

Beyond the Pervasive Cloud: Lessons and the Future for Space Organizations

(pre-panel talk),
Khawaja Shams, Tom Soderstrom,
NASA JPL, USA

Abstract— NASA's Jet Propulsion Laboratory is a leader in researching and prototyping with a variety of cloud computing solutions and integrating them into real operational missions and in multiple clouds. JPL has successfully used multiple public and private clouds for outreach and mission sensitive computational tasks. Several NASA missions, including Mars Exploration Rovers and Mars Science Laboratory are already soaring in the clouds and cloud computing is becoming pervasive in most computing solutions.

resources independent of which cloud is used and how the charges take place. JPL has created and integrated a cloud brokering and charge-back mechanism that enables full usage of clouds. In this talk, Tom Soderstrom, IT Chief Technology Officer at JPL, will discuss this mechanism, real lessons learned through hands-on exploration of multiple clouds, and JPL's continuing journey beyond the pervasive cloud.

One key to success is how these clouds are integrated into the JPL environment so that end users can self-provision the cloud