Purpose

Improve the current import/export interaction between the RUetd application and the WMS.

Current state

Currently ETD's are prepared for import into the WMS system through the use of an *export* function in the RUetd application. This *export* function creates a METS/MODS XML document that contains metadata about the paper that was submitted and accepted along with the a TAR file that contains all files related to the paper. The name of the XML document is based off of the title of the paper and the TAR filename is established using the year of the submission plus a unique database id originating from the ETD database. In the XML document a reference to the TAR files web accessible location is located in the <METS:FLocat> element. The XML document and the TAR file are stored in the RUetd applications directory structure in a directory called *export*.

The WMS is configured to be made aware of the location of the exported papers along with XMLRPC code it uses which resides in the ETD application. When prompted by a WMS user the WMS, using XMLRPC, requests a list of all ETD's that have not been imported into the WMS. Once papers are selected and imported, the XML document is mapped into WMS and the TAR file is pulled, using XMLRPC the WMS renames the XML document in the ETD application with an underscore at the beginning to note it was imported.

Issues to resolve

Because the name of the XML documents is based on the title of the paper at times titles have created issues with importing into WMS. Also, other than the current filename of the XML document, there is no way of knowing a paper was exported. Once an ETD is exported to the WMS it still resides in the export directory under the RUetd application and not cleanup, deleted. Finally, the TAR file that contains all files related to an ETD submission needs revisiting. There is no tangible way of distinguishing the main document from supplementary files.

Proposal

The proposal is to create a series of RESTful web services to correct currently functionality issues and provide expansion for future capability. This will remove the need for the XMLRPC code; ETD's will be physically prepared at time of need and deleted after being exported. METS/MODS XML document will not be based on user provided information, but a generic naming schema. RUetd application administrators will be able to view the current status of an ETD once it was exported to the WMS. Also delivering all files related to a submission in a TAR will be removed. In its place each individual file will be represented as a <METS:file> element in the XML export document, thus removing the need for the TAR file.

Methods

RETRIEVE

Retrieves a certain paper based on a paper ID. Retrieval would include the METS/MODS XML document with a generic name and the TAR file of associated files related to the paper being retrieved.

Application Key – *Required* - A unique key provided by the RUetd application to the WMS used for handshaking.

PaperID – *Required* - Unique to the paper being exported

DELETE

Removes the METS/MODS XML document and corresponding TAR file from the export directory

Application Key – *Required* - A unique key provided by the RUetd application to the WMS used for handshaking.

PaperID – *Required* - Unique to the paper being deleted

MANIFEST

Returns a list of ETD's, in XML, based on certain criteria. Each ETD in the XML document will contain author name (first, middle and last), title, degree type, graduation year, graduation month, school ID and embargo period.

Application Key – *Required* - A unique key provided by the RUetd application to the WMS used for handshaking.

Search criteria - The ETD cataloger should be able to search for ETDs that are ready to be imported into WMS and already imported into WMS. The following the search criteria that must be supported by this method:

- Search by just graduation year or graduation year and month
- Search for embargoed ETDs
- Search by author
- Search by title
- Search by not imported or imported already

LOG

The current state of the paper through the external workflow process can be reported back to the RUetd application.

Application Key – *Required* - A unique key provided by the RUetd application to the WMS used for handshaking.

PaperID – *Required* - Unique to the paper being logged

Action – *Required* - Current action being logged. (ie imported, ingested, embargoed, etc.)

Note – Optional - Additional free text supplied