

How to Build a Foundation for Future Innovation

Agencies are working hard to increase efficiency, reduce costs and improve constituent services, but are often hamstrung by the need to manage a mix of complex legacy systems.

In many cases, agencies end up with a hodgepodge of systems because they want to buy the best-in-breed. Unfortunately, that approach not only creates a management headache for the IT staff but also makes it difficult to take advantage of automation and orchestration capabilities, especially as an agency moves to the cloud.

This report looks at a different approach: platform standardization. We'll discuss:

- The hidden costs of IT complexity
- The concept and benefits of platform standardization
- Best practices in standardization

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Challenge:
Diminishing Returns

Agencies today have a patchwork of legacy and cloud-based systems, along with ambitious goals for embracing new innovations and technology. Without standardizing on a modern platform, agencies will continue to experience challenges like these:

- **Difficult cloud migrations:** Integrating multiple systems into an already complex environment only adds to the workload of an overwhelmed IT staff. The staff ends up spending more time on maintenance and less time on projects that deliver real value.
- **Waning constituent/user satisfaction:** Agencies aim to create a "no wrong door" policy, where citizens can access the government services and data they require through any method they choose. A patchwork of systems is the wrong way to go about it; it complicates service delivery, impacting the ability to innovate and deliver these services promptly.
- **Escalating costs:** A heterogeneous ecosystem requires more people with varying skill sets to run and manage the different systems and processes. And then there is the cost of maintenance, which increases as systems age and the platform becomes less homogeneous. So it comes down to return on investment (ROI): What is the total cost of ownership for maintaining what you currently have in place, and how is it impacting your ability to deliver services?

Solution:
Platform Standardization

Complex infrastructure that has grown unruly over time as new applications and different operating systems are added can prevent agencies from meeting goals, remaining compliant and embracing new technologies. Standardizing on one or a handful of platforms is a more consistent approach. It results in:

- **Lower costs, greater efficiency and better performance:** Older, complex systems are expensive to maintain. Replacing them is a good way to turn dollars used for operations and maintenance into investments in higher-value services or innovation. And as agencies begin standardizing and replacing legacy solutions, they can take advantage of performance enhancements.
- **More consistency:** Relying on as few platforms as possible makes it easier to manage applications and infrastructure across hybrid cloud deployments.
- **Fewer security and compliance concerns:** The more systems — and the older those systems are — the more security and compliance concerns are likely to arise.

"A standardized environment can reduce risk and increase time to value, and you start to remove the technical debt that may exist."

– Francisco Ramirez, Red Hat

Best Practices in Platform Standardization



Assess before acting.

Before deciding on a new platform, take the time to assess your current technology. This will help pinpoint the best opportunities for improvement and provide a roadmap that identifies the highest-value ROI. "It's not a question about having to remove everything in your environment," said Francisco Ramirez, Chief Architect for State and Local Government at Red Hat. "It's about identifying areas with fast ROI, which enables you to show early success, which in turn drives adoption."



Consider Enterprise Linux.

Standardizing on Linux allows agencies to take advantage of innovations within the open source Linux community while knowing that what they implement in their environments is safe, supported and stable. Linux is also considered a very secure operating system.



Insist on proactive, automated resolutions.

Automating data collection and insights saves valuable time in analyzing root causes that lead to problems with security, compliance, performance, availability and stability. The result: faster, automated remediation of small problems before they become bigger problems.



Get the right tools.

With the right tools in place, agencies can better manage vulnerabilities, verify compliance and conduct effective troubleshooting. Smart management means being able to manage hybrid environments and hosts in a flexible way.



Treat platform standardization as a living thing.

It's one thing to standardize on one or a few platforms so you can move on to new projects and innovations, but a very different one to keep that platform strong. It requires nurturing, maintenance and review.



Don't wait too long.

If left unaddressed, components of the environment may stop working properly, forcing agencies to make changes quickly without time to choose the best option. "If you wait long enough, you won't have a choice because your environment will cease to operate, and then you'll be in a fire-fighting situation," Ramirez said.



Case Study: How Standardization Aided Local Law Enforcement

The challenge: A local law enforcement agency needed to simplify management and reduce manual processes to increase reliability and security, and to accelerate the deployment of digital surveillance systems.

The solution: The agency automated and simplified its manual configuration tasks and in-house scripts using Red Hat's configuration and automation solutions. Taking advantage of the capabilities provided by automation, the customer's IT team of six people quickly learned how to automate effectively, freeing time for more valuable work.

The outcomes:

- Reduced new system deployment time from six weeks to three hours
- Decreased risk and simplified IT security compliance with automation
- Improved delivery of new servers and systems to cross-departmental users
- Expedited issue resolution, due to the solution's compatibility with the agency's existing Red Hat environment

How Red Hat Helps

Red Hat has been a trusted government partner for more than 20 years, helping agencies meet security and risk management goals. Its open framework and broad solution portfolio help agencies accelerate innovation while mitigating risk. Whether agencies are bridging private and public clouds, starting the process for FIPS, FISMA or NIST 800-53, or automating to improve efficiency, Red Hat can help.

To learn more, visit www.redhat.com/slg

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