"Data Centers and the Cloud, Part II: The Federal Government's Take on Optimizing New Information Technologies Opportunities to Save Taxpayers Money"

Questions for the Record

FedRAMP (the Federal Risk and Authorization Management Program) is a standardized approach to cloud security certification that will save the government money, time, and staff by eliminating redundant individual agency security assessments. GSA claims it will save an estimated $200,000 per authorization. FedRAMP is a critical part of OMB cloud-first policy. Yet, we continue to hear complaints from the agencies and industry about the program's slow progress.

The Committee is aware that, as of July 2013, eight cloud services providers are now compliant with FedRAMP requirements. Five cloud providers have been granted government-wide provisional authority, including AT&T, Autonomic Resources, CGI Federal, Hewlett-Packard and Lockheed Martin. Three other cloud providers have been granted agency Authority to Operate, including Amazon Web Services' GovCloud and US East/West offerings, each receiving authorization by the Health and Human Services Department. The Agriculture Department's National Information Technology Center (secure government cloud provider) has been granted an authority to operate by the USDA Office of the CIO.

The Committee continues to hear complaints from the agencies and industry about FedRAMP's slow progress. In fact, the program currently stands at just eight cloud services providers including the ones granted by individual agencies. Mr. VanRoekel stated in his response to the QFR following OGRs full committee's 1/23 hearing--

> "The FedRAMP program office at GSA anticipates that additional Provisional Authorizations will be forthcoming with continued authorizations during FY 2013."

Question 1: What is the current status of FedRAMP and how many cloud services providers do you anticipate to have under the government-wide FedRAMP by the end of FY2013 and FY2014?

Response: The FedRAMP Program Management Office (PMO) is currently working with ten different cloud services through the provisional authorization process with the FedRAMP Joint Authorization Board (JAB) while also maintaining the continuous monitoring programs for the five provisionally authorized cloud services. The FedRAMP PMO anticipates capacity to increase over the course of the next year to enable processing of about fifteen cloud services while maintaining the continuous monitoring activities of those services provisionally authorized. Additionally, the FedRAMP PMO assists agencies across the Government, like the U.S. Department of Health and Human Services and U.S. Department of Agriculture, through their own security authorization processes to ensure the cloud services they use meet the FedRAMP requirements.

It takes cloud service providers anywhere from six to twelve months to meet the FedRAMP requirements for each service they offer. The variance in timeframe is based on the size and complexity of the service being offered, as well as the providers' security authorization experience with Federal Information Security Management Act (FISMA).

As the June 2014 deadline approaches for agencies to comply with FedRAMP, the FedRAMP PMO anticipates an increase in agency authorizations along with the JAB provisional authorizations that meet the FedRAMP requirements. The FedRAMP PMO is assisting the OMB to verify agency compliance through PortfolioStat reporting and reviews. Additionally, the FedRAMP PMO continues outreach to Federal agencies to assist with leveraging the current provisional authorizations.

The FedRAMP PMO anticipates having another three services provisionally authorized by the JAB through the end of the FY 2013, for a total of eight services through the JAB. Additionally, the FedRAMP PMO anticipates having another twelve provisional authorizations by the end of 2014, for a total of twenty services through the JAB.

Question 2: Do you believe the FedRAMP process will deliver the cost savings predicted?

Response: Yes. Preliminary results from agencies leveraging FedRAMP authorizations show that agencies are attaining cost avoidance of more than $200,000 per authorization leveraged.

The System for Award Management (SAM) is an E-Gov initiative aims to integrate 10 different legacy acquisition systems into a single shared system - streamlining processes, eliminating redundant data, and saving taxpayer money. Late last fiscal year (9/2012), the initial launch of this system failed. The Committee is aware that OMB and GSA (SAM's program management organization) has since held TechStat reviews and restructured the program.

Question 3: Please provide a short chronology (month and year) outlining the initiative's inception, deployment, and efforts made by the new leadership;

Response: Please see response provided by GSA.

Question 4: Please provide estimated dollars spent on SAM thus far and the current estimate for the planned approach.

Response: Please see response provided by GSA.

Question 5: The Committee understands that the GSA CIO was not involved in the SAM program until after OMB held a TechStat and the program was reorganized. Please explain why the CIO was not involved in the development of a critical IT system that is used by ALL agencies. Please provide the current status, including program management organization structure and the names of the individuals responsible for the success of the program going forward.

Response: Please see answer provided by GSA.

