

Performance Tuning of the NCCS Storage System

This project is an evaluation of the performance of the storage system in the National Center for Computational Sciences (NCCS). The storage system being used is the High Performance Storage System (HPSS), which is a collaboration of DOE labs and IBM. Applications such as Netperf, HSI, and other assorted system utilities will be used to test throughput to the various computational platforms used in the NCCS. Performance will be benchmarked between storage servers and the super computers. The performance data will then be reviewed to determine where bottlenecks are likely to restrict data transfer or storage. The systems are tuned according to the parameters that are given by each test. The data is then re-evaluated in order to determine the best overall performance. Results from the benchmarking will be assessed in relation to the current and proposed design of the NCCS storage archive.

Student name:

Jamila Jones

School student attends:

Fisk University

Name(s) of Mentor:

Stan White

Division:

National Center for Computational Sciences

Program:

Research Alliance in Math and Science (RAMS)