

Accelerate Innovation and Agility with Secure Multicloud-as-a-Service

Federal systems integrators (FSIs) are essential to IT modernization in government. But much like the customers they serve, many are dealing with myriad internal IT modernization challenges. Whether through acquisitions of companies or departmental purchases, FSIs operate disparate legacy data centers and clouds from multiple providers, and now struggle to consolidate them. And like their government customers, many struggle to hire enough IT professionals skilled in cloud migration and operation to service their internal needs, rather than their government contracts.

FSIs have realized that the IT shop's contribution to the enterprise is no longer measured in data center square footage, volume of software licenses, technical headcounts, and lines of code. Today, it's measured by the business value it creates. That expectation is driving many to embrace cloud strategies to deliver greater efficiencies, cost savings, and innovation to their organizations. That value, in turn, empowers them to respond to their agency customers' ever-changing needs and retain their competitive edge in the marketplace.

Time for a Reset

The COVID-19 pandemic upended business operations for almost every enterprise – large and small, public and private. For large enterprises, it brought into sharp focus the need for agile, extensible, and cost-effective IT infrastructure that can scale on demand and deliver services to widely dispersed workforces and customers. For most organizations, this drove increased reliance on cloud computing, especially public clouds. Now, migration to the cloud has moved beyond facilitating short-term incident response to transforming operations. In the Federal government alone, cloud spending jumped about 8 percent in fiscal year 2020, to \$6.6 billion, and will reach \$8.5 billion by FY2023, according to Bloomberg Government.

Government agencies – and the private-sector organizations that serve them – realize that public clouds are appropriate for many workloads, but not all – often due to processing, security, or regulatory requirements. As a result, most organizations are employing a mix of on-premises private clouds, multiple public clouds, and legacy platforms to meet their infrastructure needs. By 2022, more than 90 percent of enterprises worldwide will rely on this type of a mix, according to IDC.

The analyst firm calls 2021 “the year of multicloud,” with most enterprises deploying combinations of on-premises, off-premises, public, and private clouds as their default environments.

Organizations embracing a multicloud strategy leverage the strengths of multiple cloud providers to best meet their mission requirements. A multicloud strategy also prevents lock-in to a single cloud provider, helps organizations hedge against potential security threats and service outages, and enables them to optimize IT budgets by comparing pricing and negotiating with multiple providers to fully realize the cost savings that cloud can bring.

Embracing Cloud Smart

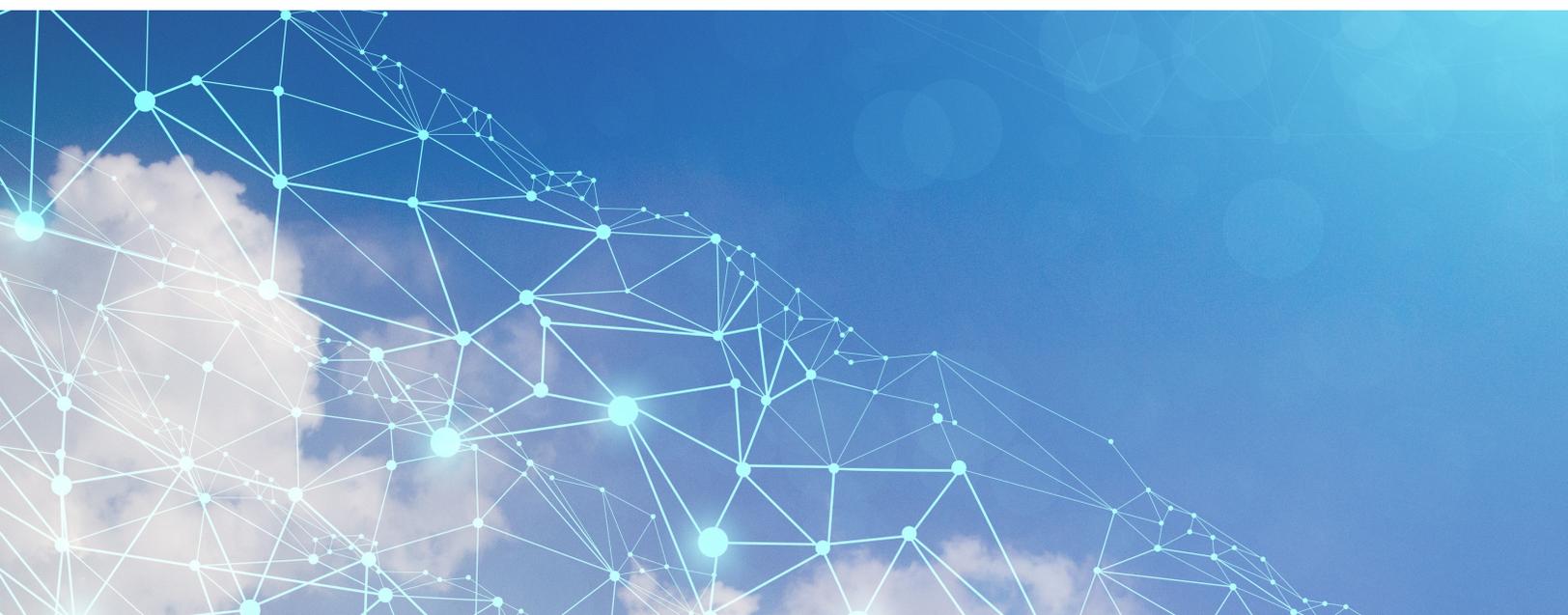
FSIs deliver some of the most sophisticated and advanced systems in the world, yet they are typically very conservative in their business operations. For that reason, most weren't on the leading edge of cloud adoption. Much like Federal agencies they serve, FSIs are taking a measured approach to the cloud – “cloud smart,” rather than “cloud first.” Instead of a wholesale “lift and shift” move to the cloud, they're starting with a substantial application rationalization.