Question 6: In your response to the QFR following OGR full committee's 1/23 hearing, you indicated--

> "OMB has followed the work of the UK closely in regards to COTS software purchases and the move to a single user model. The approach is quite interesting and there are a number of initiatives that are helping the UK better purchase at scale and reduce the number of duplicative contracts and licenses."

Please share your findings regarding possible U.S. adoption of the successful UK approach.

Response: While our two governments differ, lessons from the UK approach have informed the Federal Strategic Sourcing Initiative. By sharing services and utilizing Government-Wide Acquisition Contracts (GWACs), the Federal government is moving towards large-scale purchases of commodity IT. Such bulk purchases benefit from economies of scale, which typically generate substantial cost savings.

Question 7: How do you think the government can better manage its software user licenses so that there are no software licenses we purchase but do not use?

Response: There are three broad items agencies can take to better manage this process:

- Know the extent of the need:
- Funnel the acquisitions into strategically sourced contract(s); and,
- Annually reconcile the actual utilization with the number of licenses acquired.

The first process entails agencies better understanding their need for a given type of software. Some software, like email and word processing software, is ubiquitous, and virtually every user who has a workstation requires the software. Other software, like mapping programs, is only necessary for a subset of personnel in the agency. In all cases, agencies should be generating estimates of the number of licenses it needs for each product family. This estimate should include the number and types of licenses needed to address agency user needs as well as relevant maintenance needs.

Next, agencies should consider the range of prices, number of licenses and services that they are paying for any given software. They should identify whether there are strategically sourced contract(s) already in the Federal marketplace, and if so, work with the managing partner to leverage their acquisition to gain the best prices. If there is no strategically sourced vehicle, it is always a good practice for agencies to aggregate their acquisition into an enterprise-wide vehicle. This creates a more efficient transition opportunity for a future, strategically sourced contract and typically results in acquiring the software at the lowest price the agency can achieve.

Finally, agencies can work with the manufacturer to reconcile the number of licenses they actually used in a given year with the number of licenses they paid for. Project management software is a good example of the type of software in which agencies may acquire, for example, 200 licenses, and at the end of the year, when they count the utilization they used 300 licenses. Agencies routinely engage in a 'true up' or reconciliation process to pay for the additional licenses they needed, and only the licenses they actually used."

Cloud First Initiatives. As part of the administration's cloud-first policy, each agency is required to identify at least three legacy systems that could be replaced by cloud solutions.

Question 8: Please provide the list and status of the major cloud migration initiatives in the Federal Government.

Response:

Agency Reported Information as Part of the IT Reform Plan (June 2012)*
*This list is not an exhaustive list of all cloud investments in the Federal government

Agency Name	Service Name
Commerce	Capital Planning Software
Commerce	Document Management
Commerce	Web Hosting
DHS	On-Line Employment Verification
DHS	Data Center Services
DHS	Website Hosting
DOD	Air Force Personnel Center / Air Reserve Personnel Center / Air Force Financial Services Center
DOD	DoD Enterprise Email Service
DOD	DoD Enterprise Portal Service
DOJ	Capital Planning Software
DOJ	Time and Attendance
DOT	Application Development and Testing
DOT	Geospatial Services
Education	Private Cloud Services
Education	Survey Services
Education	Event Registration Services
Energy	National Training and Education Resource
Energy	Website Hosting
Energy	Digital Certificate Security Services
EPA	Internet Security Services
GSA	Email
GSA	Power Management
GSA	Correspondence Tracking
HHS	Grants Management
HHS	Private Cloud Services

Agency Name	Service Name
HHS	Reports Management
HUD	Infrastructure
Interior	Collaboration Services
Labor	Website Hosting
NARA	Employee Records Management
NARA	FOIA Case Management
NARA	1940 Census
NASA	Geospatial Services
NASA	Geospatial Services
NRC	Capital Planning Software
NRC	Emergency Notification Services
NRC	Virtual Meeting Services
NSF	Records Management
NSF	Email Disaster Recovery
NSF	Collaboration Services
OPM	Website Analytics
OPM	Website Hosting
SBA	LAN/WAN Vaulting Service
SSA	Electronic Verification (eVerify) for Employment Eligibility)
SSA	Identity Verification For Drivers/Voters
SSA	CARE Through 2020
State	Program Management
State	Electronic Library
State	Website Hosting
Treasury	Business Process Management
Treasury	Document Management and FOIA Case Management
Treasury	Data Center Services
Treasury	Website Hosting
USAID	Email
USAID	Virtual Meetings Services
USDA	Collaboration Services
USDA	Email
USDA	FOIA Express
VA	Claims Management #1
VA	Claims Management #2
VA	Laboratory Information Management System
VA	Vista (Electronic Health Records hosting)

PortfolioStat. Initiated in March, 2012, the OMB PortfolioStat initiative is a tool that agencies use to make decisions on eliminating duplication and moving to shared solutions in order to maximize the return on IT investments across the enterprise. Through the PortfolioStat process, agencies are expected to develop a clearer picture of where duplication exists across their respective bureaus and components. This analysis should inform the budget process and help agency Deputy Secretaries eliminate waste and duplication within the IT portfolio. OMB projects PortfolioStat will save $2.5B through FY 2015.

