

## **After the definition of Cloud Computing ... What has NIST done in the Cloud space lately? What's next?**

The Commerce Department's National Institute of Standards and Technology (NIST) issued Special Publication SP 500-292: *Cloud Computing Reference Architecture*. This document takes the NIST definition of Cloud Computing a step further by expanding the definition into a logical representation of the cloud model, which is a useful tool for the Federal Government, industry and other cloud stakeholders. NIST is hoping that a number of industry consortia and suppliers will use the reference architecture to categorize their products and services. Then it will be easier for US government agencies and others to compare to "apples to apples" when evaluating the different service offerings from the vendor community. The Cloud Computing Reference Architecture was developed over a four month period (January-April 2011) and created by a team of volunteers in the federal, industrial and academic sectors.

The Reference Architecture is also intended to be used as a guide to help identify gaps in cloud security, interoperability and portability standards, guidance and technology that need to be filled for USG agencies to move forward in deploying the cloud model.

Earlier this year, NIST published a series of Cloud Computing related Special Publications. Most recent are the Special Publication 800-146: DRAFT *Cloud Computing Synopsis and Recommendations* published in May 2011, and Special Publication 500-291 *NIST Cloud Computing Standards Roadmap*, July 2011. The latter was also developed through a public working group process with participants from industry, academia, standards developing organizations, and government.

This work is under review by a new Federal Cloud Computing Standards and Technology Working Group that met for the first time on July 27, 2011. The group was created under the cognizance of the US Federal CIO Council and is composed of senior technical managers and staff from over 25 different government agencies.

The working group purpose is to define and represent common US government interests in working with NIST in its collaborative development of the USG Cloud Computing Technology Roadmap, as called out in the Federal Cloud Computing Strategy issued by the US CIO in February 2011. The first draft release of the roadmap for public comment is planned for the next NIST Cloud Computing Forum and Workshop (IV), November 2 & 3, 2011.