module available for Satellite 6
- Install and Register on demand or provisioning
- Capsule support
- Satellite may act as proxy, or use another SSL proxy
- Reporting available via Satellite UI, CloudForms or Portal

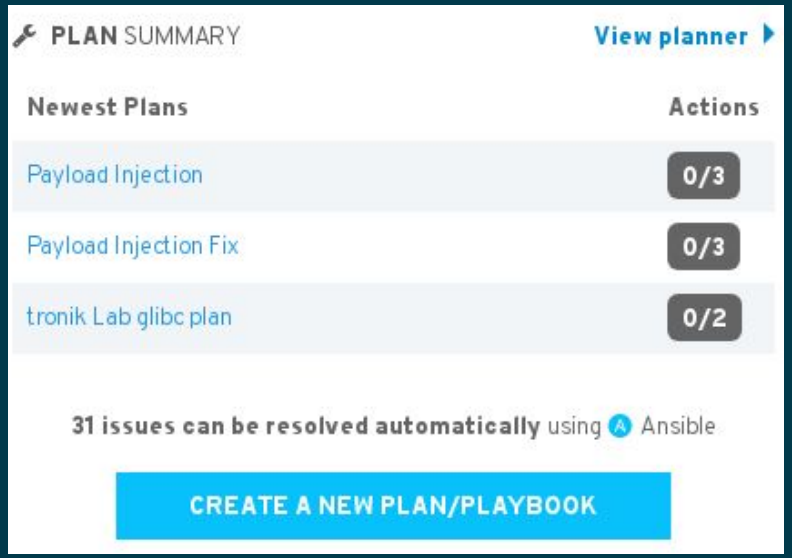
ANSIBLE TOWER by Red Hat®

ANSIBLE by Red Hat®

- Install and register on demand or provisioning
- Role available from Ansible Galaxy
  - Alternatively, use simple yum commands
- Report and remediate systems in inventory
- Use Insights Planner (Portal UI) to build playbooks for infrastructure remediation in Tower 3.1.2, or download individual playbooks from Insights Planner for Ansible.

AUTOMATED REMEDIATION

Insights Planner also allows you to set maintenance windows or planned outages, as well as reminders to act or silence plans which are no longer a priority.



AUTOMATED REMEDIATION: SETUP & DEMO

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AUTOMATED REMEDIATION

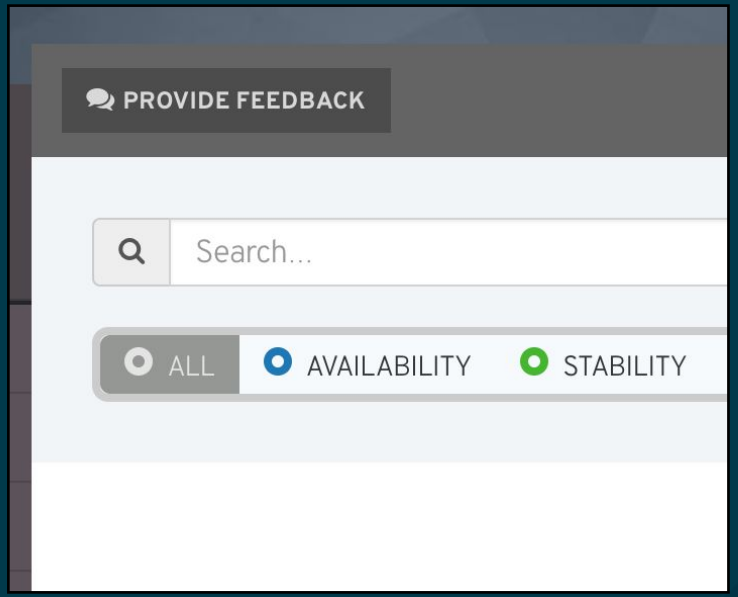
1. Add Insights credentials (Portal User/Pass) to tower
   - SCM (in future, will be an Insights type)
2. Add Insights Project for SCM sync
   - Type: Red Hat Insights
3. Have plans generated with Insights Planner
4. Create Template for large scale remediation
   - Select Inventory options, Project
   - Select Playbook from Plans listed in dropdown
   - Run Job to perform remediation

AUTOMATED REMEDIATION

1. Generate Plans from Insights Planner
   - Select Download Playbook
   - Confirm Task selections for playbooks with more than one option
2. Confirm all options and download playbook
3. Verify the contents of the playbook to ensure appropriate tasks for selected systems
4. Run ‘ansible-playbook playbook.yml’

Insights is software as a service - we're able to quickly adapt to customer needs

- Customer feedback is important to us!
- Many new features added due to feedback.
- How can Insights make things even easier?



Use Provide Feedback button
or email: **insights@redhat.com**

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Insights is a service, so that means we are able to ...

- 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

THANK YOU

Begin monitoring your infrastructure at
https://access.redhat.com/insights

Look for us at Red Hat Summit!