Question 9: How many PortfolioStats have been held and with which agencies?

Response: The following agencies each had a PortfolioStat in FY 2012 and have had or will have a session in FY 2013:

• USDA	• Justice	• GSA
• Commerce	• Labor	• NARA
• DOD	• State	• NASA
• ED	• USAID	• NSF
• Energy	• DOT	• NRC
• HHS	• Treasury	• OPM
• DHS	• VA	• SBA
• HUD	• USACE	• SSA"
• Interior	• EPA	

Question 10: Why was the previous PortfolioStat savings goal of $2.5B not revised to reflect the merger of FDCCI into PortfolioStat? Considering the $3B savings goal for FDCCI, shouldn't the new combined savings be $5.5B?

Response: The two savings estimates should be viewed separately; however, they are not mutually exclusive. For example, of the $2.5 billion in planned PortoflioStat savings between FYs 2013 – 2015 identified by agencies, $750 million of that was for servers and mainframes, which are located in a data center. Some FDCCI savings may come from PortfolioStat and some savings identified in PortfolioStat may come from data center consolidation.

Question 11: We've heard from GAO today that CIO authority is an issue with implementing PortfolioStat. What actions are you taking to address CIO authority?

Response: Current statutes provide agency CIOs with the proper authorities to ensure IT is used as a strategic asset to improve agency service delivery. However, over time, these authorities have not been implemented in a consistent and effective manner across agencies. To address this issue, OMB has established policy, including OMB-M-11-29, which strengthens the role of the CIO by stating that, "Agency CIOs must be positioned with these

responsibilities and authorities to improve the operating efficiency of their agencies. In addition to their statutory responsibilities through the Clinger-Cohen Act and related laws…agency CIOs shall have a lead role in governance, commodity IT, cybersecurity, and program management."

Additionally, OMB has made CIO Authorities an integral part of PortfolioStat. As part of PortfolioStat sessions, OMB will discuss with agencies their assessment of agency plans to implement the CIO's authorities. Furthermore, agencies are required to describe in their Information Resource Management (IRM) Strategic Plans and Enterprise Roadmaps how agency policies, procedures and authorities implement CIO authorities, consistent with OMB Memorandum 11-29, *Chief Information Officer Authorities.*

All of these efforts are centered on this premise: agency CIOs must partner with those leading mission delivery units to together focus on most efficiently and effectively delivering customer-facing outcomes. As the FY13 PortfolioStat sessions conclude, OMB will evaluate lessons learned, opportunities and barriers relating to CIO Authorities to see if additional actions are required to ensure CIOs can carry out the full scope of their duties.

Question 12: Will data center consolidation lose focus if it is merged under PortfolioStat?

Response: No. As these efforts converge, agencies will continue to focus on optimizing those data centers that are pivotal to delivering taxpayer services, while closing duplicative and inefficient data centers. To do so, under PortfolioStat, agencies are currently designating their data center population in to two categories, core and non-core data centers. The core data centers will be optimized across a suite of total cost of ownership metrics while the Government will consolidate 40 percent of the non-core population. We believe this approach provides agencies with the right incentives and measures to drive behavior that will optimize the Federal Government's use and allocation of its computing resources.

TechStat Accountability Sessions (TechStats), which are evidence-based reviews of each investment aimed at turning around or stopping troubled investments. In December 2010, OMB stated that these sessions resulted in $3 billion in reduced life-cycle costs and subsequently incorporated the TechStat model into its 25-point plan for reforming Federal IT management.

OMB is holding less number of TechStats and overly relying on each agency. OMB held 59 TechStats in 2010, 5 in 2011, and at least 6 in 2012. GAO reported that OMB-led TechStats represented only 18.5 percent of the troubled investments. For the 4 selected agencies GAO reviewed, the number of TechStats represented 33 percent of the investments that have a medium or high-risk rating.

Question 13: GAO reported that OMB-led TechStats represented only 18.5% of the troubled investments. How many OMB-led TechStat sessions were held in 2012 and 2013? Shouldn't 100% of the troubled investments be reviewed?

