

ICPSR Transaction Use Cases

Publication Steps involve multiple steps and may involve multiple systems. For example below is a sample implementation we have done which involves Fedora.

1. Start a transaction
2. Create a version snapshot
3. Create a container/folder to capture the details of the version
4. Add properties to this container folder
5. Invoke DOI service generation by posting XML to external DOI vendor
6. Send provenance information to an Elasticsearch index
7. Send a JMS message to external Preservation Manager component to perform AIP creation and replicating to other storage locations.
8. Make entries to oracle table with details necessary for dissemination system for publication display.
9. Commit transaction

Ideally we would like the capability to bind all this into a single global transaction using a JTA Implementation provider and Spring Framework.

So hopefully if Fedora Transaction API is defined to work with two-phase commit (2PC) strategy and allows hooks into readily available JTA providers will be great.