

The move to multi-cloud by default

A shift in procurement and congressional activity is driving agencies to multi-cloud deployments



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GOVERNMENT contracts and legislation are increasingly emphasizing multi-cloud solutions, and it behooves agencies to start thinking about how to build and manage those environments. For example, the intelligence community's 10-year, \$10 billion Commercial Cloud Enterprise program was initially going to be a sole-source contract, but now it's multi-cloud by default with each task order competed across Amazon, Google, Microsoft, Oracle and IBM.

Similarly, the Defense Department recently awarded Joint Warfighting Cloud Capability contracts to Amazon, Google, Microsoft and Oracle, and officials intend to consider other cloud service providers that demonstrate the ability to meet DOD's requirements. In the civilian world, the Treasury Department is seeking a single cloud broker for its Treasury Cloud contract, but officials say the program will act as a gateway to all current and future FedRAMP-authorized cloud service providers.

Finally, lawmakers understand that multi-cloud environments yield efficiencies and promote innovation when they are deployed correctly. It can

be difficult to move an application from one cloud to another if it was not built with the intention of being portable, however, which is why the fiscal 2023 appropriations bill talks specifically about making technology and applications portable and interoperable among public, private and edge cloud environments.

A CONSISTENT INTERFACE LAYER

Two decades ago, Red Hat brought a layer of normalization to the data center via Red Hat Enterprise Linux. Instead of buying the necessary hardware,

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operating system, compiler, tool chain and web server from a single vendor, we made it possible for agencies to have a choice. They could run Red Hat Enterprise Linux on a piece of hardware but later decide to run Microsoft Windows or even multiple operating systems on that piece of hardware because their needs had changed.

At Red Hat, we find ourselves in a similar situation again. Agencies are at a crossroads where they are being pushed to a multi-cloud environment but need a consistent interface layer between their applications and their cloud providers. To address that challenge, Red Hat is building automation technologies to help our customers deploy in multi-cloud environments. In addition, our OpenShift Kubernetes engine provides a consistent interface and control plane for managing the tens of thousands of containers that may be required for a modern enterprise to run at web scale.

Users can buy the infrastructure as a service directly from the cloud provider and deploy applications in a control plane that looks the same whether it is in a data center, at the edge or in a commercial cloud. We're working with both Microsoft and AWS to receive FedRAMP High

authorization for those co-managed capabilities.

A STEP AHEAD WITH AUTOMATION

Automation is essential for multi-cloud management. Agencies can begin by automating activities and sharpening their skills in their own

Source: Hao Wang



data centers. Once government IT professionals work with a platform to automate activities in the data center, they can then automate deployments to various clouds and make the process as efficient as possible.

When automation is done correctly, agencies also give themselves the

ability to move workloads smoothly between environments, whether they want to bring a workload back into the data center or move it to another cloud. The fact that the workload was built on an automation platform means agencies are already a step ahead when it comes to getting that

deployment done and reaping the benefits of a multi-cloud environment. ■

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