

# 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?”

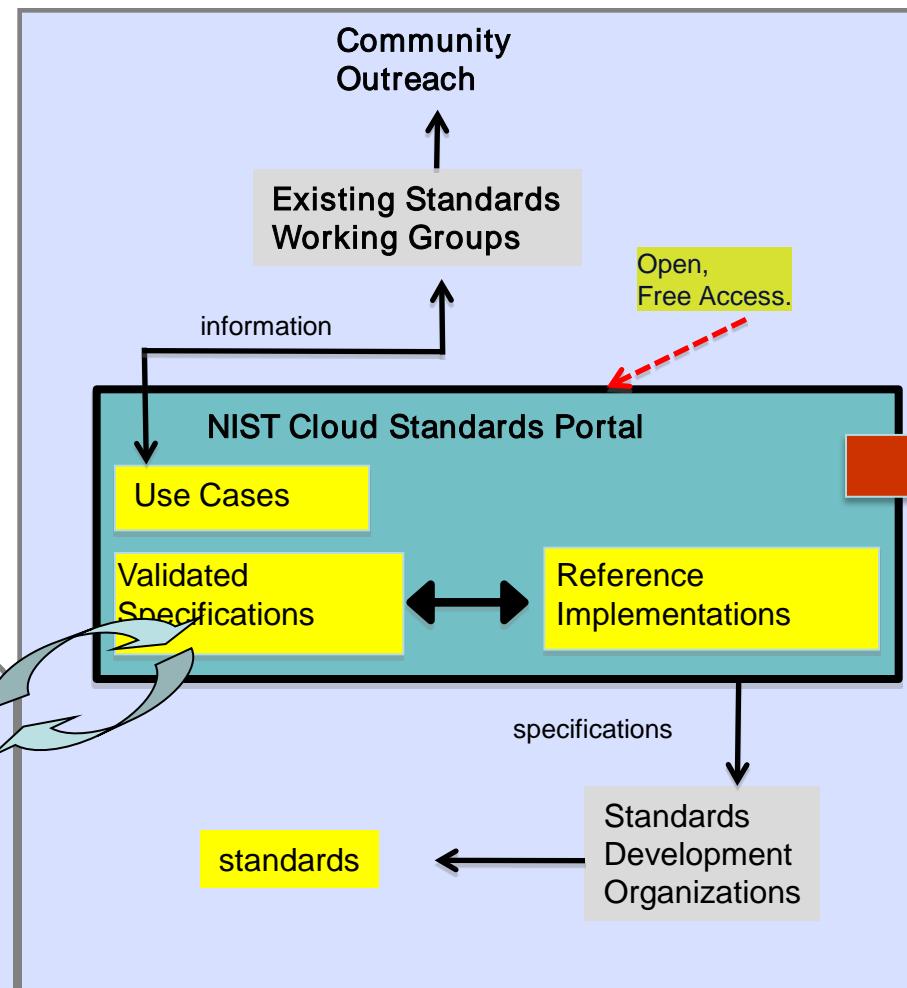
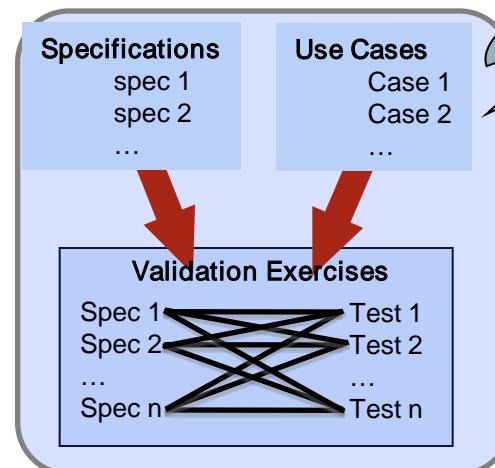
**SAJAAC is:** Strategy, Process, & Portal

**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