

National Institute of Standards and Technology (NIST) Cloud Computing Technical Role

NIST Cloud Computing efforts are consistent with the NIST mission:

“To promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.”

Cornerstone: Advancing Standards Development

- government needs to work collaboratively with private sector to develop standards

Overview: NIST Cloud Computing Efforts

Definition of Cloud Computing – issued 2008; revised through 2009

Special Publications:

1. SP 800 -125, DRAFT *Guide to Security for Full Virtualization Technologies*, July 2010
2. SP 800 – xxx, Cloud Computing – FY 2010 draft release planned

Complex Information Systems Measurement Science -- Cloud Computing Simulation Model in Progress – purpose is to enable characterization and comparison of resource allocation algorithms that might be used in Computational Clouds

Federal Risk & Authorization Management Program (FedRAMP) Technical Process Definition -- to support the government's ability to leverage security authorization work for Cloud Computing services

Standards Acceleration to Jumpstart Adoption of Cloud Computing (SAJACC)

Overview: Standards Acceleration to Jumpstart Adoption of Cloud Computing (SAJACC)

SAJACC goal is to help solve the problem: “How do we support the adoption of a new complex technology during the interim period between when standards are needed and when they are available, and how do we develop standards more quickly?”

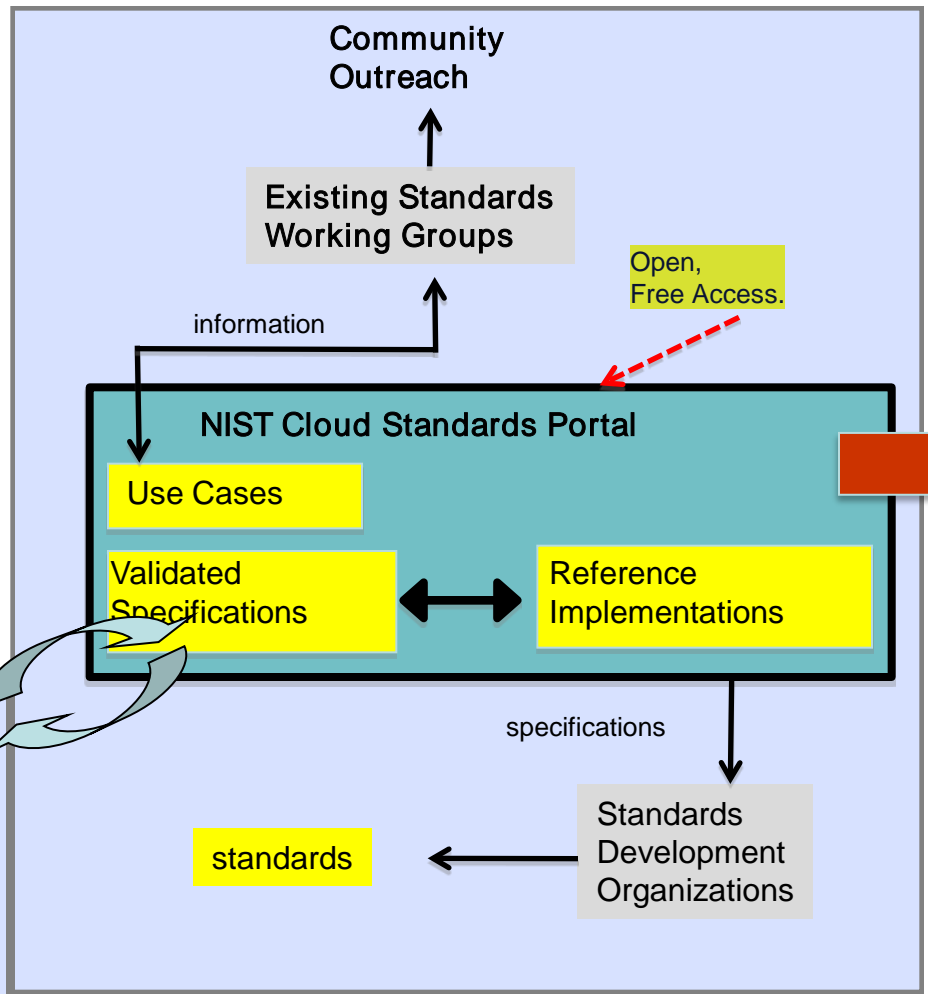
SAJAAC is: Strategy, Process, & Portal

NIST believes that we (the community) can accelerate cloud adoption by validating key cloud specifications & sharing information to build confidence in cloud computing technology in the interim before formalized standards are available

SAJACC: What does it look like and how will it work?

Portal -- public Internet - accessible repository:

- usage scenarios
- documented interfaces
- pointers - reference implementations
- test results



Enable interoperable cloud computing before finalized standards

Faster standards development