Response: Since 2012, fourteen OMB-led TechStats have been conducted. TechStat candidates are continuously evaluated through the course of OMB's agency oversight efforts. In general, OMB analysts and agencies identify possible candidates using sources of performance data, such as cost and schedule indicators, CIO ratings, or other indicators on the IT Dashboard, or other sources. Others may result from discussions with agency officials, or external reports. All candidates are vetted internally within OMB and the agency before final selection for a TechStat review.

Question 14: It is the Committee's understanding that TechStat was created, in part, because agency CIOs were not doing appropriate reviews of their IT investments. Yet 3 years later OMB seems to be returning back to relying upon agency CIOs. Will OMB stay engaged in TechStats?

Response: OMB sees TechStat sessions as an important tool to assess the performance of agency investments. TechStat candidates are continuously evaluated through the course of OMB's agency oversight efforts, and additional TechStat sessions will be held, as necessary.

Question 15: What programs are on your TechStat radar screen? Specifically, what programs have you recently reviewed and what programs are on your schedule to review? How many TechStats does OMB plan to hold in FY2013 and FY2014?

Response: OMB has recently conducted TechStats on the following programs:

- Department of Homeland Security, Federal Emergency Management Agency National Flood Insurance Program (NFIP)
- Department of Veterans Affairs Integrated Electronic Health Record System (iEHR)
- General Services Administration Integrated Award Environment (IAE)

As stated above, additional TechStat candidates are continuously evaluated through the course of OMB's agency oversight efforts. In general, OMB analysts and agencies identify possible candidates using sources of performance data, such as cost and schedule indicators, CIO ratings, or other indicators on the IT Dashboard, or other sources. Others may result from discussions with agency officials, or external reports. All candidates are vetted internally within OMB and the agency before final selection for a TechStat review. OMB conducts TechStats on an as needed basis, and at this time, does not have a prescribed number of planned Techstats for FY 2013 and FY 2014.

IT Acquisition Workforce. Between fiscal years 2002 and 2012, acquisition spending by the Federal Government expanded by 95 percent, from $264 billion to roughly $514 billion. While contract spending has risen dramatically, the number of acquisition professionals did not keep pace. Even more troubling, a significant portion of the current acquisition workforce will be eligible to retire over the next decade.

Question 16: Do you believe that the government's acquisition workforce is adequate, in terms of size, experience, and expertise, to carry out the activities required for effective use

of strategic sourcing, transition to the cloud, and shared services for Information Technology?

Response: The acquisition workforce (comprising contracting professionals, contracting officer's representatives, and program/project managers) has grown modestly over the last several years. OMB is encouraging agencies to retain these critical members of the Federal workforce in this tight budgetary environment because they can help agencies save money for mission critical support. Investment in our acquisition workforce is critical to ensure we have the necessary capabilities to execute agency missions.

For nearly 30 years, OMB has partnered with GSA to operate the Federal Acquisition Institute (FAI) in order to train and develop a professional and capable acquisition workforce. GSA works closely with OMB who leads agencies in an acquisition workforce planning process each year to ensure agencies understand their acquisition workforce and plan their training and development. Both GSA and OMB are committed to ensuring the acquisition workforce is adequate for executing IT acquisitions. FAI currently leads the Program/Project Managers (P/PM) Functional Advisory Board and has recommended that IT competencies be incorporated into the P/PM certification process for IT Program Managers.

Forty percent of the civilian agency 1102 workforce is able to retire in the next five years. Another third have fewer than five years of experience. GSA works with OMB and the civilian agencies every day to ensure the workforce is recruited, trained, developed, and retained to deliver the best value for taxpayer dollars.

The U.S. Office of Personnel Management (OPM) and the Chief Human Capital Officers Council have designated acquisition one of the five Government-wide mission critical occupations that are strategic priorities for skills gap closure. OPM is partnering with the Federal Acquisition Institute (FAI) and Defense Acquisition University (DAU) to increase the percentage of the acquisition workforce that is certified to deliver effective support for agency contracting operations. Progress against this goal is reported on www.performance.gov as one of the President's Cross Agency Priority (CAP) Goals.

Question 17: <u>Contract duplication</u> (i.e., many contracts for the same or similar services across the federal enterprise), especially in IT, is a major challenge facing the Federal procurement system. It increases costs for government and industry, costs that are ultimately borne by the taxpayer. Contract duplication increases bid and proposal, administration and overhead costs for all.

