# SCS bullet points for week ending 2014-03-28

Scientific Computing Services upgraded the batch environment software to the latest version, LSF 9.1.2.   This version supports Linux cgroups which will enable the binding of batch jobs to a requested amount of CPU and memory, providing a more predictable and reliable batch processing environment.  The batch configuration was also modified to reduce the outage time required for upgrades.  The impact of this change is that batch queues no longer need to be drained for days prior to an upgrade.

Scientific Computing Services completed the upgrade of the PPA Lustre file system to the latest 2.5.1 release within a 5-day outage window.   The upgrade involved  interim transfer of 100TB of user data to a temporary area,  relocation of hardware to the first floor server room to provide Infiniband access to the shared PPA "bullet" cluster, improved Ethernet bandwidth by switching to 10Gb network links, and a doubling of capacity from 170TB to 340TB.  Additional RAID controllers combined with networking upgrades have resulted in significant performance gains which have met or exceeded expectations.  Along with the recent expansion of the bullet cluster from 3000 to 4600 cores, this parallel file system  will enable more users to switch from using local scratch space to shared space in the Lustre storage environment.