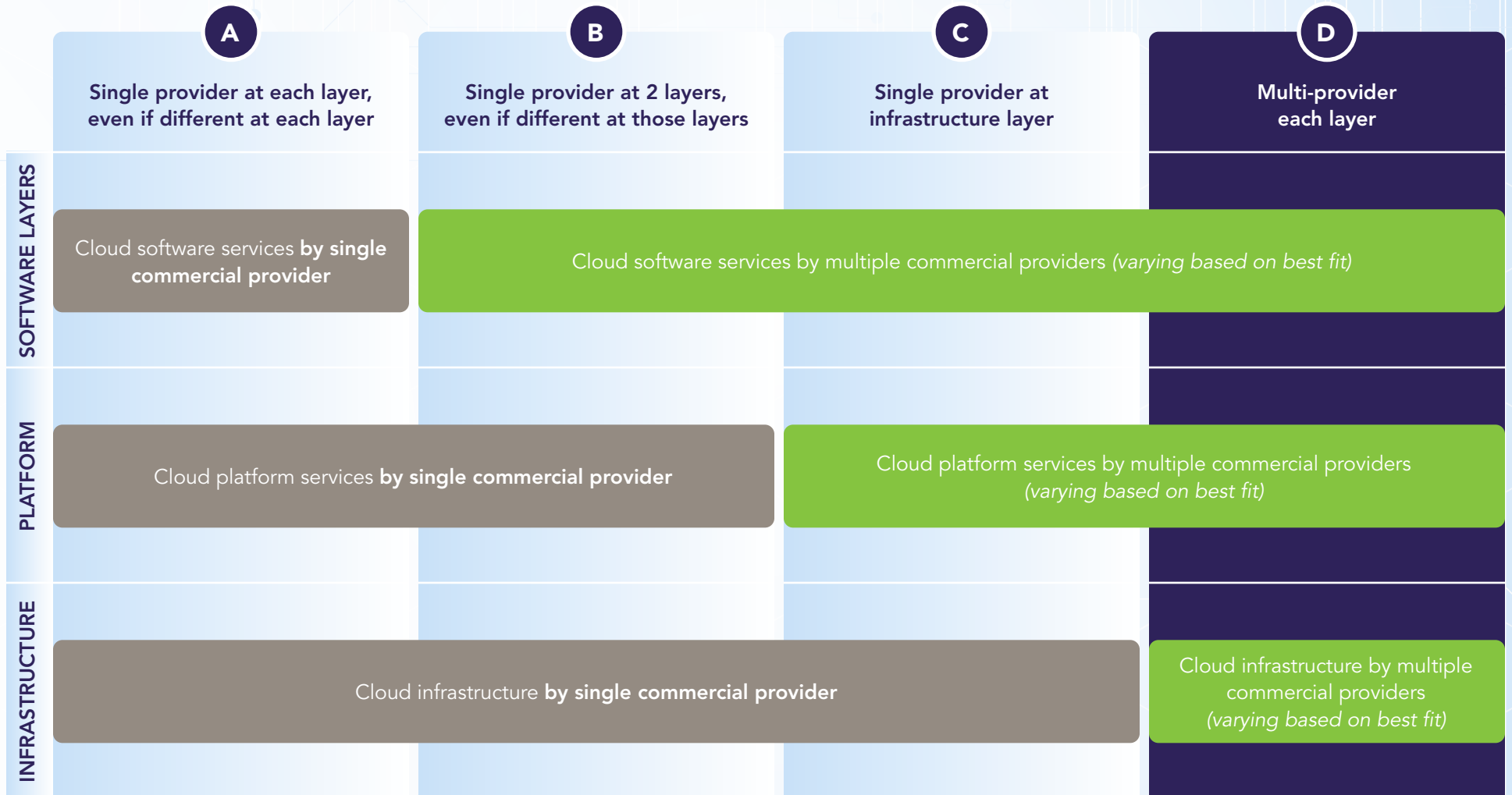# What Is Multi-Cloud?

Federal agencies should work with multiple cloud providers to allow for flexibility to optimize performance, control cost, and avoid vendor lock-in. Agencies should not put all their data in one cloud infrastructure, but rather leverage multiple cloud service providers' compute, AI, and other technologies.

	A Single provider at each layer, even if different at each layer	**B** Single provider at 2 layers, even if different at those layers	**C** Single provider at infrastructure layer	**D** Multi-provider each layer
SOFTWARE LAYERS	Cloud software services **by single commercial provider**	Cloud software services by multiple commercial providers *(varying based on best fit)*		
PLATFORM	Cloud platform services **by single commercial provider**		Cloud platform services by multiple commercial providers *(varying based on best fit)*	
INFRASTRUCTURE	Cloud infrastructure **by single commercial provider**			Cloud infrastructure by multiple commercial providers *(varying based on best fit)*

Best Practices in Innovation and Competitiveness: Multi-Cloud

To provide value for taxpayer money while delivering better service, federal agencies should choose the best cloud solution for the best price for a given workload. However, while some federal agencies have matured to adopt the multi-cloud approach to run efficiently and effectively, many are not following this commercial best practice. Multi-cloud allows for the best market solution for each application/workload to meet mission needs at the best price. Instead, many agencies award long-term, agency-wide, "winner-take-all" cloud platform contracts to a single provider. In doing so, agencies limit themselves to the innovation and solution of just one cloud platform provider, even while the industry is developing innovative solutions across a variety of platforms. This single-cloud practice limits the government's access to the best technology for a workload.

Additionally, having only one provider available for an agency eliminates any price competition for each workload. Long-term, "winner-take-all" contracts to a single provider encourage protracted award protests, as vendors fear being locked out of all cloud platform business with a particular agency in the future.

Multi-cloud technology is the leading practice in the private sector, and the federal government has the opportunity to move to this commercial practice to achieve its artificial intelligence and IT modernization goals.

Overview of the Multi-Cloud Innovation & Advancement Act of 2023 (S. 2871)

» S. 2871 seeks to help federal agencies take advantage of modern IT to leverage different commercial cloud platform providers for mission-focused data, systems, and complex applications.

» The bill helps agencies evolve by exploring a multi-cloud implementation approach through the sharing of agency multi-cloud best practices, identifying any impediments for an agency, and providing guidance.

» The bill also provides a roadmap for the adoption of multi-cloud across government and proper oversight to ensure progress and accountability.

Benefits of Multi-Cloud

» Agencies adopting multi-cloud benefit from cloud providers competing on technology and price across tasks that arise over time, rather than at a single, long-term, "winner-take-all" contract award.

» Agencies can find multiple market solutions for each application or task.

» Multi-cloud allows data portability across multiple cloud providers' infrastructure.

» A competitive federal cloud marketplace will encourage interoperability, price competition, security, and ensure a healthy industrial database.

Moving Forward on Multi-Cloud

» **BSA | The Software Alliance urges Senators to cosponsor S. 2871, the Multi-Cloud Innovation and Advancement Act of 2023.**