TRAC2 5.1.1.6.2

5.1.1.6.2 - The repository shall have a process for testing and evaluating the effect of changes to the repository's critical processes.

Explanation

SP tests and evaluates changes to its critical processes in an isolated development environment to ensure that changes will not disrupt normal operations or cause data corruption or loss. In addition to automated tests and checks performed by software, SP staff manually evaluate changes by examining samples of the relevant content. Staff evaluate changes for their effect on the integrity of information, the speed and efficiency of the system, and the accessibility and usability of disseminated information. The repository uses a code versioning system to record changes to software. Testing and evaluation continues in the production environment, and the repository uses JIRA for logging and reporting problems (see 5.1.1.3.1 for more information about JIRA).

Feedback from the Designated Community is an important source of information about accessibility, usability, understandability, holdings, and overall system performance. As described in 5.1.1.1.5, the repository receives ongoing and extensive feedback from its Designated Community.

Please see the Risk Analysis and Management Strategies document for additional information about software failure. SP has a Backup Plan that describes policies and procedures used by SP and the University of Toronto Libraries' Information Technology Services department to provide reliable backup copies of the repository's data, databases, and applications.

Responsibility

Digital Preservation Policy Librarian

Software Developer

Potential Risks

There is always a risk of software failure in complex information systems. SP uses widely accepted, industry-standard procedures for testing and evaluating software changes, but small errors or conflicts sometimes escape testing. Software failure could force SP to suspend certain operations until the affected systems can be thoroughly analyzed, repaired, and tested.

Monitoring Commitments

SP will monitor changes to critical processes and procedures for compliance with the OAIS Mandatory Responsibilities. In addition, the repository will examine new editions of the OAIS Reference Model for changes to the Mandatory Responsibilities.

Relevant Document

1. Critical Processes and OAIS Mandatory Responsibilities
2. Risk Analysis and Management Strategies
3. Backup Plan