**Utility and Scenario for Ingesting XACML policies in R5.0**

The objective is to provide a utility for ingest of the xacml policy after the commercial videos have been ingested – see the scenario below. The user interface and software should be compatible (as far as possible) with WMS so this capability can be integrated into WMS in R5.1. In R5.1, the user should be able to ingest the xacml as part of the object ingest process.

**Scenario**

The assumption is that RUcore has been installed at NJVid, public videos have been exported and ingested, and the NJVid public portal is operational. The following is the assumed scenario:

1. A selection of FMG videos is ingested into the NJVid FMG collection. The collection will be indexed but not made public. The ingest is done by an NJEDge member – the Super-collection manager (SCM). For each video ingest, the SCM will receive an email alert. For R5.0, they will need to manually correlate the repository ID with a unique identifier for the video.

2. The SCM prepares xacml to reflect licensing agreements and the xacml is added in a post-ingest edit process. The policy for each video is ingested as a datastream with ID equal to "POLICY". We will develop a "lightweight" external utility for creating the policy xacml for R5.0 (see below). This function will be integrated into WMS for R5.1 (an early Fall, 2009 release).

3. Montclair (for example) creates an FMG commercial video collection object. This collection would likely represent a sub-collection under their main video collection object (although this is not necessary).

4. A dynamic collection is created by finding/indexing the xacml policies that provide access to Montclair. A minor feature has been made available in R5.0 to allow indexing of the policy xacml.

5. The Montclair FMG dynamic collection is attached to their portal and the videos are available for presentation. Note that no copies are made of the FMG videos.

6. If Montclair later licenses additional videos from FMG, the SCM edits the xacml for the respective videos. The collections are re-indexed nightly, so these newly licensed videos would be available the next day.

**Utility**

*Preparation by the SCM.* The SCM will have previously ingested 20 videos (for the evaluation) from FMG. Each video will have a descriptive paragraph, a title, duration, and a unique vendor ID. As the SCM ingests each video, he will receive an alert from the ingest process which will provide the Fedora ID of the object. The SCM will need to correlate the vendor ID with the Fedora object ID in preparation for creating the xacml.

*User Actions.*  The user interface should provide a loop that allows the SCM to create the xacml for multiple videos.  For the R5.0 evaluation in the summer, there will be, possibly, three vendors participating and eight institutions.  In creating the xacml, the SCM will execute the following steps:

1. From the prior ingest actions; the SCM has a list of fedora IDs that are associated with vendor videos.
2. The SCM inputs the Fedora ID of the video for which xacml is to be created.
3. The SCM selects "institutions";
4. The SCM selects "Submit and Continue".
5. The utility finds the object and adds the POLICY datastreams to this object.
6. The SCM can view and EDIT the xacml POLICY for the video object though DLR.

**User Interface**

A prototype of the user interface is shown below:

## Policy Utility

**Fedora Id** (e.g., njcore:12345):

**Select institutions to be allowed by XACML accesss:**

- William Paterson Univ
- Passaic County Comr
- County College of Mo
- Middlesex County Co
- Ramapo College
- Fairleigh Dickinson U
- Rowan University
- Rutgers University

Submit

After clicking on "Submit and Continue", a POLICY has been created and a message with the fedora id will be sent to the screen of the second page. "Continue" will go back to the first page. "Finish" will go to a third page with a message that the SCM is done with this process.

## Policy Utility

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XACML POLICY for Fedora Id: njcore:12345 has been created, ingested and validated.

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| Continue | | Finish |
|---|---|---|

**Implementation Details**

- The implementation code will be shared and reused in WMS R5.1.

- The utility will validate POLICY XML datastreams.

- It is assumed that the rights event has been ingested with the video object.

- The API-M method used in this utility will be "addDatastream" for the POLICY datastream and "modifyDatastream" for the rights event if rights event needs to be modified.

- A test portal for SCM will be setup to view the whole FMG collection in the portal.

- What values to use for each institution for XACML POLICY? These values will need to be setup as part of the Shibboleth Federation and transferred as part of the affiliation attribute.

- POLICY protected document (PDF) will be handled in release 5.2.

Ron/Jie/Jeffery