Duplicative cloud contracts are being established by various agencies for requirements such as infrastructure or cloud-brokerage services (e.g., GSA, DOI, DISA for infrastructure-as-a-service), wasting government & industry resources. What can be done about reducing the amount of duplication in contracting vehicles available to Federal agencies?

Response: Because agencies often have complex and unique requirements, ordering procedures, service level agreements, and financial systems, the use of our existing cloud

Blanket Purchase Agreement (BPA) is proving difficult for some, leading them to enter into their own contracts. In addition, many agencies opted to move their e-mail to the cloud prior to GSA awarding the Email as a Service BPA. What GSA has been finding is that we have to pay close attention to creating extremely flexible acquisition vehicles that incorporate carefully gathered and implemented lessons learned.

Regarding promoting the use of government-wide contracts as opposed to the proliferation of agency-specific vehicles, we suggest greater education of contracting officers as to the availability and pros and cons of using these contracts. In addition, we must eliminate agency barriers preventing the greater use of external contracts. For example, one agency requires their contracting officers to prepare a Determination and Findings when using external contracts. This requirement discourages busy contracting officers from using government-wide contracts.

We suggest the review of Multiple-Award Contracts and government-wide contracts, and increased scrutiny over the creation of single agency contract vehicles. The proliferation of single agency contract vehicles dilutes the government's buying power. Aggregated buying power can be leveraged through the use of GSA Government-wide Acquisition Contracts and other pre-competed GSA contract vehicles. In addition, the use of GSA's pre-competed contract vehicles can shorten the procurement cycle. In an agency mission-centric culture, it is characteristic that an agency program office/requiring activity will seek and demand the shortest and quickest road to accomplish its mission. The contracting activity for single agency vehicles generally takes one to two years to award.

<u>Government duplication of already existing software capabilities</u> The Committee is aware of numerous instances where the government has decided to "make" or develop its own software systems, despite the ready availability of commercially viable products.

- For example, GSA has determined to build a government reverse auction platform, despite the availability of commercial reverse auction software packages.

- OPM has developed HR software, which it is offering to other federal agencies, despite the availability of mature HR software packages in the private sector.

- OMB, in its recent policy memorandum M-13-08, appears to be focused upon government development of financial management systems, despite the ready availability of commercial alternatives.

Question 18: Why did GSA decide to build its own internal reverse auction tool (ReverseAuctions.gsa.gov) ("RA platform") rather than engage existing commercially available solutions?
   a. What was the cost to GSA of that initial development effort?
   b. Did GSA personnel access other reverse auction provider websites or software for purposes of, or related to, researching, designing or building the RA platform?

c. What are the ongoing annual costs of maintaining the system and continuing to develop system enhancements to the RA platform?

d. What cost/benefit analysis did GSA conduct prior to contracting out the design and development of the RA platform?

Response: Please see response provided by GSA.

Question 19: GSA has clearly indicated that its RA platform is competing with commercial platforms, highlighting "No Additional Fees" as a management benefit in its overview slide deck. What are GSA's long-term goals with respect to its RA platform's effect on commercial providers?

Response: Please see response provided by GSA.

Question 20: Does OMB or the CIO Council review government initiatives to develop government IT solutions when commercial alternatives are available? Does the government utilize any form of "make/buy" analysis?

Response: Under the agency information management, budget and capital planning and investment control process, agencies undertake efforts to evaluate alternatives to develop or deploy an IT platform, be it government owned or commercial-off-the-shelf. For example:

1) OMB Circular A-130 includes language which provides agencies guidance on what to do as part of the selection component of the capital planning process. Circular A-130 states agencies must, "Prepare and update a benefit-cost analysis (BCA) for each information system throughout its life cycle. A BCA will provide a level of detail proportionate to the size of the investment, rely on systematic measures of mission performance, and be consistent with the methodology described in OMB Circular No. A-94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs.

2) OMB Circular A-11's Capital Programming Guide also outlines the following be formed for Capital Assets, including IT:
    - establish a baseline inventory of existing capital assets;
    - analyze and recommend alternative solutions;
    - manage the acquisition if approved; and
    - manage the asset once in use.

3) OMB Circular A-94 outlines the process and discount rates to use for Benefit-Cost Analysis (BCA)

Ultimately, agencies should conduct an alternatives analysis commensurate with the magnitude of the anticipated acquisition to explore and understand the variety of options

available to meet agency requirements. Agency proposals for funding to build or deploy an IT investment, and relate artifacts, are reviewed by OMB during the annual development of the Administration's budget.

Question 21: Under what circumstances is the government better suited to develop and deploy internal IT systems than to acquire these requirements form the commercial market?

Response: Please see response provided by GSA.