

Milestones

- *Advisory Board/Alpha Implementers Pre-Conference Meeting at NJEDge.Net Conference*

The Advisory Board met once more at a special meeting of all the NJVid Alpha Implementers and Advisory Board members at the annual NJEDge conference on November 18th, 2009 (<http://njedge.net/conference2009/conference-schedule/>).

The combined Alpha Implementers and Advisory Board meeting was a 2 ½ hour session with presentations by Sujay Daniel (NJEDge.Net) and Ron Jantz (Rutgers) on NJCore Development and Transfer from RUCore: Issues and how we worked through them; Commercial Video Launch: How they are authorized and authenticated through NJTrust; Current Commercial Video Negotiations by Jane Hutchison, and the last session was on “Where do we go from here?” by Sandra Miller, P.I.

Sujay and Ron gave the Advisory Board deep insight into the struggles, trials and tribulations encountered in transferring RUCore to NJCore, establishing the NJTrust statewide federated identity management service and redesigning the NJVid web site. Both received a resounding round of applause for all their hard work. Sujay demonstrated how NJTrust worked within commercial video access and Sandra demonstrated Fairleigh Dickinson’s partner portal located at <https://isweb.fdu.edu/secure/njvid.html> as an example of how any institution can have its own website designed around NJVid’s repository.

Things really grew involved and intense as we discussed NJVid’s future. In a brainstorming session, all thoughts of positioning the growth of NJVid were recorded on poster board. A major theme was how NJVid could blossom into a “community repository” (possibly titled “NJCore – a Community Digital Repository”) comprising multiple institutional repositories around the state. Within the community repository, the user would be able to search across all Fedora repositories across the state. David Pinto, VALE Executive Committee Chair and NJVid Advisory Board member, indicated that VALE is interested in this as the need for institutional repositories in the state without having to replicate across the institutions is strong. Other desirables included further development of streaming flash and the annotation tool, possible citation tool, visual mapping tool, and/or user tagging. The Board began to look at NJCore as New Jersey’s reliable Cloud Storage. Everyone was really excited and, although quite pleased with the progress of NJVid as a digital video repository, they are beginning to look forward to the potential of a community digital repository in general.

- *Completion of the Films Media Group (FMG) Test*

Twenty-five FMG titles were successfully transcoded and ingested for the initial test. Sujay Daniel created the collection in the repository and Tom Nemeth, Project Coordinator, catalogued the items. It remained only for the FMG testing institutions to try it out with their “Shibboleth” servers and this was very successfully accomplished. It is quite easy to login via Shibboleth using one’s institutional login and therefore never having to create new usernames or passwords for each new user. One thing we did learn was the necessity for SSL (Secure Sockets Layer) certificates to ensure that students and faculty would not have to bypass a screen that challenged their access to the website. These must be implemented at the local institution.

The original testers included County College of Morris, Fairleigh Dickinson University, Middlesex County College, Passaic County Community College, Ramapo College, Rowan University, Rutgers University, and William Paterson University. However, not all were able to actually participate in the test as Middlesex County College did not have LDAP in place and were trying to use a Centralized LDAP service at NJEDge.Net. However, in the middle of developing service in that manner, Middlesex decided to create an Active Directory and when that is completed, should be able to join in.

- *NJEDge.Net Conference – Commercial Video Launch*

Sandra Miller and Isaiah Beard launched the Commercial Video Collection at a Plenary Session at the NJEDge.Net Conference 2009. Isaiah demonstrated the authenticated and authorized access through NJTrust (Shibboleth) to the 25 titles ingested for the FMG test. Access to partner portal and NJTrust member, Fairleigh Dickinson University, was also demonstrated (as shown at the Advisory Board meeting) in which Sandra Miller logged in with a fdu.edu identity. The conference members really liked this aspect as students don’t have to leave their home institution’s website to go elsewhere – a real plus from an institutional point of view. There were lots of questions and excitement ran pretty high. Afterwards, the CIO from Georgian Court College came up to me and asked, “Where do I sign up?” I smiled and set him up with Sujay Daniel to start an NJTrust account.

