

Statement of the Software and Information Industry Association (SIIA)
to the Congressional Forum on Information Technology
Hosted by Rep. Elijah Cummings (MD) and Rep. Gerry Connelly (VA)
May 11, 2012

Representatives Cummings and Connelly: Thank you for the opportunity to submit this written statement to your Congressional Forum on Information Technology. We applaud your efforts to focus Congress's attention on the important issue of information technology and the federal government. SIIA is the principal trade association of the software and digital information content industries, with more than 500 member companies that provide software and electronic content products and services. SIIA is also a leading voice for innovative technology companies providing services to the federal government. SIIA played a key role in the development and legitimization of the Software as a Service and Cloud Computing Industries, and many of our member companies, both large and small, are enablers of this approach.

SIIA and many of our member companies have participated extensively in the various cloud initiatives of GSA and the National Institute of Standards and Technology (NIST) cloud computing program. SIIA supports the central roles of OMB, GSA and NIST to advance federal cloud computing standards and implement the FedRAMP program, collaborating with USG agency CIOs, private sector experts, and international bodies.

SIIA supports the objectives of the 25 Point Implementation Plan to Reform Federal IT Management, as well as the Federal Data Center Consolidation Initiative (FDCCI). In addition we generally support efforts to expedite provisional security authorizations for cloud service providers through the Federal Risk Authorization and Management Program (FedRAMP) and the effort to promote government's use of shared services as a way to reduce cost and improve citizen services by leveraging technology.

With that in mind, we offer the following for your consideration.

I. Cloud Computing

Cloud computing is not a new, nor singular technology, but rather an evolving IT consumption and delivery mechanism, provisioning a wide variety of computing services from remote locations. It is an evolution of IT architecture from centralized computing to network dependent systems with distributed assets and distributed management responsibilities. The technology has been part of the computing landscape for decades, but with the widespread deployment of broadband communications facilities, it is increasingly within the reach of businesses and individual customers.

While there are common definitions, the various different technologies, platforms and service models that comprise cloud computing reveal its complexity, and that defining cloud computing is impractical for policy purposes. Regardless of the challenges to define what is, or is not, "cloud computing," or the myriad platforms and service models that comprise it, cloud computing provides substantial benefits that are driving rapid adoption, including: on demand access, resource pooling, flexibility and elasticity, rapid implementation and energy efficiency, among others.

Increased adoption by organizations of all sizes around the world—both private sector and governments—has clearly demonstrated that cloud computing offers three transformative benefits. These are:

- **Economic Growth:** Cloud computing provides a strong engine for growth across businesses and regions.
- **More Choice, Lower Cost:** As reliance on open standards and software and data interoperability are maximized, cloud computing can lead to greater choice and lower prices for consumers.
- **Better Security:** Cloud computing provides an environment inherently superior for applying many critical security measures.

Policymakers should consider these as they seek to ensure the efficiencies and economic benefits of cloud computing.

While the growth of the cloud computing industry is strong, even more important is the effect cloud computing will have as an engine for driving growth across other sectors— growth made possible by greater access to advanced computing resources, often at lower prices. Cloud computing provides an IT environment where technology can be located in accordance with infrastructure and labor efficiencies, rather than being localized and provisioned independently, capitalizing on the economies of scale of network computing like never before.

As a result, cloud computing presents a major innovative opportunity to businesses of all sizes, and across all sectors of the economy. This opportunity is especially critical for the opportunities provided to small and medium-sized entities (SMEs) that lack the ability to make substantial investments in local IT resources. With cloud computing, SMEs can innovate more effectively and grow more quickly, therefore leveling the playing field.

Not only is this benefit significant to businesses, it will also have a transformative effect on governments, especially in regions where access to necessary technological infrastructure is limited. Countries that face shortages of trained IT professionals stand to benefit tremendously from cloud computing, provided they have adequate connectivity. With cloud computing and an internet connection, researchers, government employees, and entrepreneurs anywhere have access to the same quality of software applications. Accordingly, it can be expected that the macroeconomic impact of the cloud is similarly large. Recent research has indicated that cloud computing can promote economic growth and competition, and it can help encourage broader economic recovery from the current downturn.

II. Cloud Security

As complex networked systems, “clouds” are affected by traditional computer and network security issues such as the need to provide data confidentiality and maintain data integrity and system availability. While the cultural change of relinquishing direct control of the IT infrastructure has created fear for some IT professionals, there is a much less recognized reality that cloud computing, by nature, provides an environment inherently superior for applying many critical security measures.

By enabling uniform security management practices, clouds are capable of improving on several key security practices, such as predicting and detecting new threats, providing for quicker remediation, and providing for greater protection against end user breach or corruption, and lost or stolen data.

III. The 25 Point Plan to Reform Federal IT Management

Without the issuance on the 25 Point Implementation Plan to Reform Federal Information Technology Management, the Cloud and Shared First Policies and FedRAMP, most industry and government IT experts believe that the US Government would still be on an aggressive path to implement cloud computing. The transformative benefits of cloud technology, including spurring economic growth, driving lower cost, increasing consumer choice, and providing better security, combined with the increased adoption by organizations of all sizes around the world – both private sector and government -- and the demonstrated need for the Federal government to reduce cost and deliver more effective services to its citizens, makes this a logical and progressive step.

