Making the Shift, Modernizing, and Meeting Mandates

The public sector's uptake of technology is notoriously sluggish: Government agencies often lag years behind their private-sector counterparts in adopting new digital ways of working. However, now that citizens around the world engage with technology in all aspects of their daily lives, governments are facing increased pressure to overhaul outdated systems and accelerate their own digital transformations.

With mandates and policy pushes related to reducing security and risk mitigation coming from Congress, the White House, and agency heads, agencies are taking a closer look at their current application portfolios to determine if they can move to a more efficient and resilient cloud platform. Agencies are making tough decisions on what to add, what to move to the cloud, and how to deliver technology that enables the agency mission in a more cost effective and secure manner. The support, policy, and top cover is in place – but do agencies have the right solutions to optimize their application portfolios?

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>
> – Federal Cloud Computing Strategy, 'Cloud Smart'

Cloud Smart Means App Smart Too

The new Cloud Smart strategy offers practical implementation guidance for government missions to fully actualize the promise and potential of cloud-based technologies while ensuring thoughtful execution that incorporates practical realities. Agencies are expected to take a new approach to accelerate their cloud adoption. Cloud Smart puts the focus on agencies making the decisions that best fit their needs, instead of a uniform approach to cloud.

"Instead of 'buy before build,' agencies will need to move to 'solve before buy,'" the strategy states.

This new approach in the cloud will enable agencies to take a new approach to application development and deployment options, using the on-demand nature of cloud to quickly spin up new services that can scale as needed. With most agencies pursuing a hybrid cloud approach, taking advantage of cloud's benefits does not have to be an all-in proposition – instead, agencies can use the infrastructure that best fits their needs.

App Rationalization Push From the Top

Cloud Smart encourages a new approach to apps as well, putting a focus on application rationalization.

“All Federal agencies will rationalize their application portfolios to drive Federal cloud adoption,” the strategy notes, with a focus on optimizing the remaining applications as well.

In addition, Federal IT’s ever-present framework, FITARA, includes the PortfolioStat measure, which requires agencies to justify their IT portfolio under Congressional scrutiny. While eight agencies managed to earn A’s, 10 agencies sit at C’s or lower – an opportunity to improve FITARA scores.

FITARA also pushes agencies toward incremental development, requiring software projects to deliver functionality faster and encouraging agencies to shorten development cycles.

Adding more fuel to the fire, the Office of Management and Budget (OMB) recently released an Application Rationalization Playbook for agencies, offering them step-by-step guidance on how to undertake the process.

Even with these initiatives in place, agencies may still need a push to undertake this important step of modernizing their IT portfolio.

“Many agencies still have work to do to look at what their long-term vision is, and where they’re going with their current application footprint,” Federal CIO Suzette Kent said of the challenges agencies face while modernizing.

Shifting the Way Developers Turn Ideas Into Innovation

To meet these mandates while modernizing, agencies have increasingly adopted agile development, DevOps, and DevSecOps methodologies.

“The aim is to shorten development cycles, increase deployment frequency, and ensure more dependable releases — all in conjunction with aligning IT with business processes and objectives,” said Adam Clater, chief architect with Red Hat U.S. Public Sector.

The emphasis is not only to develop innovative applications but also a standardized deployment mechanism to allow IT Operations teams the ability to maintain, scale, and provide availability for these applications as they are promoted through their lifecycle.

The open source movement is also driving technological change across industries, providing the basis for containerized applications running on open source orchestration and management frameworks like Kubernetes.

While agencies can reduce costs and gain efficiencies through open source, there’s a misconception that open source simply means “free.” Insecure open source components and software may leave agencies exposed to serious vulnerabilities.

While agencies may be tempted to go for an open-source deployment without the support of an enterprise-grade platform, the costs, expertise, and time required to properly and securely implement Kubernetes can end up being much more than they bargained for. Without the proper support, agencies can box themselves in with specific versions of open source software, especially when those projects require significant upgrade activities, testing, and deployment changes – thus leaving agencies without the funding for internal or external resources to perform those actions in a manner that is compliant with government regulations and standards.

Red Hat, the undisputed leader of open source development and its use in enterprises, has responded to this need with OpenShift 4, the latest version of its enterprise-ready, cloud-native Kubernetes platform. OpenShift provides government agencies the means to both deploy applications faster while simultaneously ensuring those applications are secure.

Developing on Red Hat OpenShift 4, developers can take advantage of self-service provisioning, CodeReady workspaces, and an automated build and deploy process. Agencies with a hybrid cloud approach will find a consistent container application platform from the data center to the cloud. OpenShift Service Mesh and support for serverless processing also allows developers to take full advantage of the cloud while spinning up applications.

With Red Hat OpenShift 4 running on trusted enterprise Kubernetes, agencies can take advantage of the cloud-like experience wherever their apps may live with OpenShift 4's full-stack automated operations on a consistent foundation across on-premise or cloud.

OpenShift 4 provides continuous security, support, and deep expertise from Red Hat. CVEs and their resolutions are constantly reviewed so that patches can be quickly and easily deployed. The platform removes many of the complexities involved in open-source software and allows agencies to focus on the agile development and deployment of applications to support the mission. In the end, Red Hat OpenShift 4 can help your agency drive towards its goal of serving the mission by enabling faster development of applications. According to IDC's analysis, businesses adopting the platform can expect a 531 percent ROI, a 66 percent faster development lifecycle, and 36 percent more applications developed per year.

For the past 25 years, Red Hat has been a trusted leader in innovation and focused on building a better foundation for the future of IT. With the idea of focusing on a code that makes a difference, OpenShift 4 aids developers in turning big ideas into reality. From full-stack automated operations and support for developer productivity, to unified Kubernetes experience and built-in service mesh for microservices – OpenShift 4 can turn ideas into deployments that scale.

Red Hat OpenShift 4 is available through DLT Solutions, a Red Hat Certified Cloud Service Provider, and Red Hat's 2018 Public Sector Partner of the Year.

For more information on OpenShift 4, visit: https://www.redhat.com/en/openshift-4