

## **SC|05 StorCloud Applications Call for Participation**

After a successful debut at SC2004, StorCloud continues as a special initiative for SC|05 in Seattle, WA to build a High Performance Computing (HPC) storage capability showcasing HPC storage technologies (topologies, devices, interconnects) and applications. Portions of StorCloud will comprise state of the art heterogeneous devices and technologies to build a virtual on-site “storage on request” capability to support researchers and demonstrate high bandwidth applications at the conference. Other portions will be dedicated to supporting specific data intensive applications with predetermined configurations and requirements.

The goals of the “production” StorCloud are to:

- 1) Provide 1 PetaByte or greater of randomly accessible storage to SC2005 participants.
- 2) Approach a 1 TeraByte per second infrastructure bandwidth.
- 3) Provide a 1 GigaByte per second backup bandwidth.
- 4) Provide interoperability between storage systems
- 5) Manage and allocate resources to SC2005 participants.

StorCloud will be architected and deployed entirely by volunteers from government, industry and academia.

Additionally, StorCloud will combine network access mechanisms, storage devices, and control/management software to provide a standard storage capability to all conference research booths. A portion of the storage resources will be allocated to research booth host platforms throughout the convention by requested SCinet IP address. Storage allocations can be used for the duration of the conference. Special requests can be made via email

The StorCloud committee is seeking real world high performance applications that stress the limits of currently available storage systems, or use storage systems in interesting ways. Two classes of applications are being sought.

- User applications – those that make use of StorCloud’s unprecedented heterogeneous “petabyte-scale” storage farm to enable showcase applications for demonstration purposes in user’s booth
- Challenge applications – those that demand fast transfer rates and/or use multiple file systems in interesting or comparative ways.

The committee plans to set up a preliminary storage capability enabling applications with large data sets to populate the storage over a long period of time and then quickly move the data into the operational StorCloud configuration at the show. Additionally, application groups and vendors are encouraged to collaborate on specific application configurations, or proof of concept configurations, and will be supported as part of the StorCloud configuration.

Users that are interested in participating in SC|05 StorCloud are asked to provide an application description and profile by **March 1, 2005** via <http://www.sc-submissions.org>. We will begin accepting submissions on **February 1, 2005**

For information on the StorCloud initiative, please refer to <http://sc05.supercomputing.org/storcloud> or contact us at [storcloud@sc05.supercomputing.org](mailto:storcloud@sc05.supercomputing.org)