SIIA supports the government's Cloud First Strategy believing this policy will support the rapid adoption of cloud computing technologies by the federal government. Further, we support efforts to implement and leverage contract vehicles, such as the Infrastructure as a Service BPA and forthcoming Email as a Service BPA that allow agencies access to cloud computing technologies.

IV. FedRAMP, Data Center Consolidation, and Shared Services

In the two years since the issuance of the Federal Data Center Consolidation Initiative in February 2010 and the 25 Point Implementation Plan to Reform Federal Information Technology Management in December 2010, we have seen a dramatic movement toward the implementation of policies that reduce the cost of IT while improving service to citizens, including those aimed at promoting cloud computing. The 25 Point Plan was followed by the Cloud First Policy in July 2011, the Shared First Policy in December 2011, as modified by the Federal IT Shared Services Strategy in May 2012 and finally the FedRAMP Concept of Operations in February 2012. Together these initiatives form the foundation of the Federal government's plans to reduce its overall IT footprint and improve citizen services, while leveraging innovative technologies to reduce cost.

Taken at face-value, there appear to be some conflicts between policies that ask Federal agencies to both consider a move to cloud - first, and also to share - first-- while also looking at cost effective ways to consolidate data centers. However, when you dig a little deeper, it is clear that these policies work together as "tools in a toolbox" to help agencies and the Federal government overall reduce cost and improve service to citizens, leveraging new and innovative technologies available as a result of cloud computing.

- *FedRAMP*

FedRAMP, as explained by GSA, reflects a philosophy of: "do once, use many times". The process itself seeks to streamline the security certification process and provide agencies with the opportunity to take advantage of cutting edge information technologies to reduce procurement and operating costs and greatly increase the efficiency and effectiveness of services provided to its citizens. Important for agencies and Cloud Service Providers alike is the "portability" of the FedRAMP provisional authorizations which provide a basic assurance that the cloud technology

being marketed meets baseline security requirements. If implemented effectively and fairly, the process should accomplish its goals.

Recent reports indicate that GSA will give priority in the FedRAMP certification process to companies already providing cloud technology services to federal agencies under the existing Infrastructure as a Service (IaaS) Blanket Purchase Agreement (BPA) awarded on October 19, 2010 and secondarily to vendors on GSA's upcoming Email as a Service (EaaS) contract.

SIIA supports the expeditious approval of companies under the FedRAMP certification program, and believes that companies already holding the IaaS BPA and those likely to be approved under the EaaS contract present a logical starting point for FedRAMP certification. However, we encourage GSA to quickly move beyond those companies holding existing GSA BPA contracts to include companies that currently deliver cloud services to the Federal government in other domains (including financial management), as well as dozens of innovative technology companies that have expressed a strong interest in providing cloud services to the federal government.

- *Shared Services*

Long before the Federal government started to talk about cloud computing, it was talking about leveraging shared services. In the mid-2000s, the Bush Administration implemented a policy known as the Lines of Business Initiative or LOB. The purpose of the LOB initiative was to leverage shared service centers for critical back office functions like financial management and human resources. The idea was that agencies could clearly save money by leveraging existing IT infrastructure for functions that were not unique to any particular agency. This effort, while well-intentioned, was moderately successful with some of the smaller Federal entities who leveraged shared services like those provided by Interior's National Business Center. A vast majority of the larger agencies however stayed away from the LOB concept and continued operating their own systems, culturally believing that their existing infrastructure was necessary to meet their unique needs.

Fast forward to today, and the Obama Administration is again promoting the idea of shared services, through the Shared First/Federal IT Shared Services Strategy, which aims to reduce cost, increase the return on investment of the IT spend and bring centralization and order to a fragmented IT environment. Shared First, according to the policy memorandum issued in December 2011 and the updated policy guidance issued as the Federal IT Shared Services Strategy in May 2012 will be a multi-phased effort beginning with the adoption of intra-agency shared services promoting centralized IT services, *i.e.* within a single department, agency or component. The strategy then calls for consideration of shared services across government, *i.e.* inter-agency for commodity (back office) IT services, followed by more strategic, mission-oriented IT investment.

Shared services, while effective in many ways, is a laudable objective, but just one of several tools in the toolbox for agencies to consider when trying to improve efficiency and reduce their IT footprint. Shared services today, unlike the effort in the mid-2000s is further enabled by the advent of cloud computing.

- *Data Center Consolidation*

Even before the Federal government issued its Cloud First Policy, it was looking to reduce its overall IT footprint through the consolidation of its more than 2000 data centers. The Federal Data Center Consolidation Initiative, announced in early 2010 and accelerated as part of the 25 Point

Plan, requires Government agencies to reduce the overall energy and real estate footprint associated with their data centers, with the goal of reducing cost, increasing security, and improving efficiency.

The Federal Data Center consolidation effort is linked closely with complementary efforts by the federal government to move agencies to cloud computing and to more effectively utilize shared services. Simply closing data centers alone will not improve the management of data within the federal government. Agencies must strategically plan for the closing of data centers, eliminating duplication and redundancy, while successfully leveraging new innovative technologies provided in the cloud or by utilizing shared services. Like cloud and shared services, it represents another tool at an agency's disposal which can be leveraged to meet the Administration's goal of reduced IT cost and better service to citizens.

Thank you for the opportunity to submit this statement and we again applaud your efforts to look at the intersection of technology and government.