

SAJACC WG

Current Status and Plans

NIST Cloud Computing Big Data
Workshop

January 17, 2013

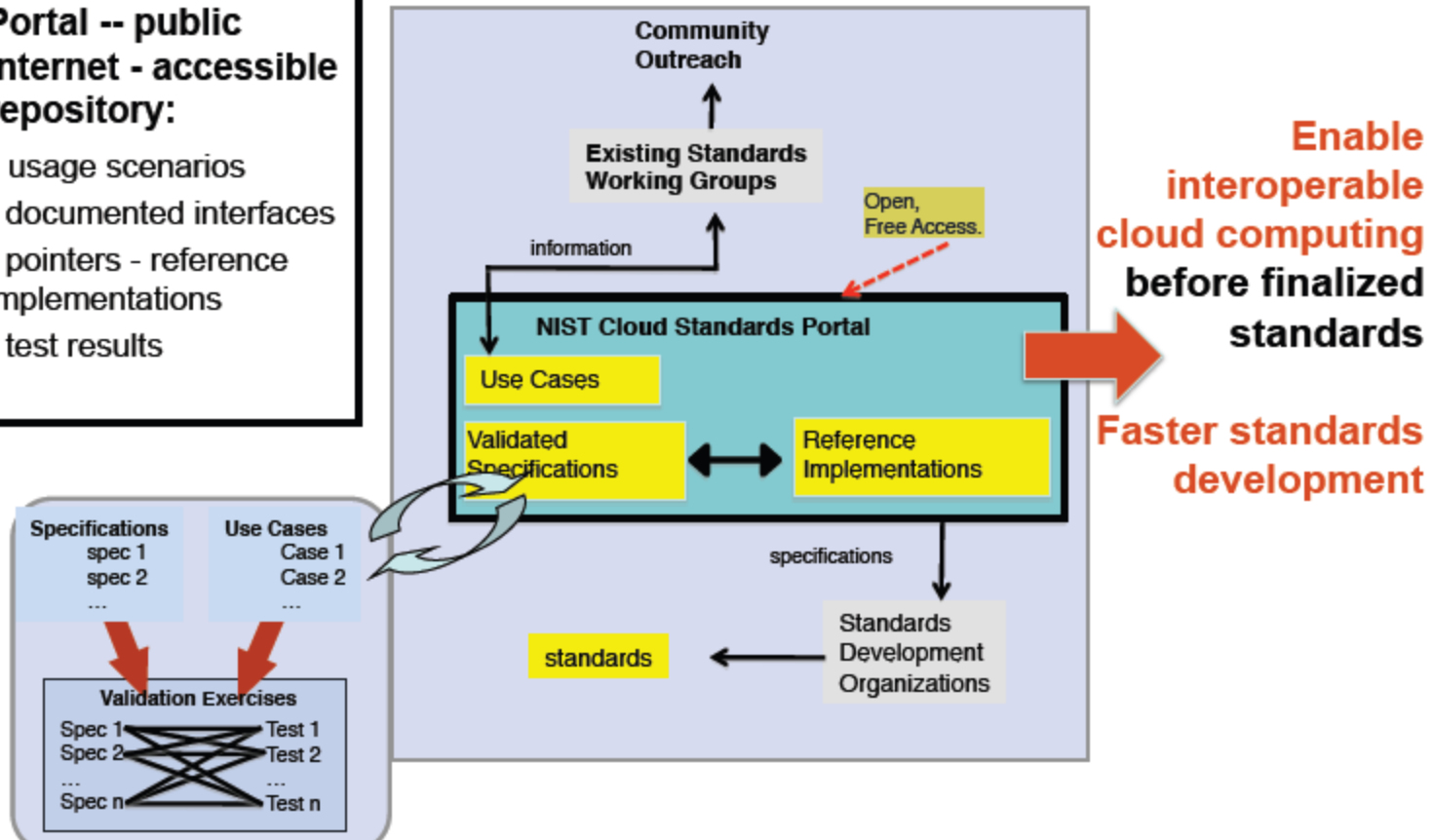
Co-Chairs: Eugene Luster and Alan Sill

SAJACC Process

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

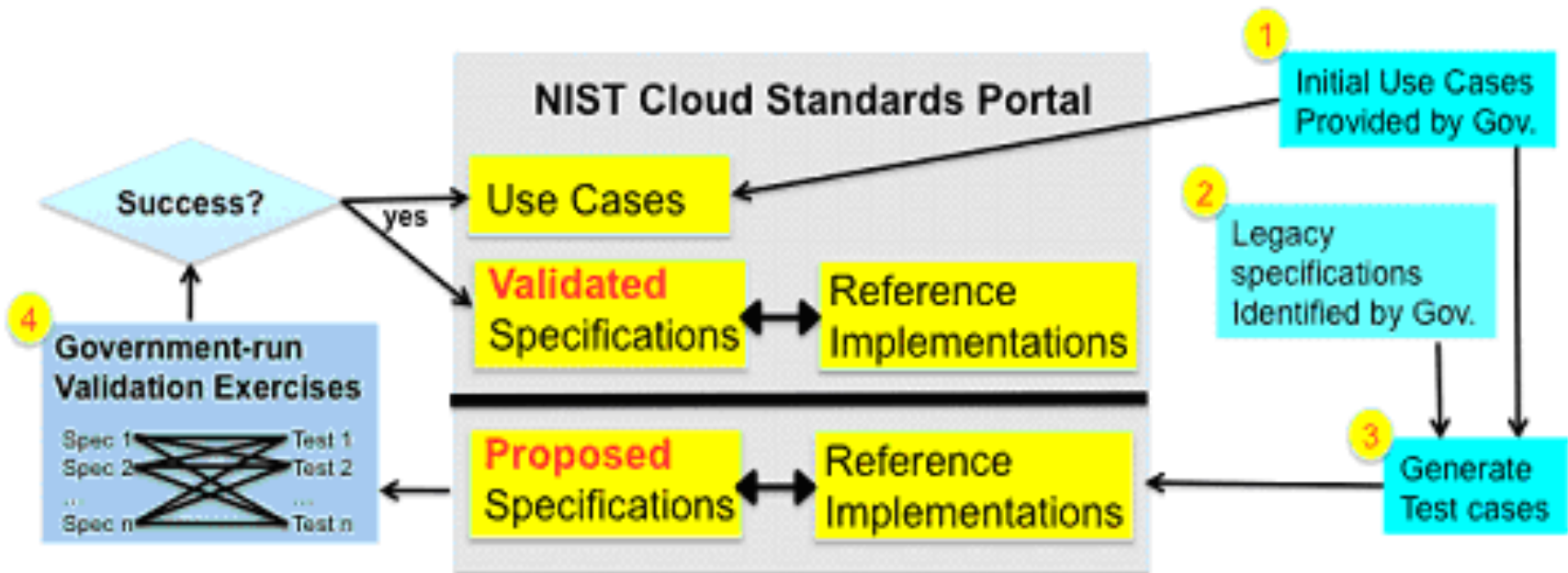
**Portal -- public
Internet - accessible
repository:**

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



SAJACC Process

In a little more detail...



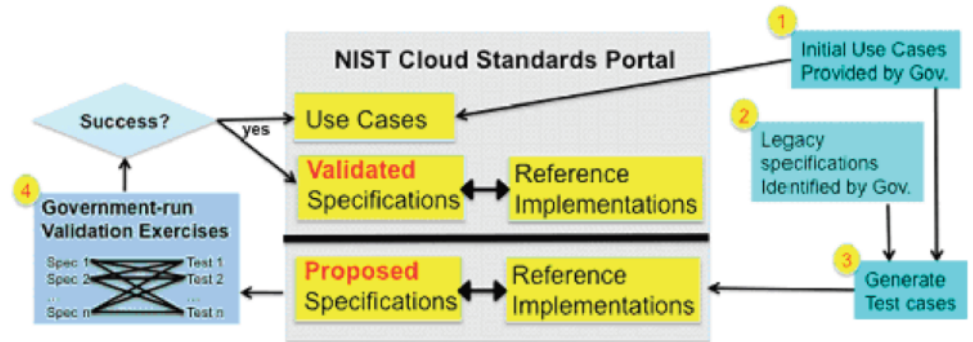
Structure of SAJACC Report

Draft report on the SAJACC portion of the NIST Twiki –
Jan. 14, 2013

1. Introduction
2. Terminology and Structure of the SAJACC Use Cases
3. Cloud Management Use Cases
4. Cloud Interoperability Use Cases
5. Cloud Security Use Cases
6. Future Use Cases Candidates
7. Examples of Validation Tests Conducted Against the SAJACC Use Cases
8. Comparison with other NIST Cloud Computing Group Organizational Structures, Roadmaps, and Output
9. Conclusions

Cloud Management Use Cases

- Open An Account
- Close An Account
- Terminate An Account
- Copy Data Objects Into A Cloud
- Copy Data Objects Out of a Cloud
- Erase Data Objects In a Cloud
- VM Control: Allocate VM Instance
- VM Control: Manage Virtual Machine Instance State
- Query Cloud-Provider Capabilities and Capacities



Cloud Interoperability Use Cases

- Copy Data Objects between Cloud-Providers
- Dynamic Dispatch to an IaaS Cloud
- Cloud Burst From Data Center to Cloud
- Migrate a Queuing-Based Application
- Migrate (fully-stopped) VMs from one cloud-provider to another

