8 Reasons to Implement a Federal Hybrid Cloud Solution

Hybrid cloud implementations have been increasing in the federal marketplace due to their flexibility, customization, and ability to manage the balance between security and availability. Federal agencies can utilize existing on-premise solutions for mission critical workloads, while moving non-critical items to a public cloud.

1. Accelerate Information technology (IT) development, and speed to market, with enhanced collaboration and virtualized sandboxes.

2. Utilize existing IT resources, while updating operations in phases, minimizing risks and building an agency specific lessons learned library.

3. Customize solutions, choosing from on premise, public or private cloud, allowing for the best available technologies for each application and agency specific use.

4. Enjoy the flexibility and agility of public cloud solutions, while maintaining security and ownership of data and applications.

5. Reduce IT expenses, by eliminating many in-house operations, freeing IT departments to focus on future innovations.

6. Increase asset utilization, by purchasing only what you need, and maximizing what current capital expenditures.

7. Compliance with Federal and agency specific regulations and policies.

8. Reduced cost and improved disaster recovery processes.

Model	Cloud Infrastructure Set-up	Managed by	Location
Private cloud	Used by a single organization comprising multiple consumers (e.g., business units)	Owned, managed, and operated by the organization	On or off premises
Community cloud	Used by a specific community of consumers from organizations that have shared concerns (e.g., mission, security requirements, policy, and compliance considerations)	Owned, managed, and operated by one or more of the organizations in the community, a third party, or some combination of them	On or off premises
Public cloud	Used by the general public	Owned, managed, and operated by a business, academic, or government organization, or some combination of them	On the premises of the cloud provider
Hybrid cloud	The cloud infrastructure is a composition of two or more distinct cloud infrastructures (private, community, or public) that remain unique entities, but are bound together by standardized or proprietary technology that enables data and application portability		

8 Things to Know Before Starting a Federal Hybrid Cloud Implementation

When agencies find that they cannot migrate all legacy information technology (IT) infrastructure, applications, or data to the cloud, hybrid cloud—a mix of on-site computing resources and commercially provided computing resources—may be considered.

1. Know the Mission
Ensure that the hybrid solution will support the mission of the agency, as well as the current information technology strategy.

2. Focus on Outcomes
Know the desired business objectives. Understand what security and access levels are required for end users to accomplish agency objectives.

3. Take Inventory
It is important to document at a high level what systems, infrastructure and data the agency owns. Evaluate what resources require private and which resources are suited for public cloud. Take into account legacy systems, as well as on premise infrastructure.

4. Focus on Culture
This is not an IT project; it will change the way the agency administers IT. It requires training and a solid communication plan that includes all stakeholders.

5. Choose the Right Cloud
Private cloud should not be the default.

6. Standardize the Solution
By using open technology the agency will not be locked into one vendor or solution, allowing future flexibility. Utilizing The Federal Risk and Authorization Management Program (FedRAMP) templates is a good way to ensure compliance, while navigating from vendor to vendor.

7. Create Processes
Hybrid solutions may involve several technologies, and several vendors. Vendor relationships may be more dynamic than traditional IT, requiring quick on-boarding and sometimes termination. Always have a plan for the migration of data, in the event that a relationship is terminated. Create a good evaluation system to ensure that comparisons between vendors and offerings are similar.

8. Start Small
Develop agency specific lessons learned from implementing more manageable solutions first. This helps have successful implementations for mission critical systems.

For More Information
To learn more about GSA's Customer Engagement and Solutions Development Division (CESDD), visit **www.gsa.gov/ cloud** or email **CESDD@gsa.gov**. You can also contact GSA's Information Technology – Customer Service Center at 1-855-ITaid 4U (855-482-4348).