On a case-by-case basis, they must decide whether to:

- **Rehost – lift and shift**
- **Replatform – use cloud-native functionality such as a managed service to run the app**
- **Refactor – modify the app to make sure it works well in the cloud**
- **Rearchitect – replace the entire application**
- **Retire – eliminate the application**

Lift and shift is the simplest approach, but it ensures FSIs won't get the best value from the cloud. That's because 84 percent of on-premises workloads are overprovisioned, according to a study by Bain & Company and TSO Logic (now AWS Migration Evaluator). If FSIs simply shift those workloads to the cloud, they are still paying for more computing than they're using – and are likely to pay 10 to 15 percent more than on premises, according to Bain and TSO's analysis of more than 60,000 workloads. In contrast, organizations that conduct a thorough analysis and right size workloads before moving to the cloud can save 30 to 60 percent, Bain and TSO found.

The Federal government's [Cloud Smart strategy](#) includes three central pillars for successful cloud adoption: security, procurement, and workforce. Collectively, these elements embody the interdisciplinary approach to IT modernization that delivers improved return on investments, enhanced security, and higher quality services.



The government's strategy can serve as a model for FSIs and other large enterprises grappling with many of the same challenges that drive cloud adoption, including:

Legacy Data Centers

Like Federal agencies, FSIs have consolidated their data centers to a manageable number. Due to the ongoing, substantial cost of operating these remaining sizable data centers, however, FSIs are turning to hyperscale cloud computing.

Staffing

The market for IT talent is hyper-competitive. In order to attract and retain employees, FSIs must invest in modern technologies, such as cloud.

Speed to Market

Defense systems-producing FSIs and their counterparts in IT services are focused on getting products and services to market faster – and more than ever, that requires modernizing IT systems. In its 2020 Global Aerospace and Defense Industry Outlook, Deloitte advised: “defense companies should leverage highly agile production that adapts to changes in demand, including digital technologies. For instance, adopting [smart factory initiatives](#) could drive 10 to 12 percent gains in factory utilization and labor productivity without major capital investment.”

System Rationalization

Among FSIs, the breakneck pace of mergers and acquisitions (M&A) makes cloud adoption an imperative. M&A has brought many FSIs to a near-breaking point as they combine organizations – determining which systems to keep and which to integrate, and training potentially thousands of employees to use them. Rather than investing millions in modernizing legacy systems, cloud enables FSIs to scale operations more efficiently and cost effectively to meet the needs of their growing workforces.

Emerging Technologies

Cloud-based infrastructure enables IT organizations to rapidly create development environments and sandboxes where they can develop, test, and fail or succeed quickly with minimal risk and cost. FSIs can take advantage of this rapid development capability to leverage and operationalize emerging technologies, such as artificial intelligence (AI) and edge computing, to make processes more efficient, especially as datasets expand. They also can keep iterating their offerings and improve the end-user experience.