Cloud Security Use Case

- Identity Management - User Account Provisioning
- Identity Management - User Authentication in the Cloud
- Identity Management - Data Access Authorization Policy Management in the Cloud Identity Management - User Credential Synchronization Between Enterprises and the Cloud
- eDiscovery
- Security Monitoring
- Sharing of access to data in a cloud

SAJACC Demonstrations

- The meat of the SAJACC process
- Once use cases are defined, we can invite the community to put forward demonstrations of the applicability of their cloud product, process or standard to meet the SAJACC use cases
- Several demonstrations already conducted – see SAJACC report and Twiki site:
 - AWS/Eucalyptus, S3, Azure, CDMI, OCCl
 - More possible – see “way forward” below

Future Use Cases

- Cloud Management Broker
- Transfer of ownership of data within a cloud
- Fault-Tolerant Cloud Group
- Multi-provider integration vs. single use case
- More possible

SAJACC Recommendations and Conclusions: The Way Forward

- Integrate with current structure of the NIST Cloud Computing Reference Architecture and Taxonomy**
- Add use cases based on taxonomies for Cloud SLA Metrics and NIST Cloud Computing Security**
- Integrate input from BUC and Standards Roadmap groups**
- Study and adopt template elements from the US VA Bronze, Silver and Gold Use Cases**
- Add automation and tooling to the NIST web site**
- Conduct, invite, document more demonstrations of cloud standards & products vs. the SAJACC use cases**
- Add more recommendations from the community**