



Success Story: Data Migration and Storage Reconfiguration

Summary:

TerpSys migrated more than 78TB of a federal agency's data to hardware with the capacity to maintain current data, and to allow for significant future growth.

Client: The National Institutes of Health (NIH)

NIH is Maryland-based federal agency responsible for conducting and supporting critical medical research on a national and international scale.



Objectives:

- Establish a uniform architecture for future data storage and immediate data migration
- Create a system that can quickly accommodate surges in data storage needs
- Reduce maintenance downtime in the post-migration environment
- Maximize utilization and efficiency of new data storage system

Challenge

The client's existing data storage system was stretched to its limits. It desperately needed a new process to migrate more than 78TB of existing data to hardware able to maintain that volume of information, and – more importantly - to allow for future growth.

In the then-current environment, NIH users accessed stored data from multiple platforms, including Macintosh, Windows and Unix. NIH sought a more manageable and uniform approach, with enhanced scalability to meet future storage capacity requirements. Additionally, the new solution needed to be implemented quickly, and with minimal impact to users.

Solution

After compiling an inventory of existing hardware, the TerpSys team built a standard server platform for the rollout and carefully documented its details. This measure ensured that going forward, all servers would be built to exact specifications, rather than cobbled together on an *ad hoc* basis.

After determining a standard server configuration, TerpSys duplicated the production environment to test various migration strategies. We then identified the most effective method of installing the new server platform, and migrating existing data to it during weekends and other low-use periods.

Finally, TerpSys developed robust quality assurance procedures to ensure that all work was completed as designed, and that the new platform would perform as planned. We also designed custom monitoring and management utilities to verify that the newly deployed systems were working properly at all times.

Results

- Completed project on time, on budget, and with minimal disruption to system users
- Greatly improved scalability by allowing for additional data storage to be added quickly
- Enhanced multi-platform functionality by removing aging, redundant servers supporting disparate systems
- Increased ease of management and the fault tolerance of NIH's critical data management systems