

Reduce time to:

Remediate configuration drift*
by up to

89%

Enact policies
by up to

66%

Detect and remediate a vulnerability
by up to

60%

Detect and remediate patching issues
by up to

49%

Identify and remediate configuration problems more effectively with Red Hat Smart Management

For several common use cases, using Red Hat Smart Management saved time to identify and remediate issues in a Red Hat Enterprise Linux environment compared to scripted workflows

Administrators maintaining expansive Red Hat® Enterprise Linux® deployments frequently use their manually scripted workflows to assess environment health, which can require significant time and effort in script maintenance. By automating these routine processes with built-in tools, admins can free up their time to focus on other tasks. Red Hat Smart Management—which includes Red Hat Satellite and Red Hat Insights—offers advanced management capabilities for Red Hat Enterprise Linux systems, wherever they reside. Adding Red Hat Smart Management extends the functionality of Red Hat Insights, which is included in Red Hat Enterprise Linux, by making it easier to identify risks and then remediate common issues.

From the Principled Technologies (PT) data center, using a mix of on-prem VMs and cloud VMs, we compared two approaches to detecting and remediating configuration issues: 1) a representative home-grown, manually scripted workflow (though every admin's scripted approach will differ) and 2) adding Red Hat Smart Management to work with Red Hat Insights monitoring. Across the four common use cases we selected—Vulnerability, Drift, Patch, and Policy—using Red Hat Smart Management in our 100-host environment reduced time to complete remediation. These results show that using Red Hat Smart Management to handle routine monitoring and remediation tasks can give back time to administrators so they can focus their efforts on other work.

*remediating configuration drift on 90 hosts (of 100 total hosts) with Red Hat Smart Management versus a manual approach with scripted workflows

How we tested Red Hat Smart Management for remediating issues

For manual scripted workflow testing, we determined the time required to write scripts to detect issues, review results, and write scripts to remediate issues on 100 hosts. For Red Hat Smart Management testing, we determined the time required to set up Insights for detection on 100 hosts, review the results, and remediate the issue. We omit the time for things that run automatically without user intervention, but include the time for the actual remediations, even when scripted.

The PT administrator completing these tests was Linux-savvy with heavy scripting/automation skills, and had some exposure to Red Hat Insights but little experience with Red Hat Smart Management prior to testing. Time and steps will vary with the Linux/automation experience of your particular team. Our test bed consisted of 100 virtual hosts: 90 on-site in the PT data center, and ten hosted in the cloud (five on Microsoft Azure, and five on AWS).

Where Red Hat Smart Management fits in your toolbox

Red Hat Smart Management is an add-on subscription that works with the Red Hat Insights tool (which comes included as part of Red Hat Enterprise Linux) to detect and remediate flaws in your deployment. Smart Management provides advanced management capabilities through two platforms: 1) Red Hat Satellite, which monitors and manages on-prem or cloud deployments, and 2) cloud management services for Red Hat Enterprise Linux, an as-a-service offering for managing Red Hat Enterprise Linux deployments in the cloud (see Figure 1).

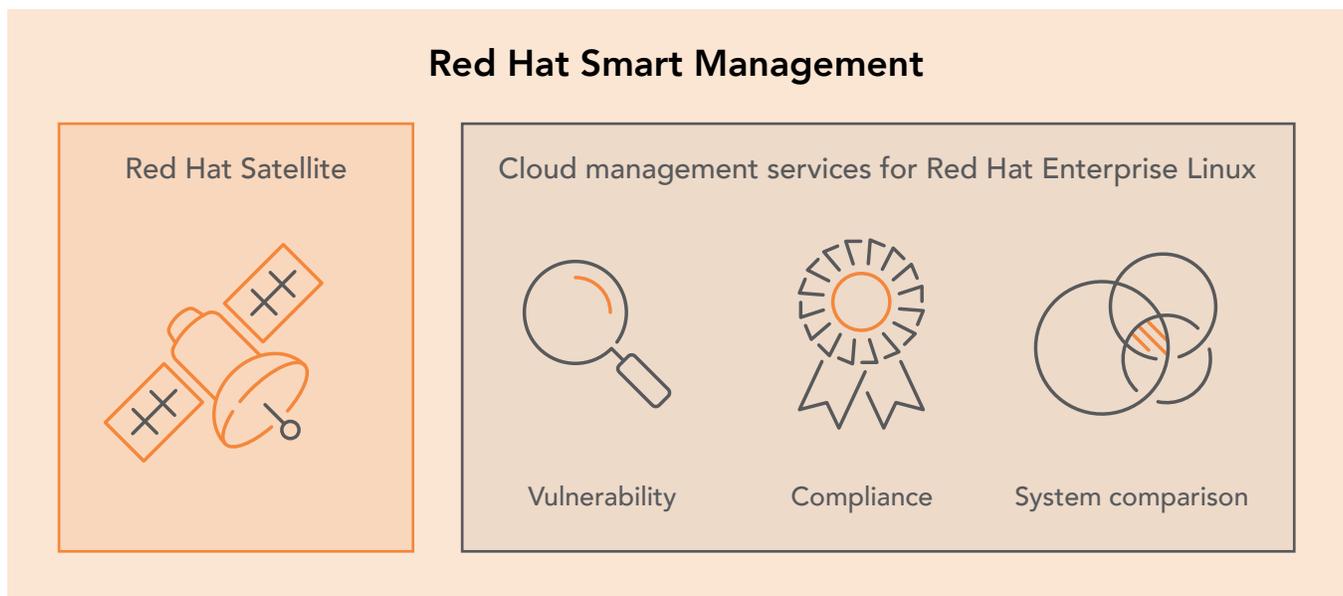


Figure 1: The Red Hat Smart Management add-on includes two main services that work to remediate configuration problems in Red Hat Enterprise Linux environments. Source: Principled Technologies.



