Federal IT teams are caught in a vicious modernization cycle. They’re trying to follow the guidelines laid out by the Data Center Optimization Initiative and the Trump administration’s Cloud Smart policy, which call for IT consolidation, optimization and cloud migration. Yet they’re also reliant – both financially and technologically – on established legacy systems, like Oracle’s Scalable Process Architecture server (SPARC). For years, they’ve developed systems that are now costing agencies millions of dollars in maintenance fees.

In many cases, IT administrators keep investing in these older systems because they feel like they have no choice – but now they do.

Instead of paying high maintenance costs or making a major capital commitment to rip and replace existing infrastructure, agencies can invest in as-a-Service models that upgrade legacy systems and create a gateway toward a modern, multicloud future. In doing so, they can maximize performance and reduce costs over the long term.

Let’s take a look at how agencies can upgrade their aging infrastructure and pave the way to a more cost-effective, consolidated and higher performing future. We’ll use SPARC as an example of how they can migrate from an outdated system to a modern, cloud-centric architecture.

**A dwindling SPARC**

SPARC was first introduced by Sun Microsystems and Fujitsu in 1987 (Oracle purchased Sun in 2009) and has since become nearly ubiquitous in government circles. Agencies use the server to manage intensive applications and workloads, from system applications to enterprise resource planning and beyond. The thought of migrating these applications off of this infrastructure understandably gives these organizations pause – they think it’s too expensive, too risky, too time-consuming.

Like any technology that’s several decades old, agencies that are still using it pay a premium to maintain it. Fortunately, there is a better way for agencies to keep their mission focus and continue on the path toward modernization.

**Rekindle SPARC with infrastructure as a service**

Migrating to a private cloud, Infrastructure as-a-Service (IaaS) model is an ideal option. With this model, agencies can upgrade to a modern, secure, reliable and flexible infrastructure that addresses their modernization needs without the disruption and cost associated with retrofitting. They won’t need to rewrite code, upgrade their operating systems or experience downtime. They can eliminate technical and operational concerns while supporting the requirements of consolidation, optimization and the cloud.

The movement to an IaaS model can be done over time and in a modular fashion. Administrators can develop an interim upgrade strategy for critical legacy applications while they work on creating a long-term migration plan that will benefit their agencies over the next several years.
This approach lets them develop a strategic cloud model – private, public, hybrid, or multicloud – that best suits their unique needs. For instance, many organizations choose multicloud to solve their most complex IT challenges. IaaS can support multicloud initiatives by allowing agencies to auto-deploy applications with the proper configurations on the correct cloud platforms.

**Ignite cost reductions**

In addition to setting a path toward the future, upgrading from legacy SPARC to a consumption-based service can help agencies meet today's consolidation and optimization objectives.

IaaS can significantly reduce the need for expensive and space-consuming legacy hardware, thereby allowing agencies to save on resources. By migrating to an IaaS model, for example, agencies can save money on everything from cooling and power costs to maintenance bills. They won’t have to worry about outdated technology or the usual three- to four-year technology refresh cycle that requires a significant investment.

Savings can then be allocated to initiatives that will add value to the agency’s mission over the long haul. Operating expenses can be used to upgrade organizational infrastructure and invest in new initiatives, including the development of applications that can benefit warfighters and citizens.

**Fan the flames of innovation**

Building platforms that bridge the past, present and future requires a strong infrastructure. With IaaS, agencies can optimize their legacy applications, yet realize opportunities to innovate. They can create an ideal environment upon which they can leverage modern technologies like artificial intelligence, machine learning and more.

Agencies that adopt this approach will be able to enjoy far more flexibility than they have with their legacy architectures. They can turn resources on or off and shift suitable workloads to the right cloud while keeping other applications on-premises. And, they can significantly expedite the deployment of new services to support new government initiatives.

IaaS is a fiscally and technologically smart approach that can get agencies out of the modernization cycle and onto a smart path to their most effective cloud model.

*Editor’s note: This column was changed March 5 and 6 to more accurately reflect the origins and future of SPARC.*

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