This session was followed by George Laskaris, Executive Director of NJEDge.Net, who spoke about the progress NJEDge has made over in establishing a statewide identity management Trust Federation (NJTrust) as part of the NJVid grant to create an academic video-on-demand content repository. He explained that NJTrust creates a trust fabric of Service Providers and Identity Providers around the state. This framework enables services provided by one institution to be accessible by other institutions’ local authentication credentials. He further described how NJTrust provides the critical foundation infrastructure necessary for NJEDge to provide a variety of “Cloud services”.

- *NJVid's New Website*

As the Fedora Repository and WMS were duplicated at NJEDge.Net for NJVid, we decided to move the NJVid website responsibility and location from William Paterson University to their location. NJEDge.Net developed a new website at the same address as before, <http://njvid.net>. The Web Workgroup reviewed the website and several tweaks ensued, but the new website was hailed by all as a real upgrade. Many more features were added and it now uses the JWPlayer which allows for accommodating .srt files for closed captioning.

A Search feature was added to the Browse feature along with an Advanced Search. This enables users to type in title, date, name, date created, description, publisher, genre, table of contents, note, or target Audience (all part of the metadata in the full record). You can search through all of NJVid's collections or just through specific ones. You can change the number of results on page from 5 to 10, 25 or 50. NJVid's homepage now highlights New Videos so a frequent viewer will see changes right away and can just click to view. There's a quick feedback form that enables viewers to comment on either the website or on the NJVid project, itself, with an area for the respondent to enter his/her email address so that we can respond. We added the subject "History" for browsing. The new website was demonstrated at the Advisory Board/Alpha Implementers pre-conference meeting and the Plenary Session at the NJEDge.Net Annual Conference in November, 2009.

- *NJTrust*

NJTrust has been gathering steam in the State of New Jersey. We now have 13 members above and beyond the original 8:

Berkeley College
County College of Morris
Fairleigh Dickinson University
Middlesex County College
Montclair State University
New Jersey Institute of Technology (NJIT)
NJEDge.net
Ramapo College of New Jersey
Rowan University
Rutgers, the State University of New Jersey
Stevens Institute of Technology
The College of New Jersey
William Paterson University

NJTrust is also now nationally recognized. There is only one other statewide federated identity consortium and that is in the state of North Carolina – NCTrust. We regularly collaborate with them to share knowledge, but they wanted to know if we could inter-federate with them using Shibboleth. It's something that we would like to look into for the future.

- *NJVID Commercial Video FMG Test Evaluation*

An NJVID Commercial Video (FMG Test) survey on October 19, 2009 was sent to the alpha implementer institutions who participated in the FMG Test. Results from this survey indicated that the test was going well. Of the 10 respondents, 90% agreed or strongly agreed that accessing NJVID's FMG test titles was easy. Eighty per cent agreed or strongly agreed that it did not take long before they could view their video choice (i.e. from Shibboleth login time to actual viewing was a matter of seconds). However, only 50% agreed or strongly agreed that the quality of the moving image was good. Another 30% were neutral on this issue, so perhaps it is more a matter of streaming video quality compared to face-to-face viewing quality. Only 55% agreed or strongly agreed that the metadata record for FMG titles contained the information needed. However, another 44% were neutral on this issue indicating that the metadata record was not a major issue.

Some of the comments included the following: "The video loaded quickly. The quality on some videos was better than others. I noticed an audio lag on one of the videos." Quality control is always an issue and we are trying to monitor for that. Another comment indicated a desire for full screen viewing, "I would like a button that makes the film image larger". We do now have that button on our player and full screen viewing of videos is now available. These and other comments led us to make a number of improvements in our video viewing. However, the main concern was ease of access through Shibboleth login and that is, without a doubt, an obstacle that we have overcome.

- *Timelines*

It is important to note that the Annotation Tool timeline has been significantly delayed. One of the programmers, who had been working on it, left last year and Chad Mills is carrying on. Originally scheduled for December, it was then re-scheduled for May release, but another delay has pushed it back to July, 2010. This created some real problems for the Learning-on-Demand (LOD) Collection development as we had concluded that we would probably use the Annotation Tool for LOD upload. However, Sujay Daniel, NJEDGE System Architect, is working on a way to circumvent this delay with a program that allows for upload through the website. This is critical to keeping LOD on target for release before the end of the grant.

