TRAC2 5.1.1.1

5.1.1.1 - The repository shall employ technology watches or other technology monitoring notification systems.

Explanation

SP staff collaborate with personnel from the University of Toronto Libraries' Information Technology Services (ITS) department to assess the long-term viability of the repository's hardware and software. This is an ongoing and comprehensive process that incorporates information obtained from automated monitoring systems, manual quality controls, the repository's Designated Community, the repository's hardware and software vendors, and the enterprise IT community at large. The chief objective is to predict deterioration and obsolescence before they can impair the repository's ingest, data management, archival storage, or dissemination processes. Furthermore, systems administrators monitor hardware and software in order to detect potential points of failure and identify opportunities to reduce costs.

SP employs experienced systems administrators and programmers to oversee its technical operations. In addition to their operational duties, systems personnel monitor innovations in data management and storage, attend relevant conferences, and upgrade their skills through the repository's professional development program (see 3.2.1.3). At the same time, SP can draw on the expertise of systems administrators at ITS and vendors for help with technology evaluation.

SP benefits from an active and technologically savvy Designated Community, composed of librarians, researchers, and students, who report problems in system behaviour. SP receives feedback from its Designated Community on a regular basis. Librarians at OCUL member institutions can contact SP staff directly to report problems and discuss issues. Representatives from the Designated Community sit on the repository's advisory committees, giving them an opportunity to report technology issues to SP staff.

For more information about hardware monitoring and change manangement, please see 5.1.1.1.1 and 5.1.1.1.2. For software, please see 5.1.1.1.5 and 5.1.1.1.6.

Responsibility

Digital Preservation Policy Librarian

Systems Administrator

Potential Risks

The primary risks associated with technology monitoring are (1) failure to gather information from a wide variety of reliable sources and (2) failure to monitor sources in a timely manner. SP and ITS staff minimize these risks by regularly gathering information from a large number of trusted sources within and without the repository (see Explanation above).

There is a risk that systems personnel, who know the Designated Community, system requirements, and system behaviour intimately, will leave the organization at some point. To minimize this risk, SP uses well known hardware and software and delegates critical responsibilities to several people. Please see the Risk Analysis and Management Strategies document for more information about SP's strategies for reducing the impact of personnel departures.

Future Plans

Systems administrators will revise and update their monitoring practices as new tools and resources become available.

Relevant Documents

1. Risk Analysis and Management Strategies
2. Hardware and Software Inventory (available on request)