

Federal Agencies Seize Cloud Opportunities

Opportunities abound in the federal market for secure and capable cloud services.

loud computing is coming into its own both as a mainstream IT platform for federal agencies and a business opportunity for systems integrators, VARs and other IT service providers. The opportunities continue to grow for companies of all sizes as well as both civilian and defense sectors of the government.

Washington Technology recently polled companies in the federal market, ranging from consultants to large integrators. Respondents included more than 150 companies, representing the full spectrum of federal contractors in terms of size and vertical sub-markets served.

The survey polled their perceptions of the federal cloud services market—whether it's growing, what they expect it to do, which specific services they anticipate will be important to the government, what contractors expect from their cloud services subcontractors, and several other characteristics of the market.

ORIGINS OF FEDERAL CLOUD ADOPTION

Early in the Obama administration, the federal CIO and his staff instituted policies designed to foster cloud computing adoption by federal agencies. These efforts were conducted with the General Services Administration as the technical and operational partner.

The foundation of these policies was the central mandate called "Cloud First." The Office of Management and Budget (OMB) deemed a quarter of the government's computing budget eligible to move to the cloud. The policy asked agencies to reconsider their sourcing strategies and incorporate cloud solutions into their budget planning. The policy created a real—if still nascent at its

establishment in 2011—federal market for cloud services.

The Cloud First policy and the surrounding programs were not simply for the sake of cloud adoption alone. The policy also presumes that cloud adoption drives several other IT goals for federal agencies, including:

- Greater agility in the deployment of data center services because the cloud offers fast scaling and descaling without adding fixed capital costs. The flip side is lower operations and maintenance costs, freeing up more dollars for development.
- More innovation capacity thanks to lower asset costs and faster adoption of new technologies.
- Enabling the sister policy of data center consolidation to reduce asset redundancy that costs the government billions every year.
 Cloud adoption took a while to gain

DEMAND ON THE UPSWING

Companies responding to the Washington Technology survey clearly see demand trends showing growth in the hybrid cloud model. A hybrid strategy incorporates the simultaneous use of multiple clouds, such as private (governmentowned or hosted) and publicly offered clouds. Three quarters of the recipients expect demand for the hybrid model to increase somewhat or a lot in the coming year.

A larger percentage of respondents expect to see growing demand for private, government-owned clouds (see **Figure 1**). There's opportunity here as well, in the government-owned, contractor- operated model. Cloud requisition bidders should therefore stress compatibility with government- owned facilities. For example, the bidder should

	Will increase somewhat	Will increase a lot	
Public Cloud	34%	22%	
Private Cloud	41%	32%	
Hybrid Cloud	36%	39%	

Figure 1. Growing demand for private government clouds (as rated by % of respondents)

momentum. Today there are dozens of service providers that have received an Authorization to Operate from FedRAMP. There's a robust ecosystem of cloud service providers and value-added infrastructure technologies such as virtualization, and brokering resellers and integrators. However, as the Washington Technology survey shows and recent activity in the market demonstrates, the next several years could bring an accelerated rate of cloud services procurement by federal agencies.

emphasize ease in moving virtualized workloads to and from public and private data centers, and increase the presence of continuous security monitoring across multiple environments.

Given that the hybrid approach is likely to prevail for the foreseeable future, what sort of benefits (see Figure 2) does the government expect from hybrid? According to survey respondents, they expect a number of benefits, all with roughly equal



weight. The two most often cited benefits respondents say that federal clients want are:

- The ability to extend their data centers to the cloud in such a way as to preserve their investments, as cited by 64 percent of respondents. Closely related and cited by nearly as many is the desire for a more flexible infrastructure.
- The option to secure more-sensitive data in private facilities and less-sensitive data and applications in the public cloud, as cited by 62 percent of respondents.

The first case points to a bid strategy emphasizing low incremental costs provided by the cloud model. As noted earlier, technical compatibility with existing federal infrastructure is also essential. The second case underscores the importance of authorizations from FedRAMP. Beyond that, the corporate culture must foster security.

Other benefits cited by more than half the respondents include workload agility and better cost controls especially costs representing savings over operational costs of private data centers. Nearly half of respondents also mentioned expecting more efficient disaster recovery processes and the ability to administer systems end-to-end with a single, unified management view. This demonstrates the importance of up-to-date management systems featuring the so-called "single pane of glass" and "Web-based anywhere access" to management alerts and tools.