Activities Review by Group

- *NJVID Project Team*

The biggest focus of the NJVID Project Team was to finish up with the FMG Test and to prepare as much as possible for the official Commercial Video Launch scheduled for the NJEDGE.Net

Annual Conference. Several issues arose and were dealt with such as the SSL certification, a Quicktime issue and finalizing the Partner Portal at FDU. One of the main changes in process was a result in the Quicktime issue. We decided to go with a Wowza streaming server at NJEDge.Net rather than a Darwin as Rutgers has. To that purpose, William Paterson University began to prepare the specifications and is currently installing a Wowza streaming server for testing. In the meantime, NJEDge also began to make preparations to move away from the Darwin server to a Wowza server.

More commercial videos began to come our way as VALE negotiated more agreements with other vendors. We received BioMedia DVDs and needed to work on transcoding and ingesting those as well as FMG. There were more issues with FMG that had to do with a drive failure, but we were able to go around that with DVDs. BioMedia presented other problems. They switched their archival files to MPEG4 files and we had to work with those. Other issues with BioMedia included a difficulty in matching up some of the videos with the metadata and getting the thumbnails. The BioMedia Collection is still not up yet at the time of this report, but it is close.

In the meantime, more Commons videos were continuing to come in from other institutions. Tom Nemeth has been keeping track of the videos as they come in and at what point in the process of ingestion they are at any point in time. Close work with Isaiah and Sujay was critical for this part of the production process.

An interesting development in working with the Commons was the receipt of several ¾" tapes from Bergen Community College. As this is a much older format, we actually had to scour Rutgers and William Paterson University for access to a ¾" beta unit. Finally, we were able to find one that was reliable enough to work with, but it took several months.

In January, we attacked the issue of adding transcripts to the WMS. By adding an event in provenance and reingesting, we were able to accomplish this. Additional linking to the website was also necessary. We did it first with the Hope Historical Society and have subsequently done it with The College of New Jersey's (TCNJ) videos that came in with a transcript as well as 4 FMG titles that were accompanied with a Teacher's Guide. Since a deposit agreement was signed with TCNJ, we are hoping more will soon follow. They have about 50 ¾" tapes to contribute to the NJVid Commons.

Another collection was started for NJEDge.Net, itself. Since so many valuable instructional technology educational videos are recorded at the Annual Conference and at NJEDge.Net's Annual Faculty Best Practices Showcase, we have now developed a collection for those videos for all state educators integrating technology into their curriculum.

A lot of discussion over these months was in how to incorporate closed captioning into NJVid. It's not part of the grant, but we do feel that it is something that we want to be able to offer. We looked at a lot of the closed captioning tools such as Magpi, but don't feel that they are

quite ready for “prime time”. However, we did build into the website the ability to play .srt files so if the contributor can create that file, NJVid can support it now.

In March, NJVid upgraded to RUCore 5.1 which assisted with Unicode and format issues. One of the issues before had been the inability to use true Library of Congress notation such as the use of &. Now, we are able to do that.

Video technology is rapidly changing – one of the reasons we developed NJVid in the manner that we did with archival files to be able to go back to in times of change. HTML5 is on the new frontier. Isaiah will be drafting a document on it that will demonstrate the requirements, etc. Right now, Internet Explorer doesn’t support mobile computing but HTML5 does. What’s more, there are no downloads or plug-ins. This will be something we need to consider as we move forward.

- *NJVid Working Groups*

Locally-Owned Content Collections – The Commons continues to grow, but slowly. Recently, four William Paterson University music management seminars were added, two Bergen Community College archival videos, and six of Montclair State University’s Carpe Diem television series. However, all total, we are up from the original 30 locally owned videos launched in November, 2008, to 83, so progress is indeed happening.

Sometimes, it takes a special trip to the institution’s site to engage them in contributing to the Commons. Sheri Prupis and Sandra Miller visited The College of New Jersey (TCNJ) on March 11th, 2010, and spoke with representatives from various areas such as the Library, Academic Technology, and Marketing/Public Relations. All have educational videos that they would like to share, but were unsure of the process. Face-to-face explanation and demonstration helped to overcome their hesitancy. Now, we are also looking forward to receiving approximately 30 more ¾” tapes from TCNJ and 24 more from NJEDge.Net. The beauty of NJVid is clearly demonstrated in our ability to digitize and preserve these collections.

Commercially Licensed Video Collections – The Commercial Video workgroup has been the busiest. They met on November 13th, 2009, with the VALE Digital Video Committee. The new website (in beta test at that time) was demonstrated. It was at this meeting that the issue of collection architecture for each institution was first discussed. Follow-up sessions have resulted in most NJVid-participating institutions creating appropriate collection architectures which have now been implemented in NJVid’s portal.