Thriving with an Iterative Approach

As FSIs plan for multicloud, an iterative approach can help address critical issues that may delay stakeholder buy-in for multicloud or derail projects along the way. For example, cloud migration can stall if the organization does not fully understand the total cost of operation of their current, on-premises implementation across the full lifecycle. Without this understanding, the transparent pricing of a cloud implementation can look more expensive than the status quo. Organizations must also take into account their role in operating and securing public and hybrid cloud implementations, even if they are using a hyperscaler. They must also understand the egress costs associated with the public cloud, in order to effectively manage data use and avoid huge bills when data is repeatedly moved back and forth between on-premises and public cloud environments.

A cloud strategy that begins with discovery and application rationalization, followed by design, build, secure, manage and optimize, enables FSIs to accelerate innovation and agility.

The iterative approach requires organizations to address a series of critical questions:

- What is our multicloud strategy?
- What goes where - public, private, hybrid?
- Which public cloud is best for each use case?
- Which applications will we move first? And next?
- How do we manage a growing universe of integrations?
- How do we optimize operational efficiencies?
- How do we ensure appropriate security and compliance - and avoid the risk and expense of having to move data multiple times due to security and compliance risk?
- What tools do we need to manage our multicloud environment?

Turning to Secure Multicloud-as-a-Service (MCaaS)

The multicloud environment enables FSIs to leverage best-of-breed cloud capabilities to enable modernization and stay competitive. Managing the multi-cloud environment, however, can place a tremendous burden on in-house IT teams, because workloads are distributed across clouds and each cloud has its own interfaces, security requirements, SLAs, data flows, and more. Many FSIs seek a trusted guide that can provide unbiased insight and a clear

path forward, while eliminating a mounting operational burden.

Rackspace Government Solutions delivers secure MCaaS to solve this growing, and unnecessary, challenge. The Rackspace Fabric technology service platform unites all cloud platforms, enabling consistency in multicloud. With this service layer, Rackspace Government Solutions provides common governance, ticketing, billing, tagging, and more throughout FSI's multicloud estates. The solution does not replace native access to cloud technology; instead, it unifies the service layer between them. This enables a faster, more consistent approach to consuming cloud resources from multiple providers, enabling FSIs to realize the transformational capabilities of cloud much faster.

Rackspace also delivers access to solution experts, engineers, data architects, and system administrators via solutions such as Rackspace Teams to help FSIs ensure they have the skilled, experienced staff they need for a successful multicloud experience. In addition, Rackspace Service Blocks™ offer flexible, specialized cloud solutions to address specific needs. FSIs can employ Service Blocks for as much or as little of the cloud journey as they require.

In addition, the Rackspace Government Solutions and managed services portfolio offers unparalleled multicloud, security and compliance expertise and certifications, empowering FSIs to confidently design, build, manage, and optimize the cloud. As a result, FSIs can accelerate innovation and agility – and meet mission requirements faster. Rackspace Government Solutions enables FSIs to focus on being mission experts, rather than cloud experts.

Offering unparalleled security, Rackspace Government Solutions has held FedRAMP Joint Authorization Board (JAB) certification since 2015, as well as DoD Impact Level 4 and DFARS. RGS is also a [CMMC Registered Provider Organization](#). Its solutions also comply with FISMA, IRS Publication 1075, TAC 202, and HIPAA standards, among others.

For more information about the Rackspace Government Cloud, visit rackspace.com/cloud/rackspace-government-cloud.

Rackspace at a Glance

- A leader in the 2020 Gartner Magic Quadrant for Public Cloud Infrastructure Professional and Managed Services, Worldwide
- A leader in The Forrester Wave: Multicloud Managed Services in North America, Q2 2020
- Powers 15+ FedRAMP ATOs and numerous government cloud solutions
- The largest AWS managed service provider; VMware Premier Cloud Partner; Dell Titanium Partner
- Delivers 80% of NIST 800-53 Inheritable Security Controls with Rackspace Government Cloud
- Holds 10,000+ certifications across 45 technology solutions providers, including AWS, Dell, Google, Microsoft, Oracle, Red Hat, and VMware