



Taking a fresh look at **cloud's potential**

As the need for resiliency, agility and cybersecurity grows, so does the reality of multi-cloud and hybrid systems



Jason Payne
CTO, Microsoft Federal

THE PANDEMIC **DISRUPTED** the government's way of thinking about delivering citizen services and other missions. Now agencies aren't looking to cloud for elasticity or cost savings alone, but as a platform that enables them to improve their cybersecurity posture and support an ability to deliver on their missions.

Agencies have learned a valuable lesson about the need to respond to adversity in an agile way with a set of resilient services. As pandemic restrictions ease, agencies have an opportunity to reevaluate how

they deploy and manage multi-cloud and hybrid IT environments.

Agencies should assess higher-order value propositions when deciding what runs on what cloud. And even though agencies run a mix of applications on premises, in multiple clouds and at the edge, it's important to have a single governance model for migrating applications to the cloud, integrating them with other applications, and then managing and securing data in those clouds. Our customers consistently tell us that what they really need is a cloud-native

control plane to inventory, organize and enforce policies for their IT resources wherever they are.

A coherent model for modernization

Agencies need to understand the business goals for a particular cloud-based application or workload and then make decisions about the best architectural approach. They also need a comprehensive security model that's architecturally coherent from a deployment and operations perspective. The model should take into consideration the entire life cycle of applications as agencies modernize into the cloud.

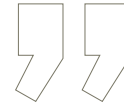
By combining the security and compliance aspects of modernization with a coherent IT architecture, agencies can drive down costs for managing those applications in the cloud. The cost savings can allow agencies to fund further modernization efforts or conduct research and development activities around core workloads or advanced capabilities such as artificial intelligence.

Furthermore, agencies that want to take a cloud-agnostic approach should employ an infrastructure-as-code approach. They should also be strategic about choosing what to deploy on different cloud platforms and should develop on portable technologies, such as containers and microservices. In addition, they should use orchestration tools to deploy applications and adopt services that are certified by the vendor-





By combining the security and compliance aspects of modernization with a coherent IT architecture, **agencies can drive down costs for managing applications in the cloud.**



neutral Cloud Native Computing Foundation.

Engaging with industry on the art of the practical

There are many tools that can help agencies manage governance for multi-cloud and hybrid environments. Microsoft's Azure Arc is a best-of-breed example of how to gain a comprehensive view into a standardized approach for managing an entire multi-cloud hybrid IT infrastructure. Azure Arc enables customers to have a central, unified and

self-service approach to manage their Windows and Linux servers, Kubernetes clusters, and Azure data services wherever they are. Azure Arc also extends the adoption of DevOps and security best practices across on-premises, multi-cloud (Azure, AWS, Google) and edge.

In terms of security, many cloud service providers have begun to think of FedRAMP High as the new baseline. At Microsoft, we're proud to say that FedRAMP High is one of the nearly 100 global certifications we have achieved, particularly with respect to our Azure cloud service.

In pursuit of ambitious transformation goals, industry and agencies can share expertise, lessons learned and positive outcomes in dealing with IT challenges. Although they are often hesitant for security and other reasons, agencies should find opportunities to publicize their successes more broadly so that their government colleagues can copy those models and accelerate digital transformation. ■

Jason Payne is CTO of Microsoft Federal.



Breakthroughs for modern missions.

Microsoft Federal brings the mission understanding, engineering expertise, and leading technology to drive outcomes in a new era of Government.

Visit Microsoft Federal at microsoft.com/federal

