Review of the Existing NIST Standards Development Strategy & Roadmap Process for Cloud Computing

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Basic NIST Goals

- Develop a strategy for a roadmap process for US Government approach to cloud computing from a standards perspective

- Charged with improving standards in the areas of interoperability, portability and security specifically

- Deliver this strategy ASAP (Basic strategy already exists and is being worked now!)

- Deliver finished roadmap by Oct 2011

Progress To Date

- NIST workshops I and II held May 2010 and Nov 2010 respectively

- Many high-level talks (including US CIO, NIST Director, etc.) plus extensive panel discussions and presentations

- Workshop sessions explored topics in more detail

- Five major working groups defined (see links)

- Open process, open community involvement

Purpose of this talk

- Several US Government cloud computing projects exist (DOE Magellan, NASA Nebula, Globus Nimbus, others)

- Most large-scale distributed computing projects are already growing ability to interface with clouds (Condor has EC2 interface), etc.

- This is happening on an international basis

- Would like to document the US Government science-oriented agency use cases in the context of the NIST Federal Use Case effort.

Grids Have a Role to Play Too!

- Most grid projects have at least some effort to engage with cloud-based methods and concepts

- OGF in particular notices an increasingly strong trend of cloud-based standards work within its community.

- Cloud-to-grid and grid-to-cloud efforts will be essential to recapture our investment in distributed computing development to date and to extend it to the future.

- Need to capture and document this work as input to the NIST process.

Links and Request

- Links of interest (also sent by email):

    NIST cloud Computing program site:
       http://www.nist.gov/itl/cloud/

    NIST cloud computing standards strategy twiki:
       http://collaborate.nist.gov/twiki-cloud-computing/bin/view/CloudComputing/
    WebHome

    Cloud Computing Forum & Workshops I and II: (Next workshop Apr. 7-8, 2011)
       http://www.nist.gov/itl/cloud.cfm
       http://www.nist.gov/itl/cloud/cloudworkshopii.cfm

    Cloud Computing Forum & Workshop II Standards Panel:
       http://www.nist.gov/itl/cloud/upload/Standards_Panel.pdf

    NIST Cloud Computing Program Overview - Dawn Leaf
       http://www.nist.gov/itl/cloud/upload/Leaf-CCW-II-2.pdf

- Please contact NIST directly or me at Alan.Sill@ttu.edu