Use case 1: Vulnerability

Monitoring Common Vulnerabilities and Exposures® (CVEs) and remediating any that appear in the environment can keep data secure and prevent unnecessary interruptions in service. Red Hat Smart Management automates monitoring environments for CVEs and gives admins the tools to address them swiftly.

As Figure 2 shows, Red Hat Smart Management reduced the time to detect and remediate a vulnerability on 100 hosts by over an hour (60.7 percent) compared to the manual, scripted workflow. By addressing vulnerabilities swiftly, Red Hat Smart Management works to keep critical data more secure.

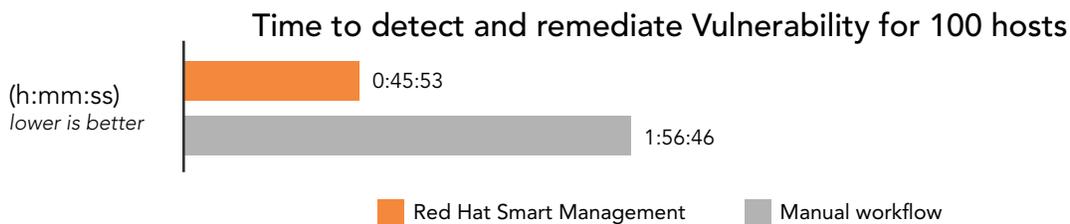


Figure 2: Time in h:mm:ss to complete the Vulnerability use case for 100 hosts using Red Hat Smart Management versus a manual, scripted workflow. Lower numbers are better. Source: Principled Technologies.

Use case 2: Drift

While an environment begins with a desired baseline configuration, over time the configuration can drift away from its initial state, which may cause problems in service across the systems that have drifted. Red Hat Smart Management monitors the whole environment to ensure each system lines up with the desired baseline configuration and gives administrators the tools to easily bring them back.

We used Red Hat Smart Management to detect configuration drift on the 90 onsite hosts. We used the original local host configuration as a baseline, and made changes to the local hosts. We then compared the 90 local hosts to the baseline and remediated the drifted configurations. Because the ten cloud hosts would not have the same baseline as the local hosts, we did not include them in comparison for drift detection. The Red Hat Smart Management process was significantly faster and easier than using the manual, scripted workflow. As Figure 3 shows, Red Hat Smart Management reduced the time to detect and remediate drift by 89.5 percent.



Figure 3: Time in h:mm:ss to complete the Drift use case for 90 hosts using Red Hat Smart Management versus a manual, scripted workflow. Lower numbers are better. Source: Principled Technologies.

Use case 3: Patch

Keeping an environment up to date with current patches can be a daunting task that requires investigation and updating for administrators doing the process manually. Red Hat Smart Management automates the process by recommending patches and providing an easy way to implement them.

Figure 4 shows the time it took using each approach to detect and remediate patching issues on the 100 hosts. Using Red Hat Smart Management to complete patching took 49.7 percent less time than the manual, scripted workflow.

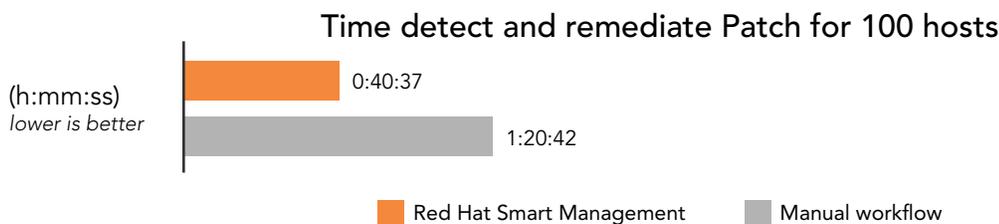


Figure 4: Time in h:mm:ss to complete the Patch use case for 100 hosts using Red Hat Smart Management versus a manual, scripted workflow. Lower numbers are better. Source: Principled Technologies.

Use case 4: Policy

Using a Policy service through Red Hat Smart Management gives administrators the ability to make their own policies and easily enact them on their Red Hat Enterprise Linux environment from a single console.

As Figure 5 shows, using Red Hat Smart Management to create and enact two policies on our 100 hosts shrank the time needed to complete the task from over 24 minutes to just over 8 minutes, a 66.8 percent reduction in time.



Figure 5: Time in h:mm:ss to complete the Policy use case for 100 hosts using Red Hat Smart Management versus a manual, scripted workflow. Lower numbers are better. Source: Principled Technologies.





Add Red Hat Smart Management to Red Hat Enterprise Linux to save time

Red Hat Enterprise Linux includes Red Hat Insights to automate many monitoring tasks and ease the management burden. Red Hat Smart Management, an add-on subscription, takes these management capabilities a step further to make the remediation of issues simpler as well. In our tests, using Red Hat Smart Management to monitor and remediate common issues in our 100-host deployment saved as much as nearly four hours to detect and remediate configuration drift versus completing the same tasks with a manual, scripted workflow. As these results show, employing Red Hat Smart Management in your environment can make a big difference in an administrator's daily routine, saving significant time while keeping your Red Hat Enterprise Linux deployment secure and available.

Read the science behind this report at <https://facts.pt/Hgrph00> ►



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