UNIVERSAL CLOUD ADOPTION BENEFITS

Washington Technology also asked companies that have or will bid on a federal contract that includes cloud-based solutions, what cloud services they require from the cloud provider, and the specific benefits these services provide to the customer?

The survey uncovers the impor-

Figure 2. Anticipated benefits of hybrid cloud deployments (as rated by % of respondents)

64%

Ability to extend data center to the cloud while preserving investments in existing infrastructure, applications, and so on

54%

Ability to move workloads between on- and off-site cloud platforms as requirements change

47%

Ability to administer everything from the data center to the public cloud from a unified management view

62%

Better security and access control options (by hosting sensitive corporate data on private cloud and less sensitive apps and data on public cloud)

62%

More flexible infrastructure

50%

Better cost controls, as private cloud hosting is often more expensive

44%

More efficient disaster recovery processes

tance of compliance, with ninety three percent of respondents citing it as "somewhat" or "very important." The bottom line? Cloud service providers must help the companies they are teaming with to ensure compliance with federal requirements including FedRAMP, FISMA, the DOD Information Assurance Certification and Accreditation Process and others (see Figure 3).

The second highest rated benefit is reduction in operations and maintenance expenses. That follows a major line of thinking from the Office of Management and Budget, which has deployed a variety

of policies and strategies to help agencies reduce maintenance-to-innovation ratios.

Most bidders want it all, in a sense. At least 85 percent of responders say shortened deployment intervals, ensured ability to obtain the Authority to Operate (a FedRAMP requirement) and simplified implementation of customized service level agreements (SLAs) to meet agency requirements rank somewhat or very important. The flexibility of SLAs is critical in the federal market, where agency perceptions of their own uniqueness run high. A take-it-or-leave-it policy with respect to product offerings is



	Very	Somewhat
Substantial reductions in O&M expense		48%
Shortened deployment intervals		55%
Simplified implementation of customized SLAs to meet agency specific requirements	38%	48%
Ensured ability to obtain Authority to Operate (ATO)	51%	37%
Ensured compliance with key federal requirements (e.g., FedRAMP, FISMA, DIACAP, ITAR, HIPAA, SOX and PCI		25%

Figure 3. The importance of compliance and other business benefits

(as rated by % of respondents)

likely to get a cool reception from federal contracting officers.

SECURITY REMAINS CRITICAL

The survey clearly indicated how important various security measures are when bidding for contracts that include a cloud component. Those measures, provided by cloud services vendors, are listed in order of the percentage of respondents rating them as very important or critical (see **Figure 4**).

Security, flexibility in SLAs, solutions that increase efficiency and agility, and technical compatibility—or at least interoperability with existing IT environments—are among the qualities cloud service providers must offer integrators, resellers and VARs pursuing federal business. Those partners have many potential cloud service providers from which to choose, but the market is solid. In fact, eighty-six

percent of the Washington Technology survey respondents say they're likely or very likely to use an existing cloud service provider to take to the government market (see **Figure 5**).

build, deploy and manage cloudbased solutions for agency customers provides a wide range of benefitsmost notably the ability to accelerate time to value by mirroring the same VMware technology that is already being successfully used in many agencies today. The vCloud Government Service resides exclusively within QTS' Vault Campus and is monitored 24x7x365 by an experienced support team. By collocating your supporting IT Infrastructure within the same facility, you will benefit from a seamless extension between your physical environment and vCloud Government Service via a high bandwidth, low latency cross connection. Plus you will enjoy

	Very Important	Critical
Use of FedRAMP-compliant platform	27%	30%
Use of secure hosted data center	35%	37%
Encryption of cloud-based data	41%	31%
Development of a robust disaster recovery plan	35%	31%
Real-time view of compliance and situational awareness	31%	24%

Figure 4. The importance of various security measures (as rated by % of respondents)

FINDING THE RIGHT PROVIDER:

Leveraging VMware vCloud® Government Service provided by Carpathia™ (A QTS Company) to

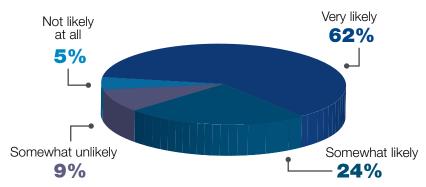


Figure 5. Likelihood of using an existing cloud provider for agency services (as rated by % of respondents)

superior carrier/network connectivity, as well as the very same access to QTS' 24x7x365 support team. Interested in learning more about partnership opportunities to help deliver on federal missions? Carahsoft has simplified your procurement process by serving as a one-stop shop for both vCloud Government Service and QTS services.



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