

## 4c – Secure Massive Data Storage

### Action Item Template Response

#### General Action Item Information

Lead Division/Office: Research Technologies

Action Item Number: 4c

Action Item Short Name: Secure Massive Data Storage

Dependencies with other EP Action Items: TBD

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#### I. DESCRIBE YOUR PLANS FOR IMPLEMENTING THIS ACTION.

Our existing massive data storage system is near, at, or past reasonable end of life. This is an essential service to the IU artistic, scholarly, and research community. The value of this system to the health research community grew dramatically when required Health Information Portability and Accountability Act (HIPAA) analyses and process development were certified by IU Counsel. It is now possible to store electronic personal health information (ePHI) on this system. This gives us nearly unique capabilities, as only one other HPC center has this capability.

We propose to continue to support and enhance the Indiana University High Performance Storage System (HPSS) implementation known as the Massive Data Storage Service. The acquisition of new automated tape libraries will offer greater tape volume capacity and better tape management. Periodic investments in new tape drive technology will allow IU to utilize higher-density tapes and keep pace with the exponentially growing storage requirements. Server hardware refreshes will satisfy the growing number of users and bandwidth required to support modern research activities. Enhancing access mechanisms will enable additional data collection availability like the IU Spatial Data Portal and the Digital Library Project.

#### II. WHAT ARE THE POLICY AND PRACTICE IMPLICATIONS OF YOUR PLANS?

Researchers will be freed from managing local storage resources that may lack sufficient physical and network security. Offsite storage and replication of critical research data is automated and controlled by policy. Data are encrypted onto tapes as they are stored, ensuring that loss of media does not result in threat of legal action toward researchers or the university. When archiving data, researchers are free to focus on the structural and logical format of the data and not on the physical media storage issues.

#### III. IDENTIFY STAKEHOLDERS.

- Research community
  - Faculty

- Graduate students
  - Laboratories
  - National and international research collaborations
- Creative activities communities
- Library and archival communities
- Outreach and community engagement