Since that date, the VALE Digital Media Committee has been hard at work in developing agreements with new Commercial Video Vendors. We have been able to secure deposit agreements with Films Media Group, Media Education Foundation, BioMedia ASSOCIATES, and Intelcom. We are currently seeking agreements with Ambrose, California Newsreel, Icarus (and

Fanlight which was recently purchased by Icarus), VEA, and National Film Board of Canada. The new price list for all of these was distributed on April 15, 2010.

NJVid's Commercial Video collection was launched last November. At that time, there were only 25 FMG titles available. Currently, we have 84 Commercial videos and it's growing rapidly. We actually have up to 700 FMG titles alone to transcode. The focus now is on rapidly growing this collection as quickly as possible and the transcoders (students included) are very busy.

Web Workgroup –In early November, NJEdge.Net took over the website from William Paterson University. The new website was well received (see above for more information). The Web Workgroup met via conference calls and discussed the new website. There were quite a few bugs initially that needed to be worked out. We have noticed far more issues when NJVid is viewed through the Internet Explorer browser than through Firefox or Safari. Tom Nemeth worked up a punch list and he and Sujay Daniel consistently worked on the website to correct the errors found.

Intellectual Property and Copyright – This workgroup did not meet officially since the two launches of the Commons and Commercial Video. Most of its work is completed at this stage.

Metadata Workgroup – Although, the Metadata workgroup did not meet officially within this past timeframe, it may soon be called upon again to look at the metadata required for Learning-on-Demand (LOD), our final collection. It is anticipated that LOD will not require as much metadata as the more permanent objects in the Commons and the Commercial Video Collection, but should conform to the same standards.

Outreach and Marketing – An Outreach and Marketing conference call took place on February 3rd, 2010 in which the main discussion was around different types of communications to be used with New Jersey institutions. For private communications, we would continue to use our list-servs. For public announcements, we would like to initiate a blog and develop a Facebook site. Tom Nemeth could become the moderator of this site. However, the blog and Facebook site have not yet been developed simply due to other concerns taking precedence. It's an interesting idea that we'd like to try out once LOD is in place.

An Outreach Survey, sent to small museums and historical societies in NJ, was mailed by Bob Wolk, Librarian at William Paterson University, with the purpose of locating collections of educational videos, prints, and photographs that might be candidates for inclusion in the NJVid and New Jersey Digital Highway Projects. Working with lists from the League of NJ Historical Societies and the Museum Directory, more than a hundred institutions were contacted directly, as well as others through a random survey. Although most of the respondents did not have educational videos, ten respondents offered videos or at least expressed interest in participating in NJVid.

These included Cranbury History Center, Hamilton House Museum, Camden County Historical Society, Hope Historical Society, Fort Lee Historic Park, Monmouth County Park System – Historic Services Division, Lyndhurst Historical Society, Historical Society of Ocean Grove, Cumberland County Historical Society, and the American Hungarian Foundation. Tom Nemeth has been contacting these institutions to determine the status and availability of their videos for NJVid. Of these respondents, thus far, Hope Historical Society has contributed their main, introductory video covering the background of the town of Hope, as well as a transcript of the program – both now available to view on NJVid. It’s wonderful to be able to include these small organizations in this project. They would never have been able to stream their videos without NJVid as a resource.

Sandra Miller, P.I., has been collaborating with members of several different organizations looking to implement something similar to NJVid such as the California County Educational Technology Consortium (CCETC) who was submitting an IMLS NLG proposal. She has also been in email conversation with Andrea Chappell, Instructional Technologies and Multimedia Services, Information Systems and Technologies of the University of Waterloo in Canada. She has also been working with Christine Roysdon and Bonnie Lynch from Lehigh University in Pennsylvania. They are part of a consortium of several universities who are looking to implement something similar to NJVid or to participate in NJVid. Interestingly enough, we have considered that as an option to increase revenue, but are not necessarily ready to handle it. We did share all our information with this consortium, however, and will continue to do so as they go forward. In addition, George Laskaris, Exectutive Director of NJEDge.Net, is working closely with NCTrust (NJTrust’s equivalent in North Carolina) to look at ways in which our two federated identity trusts can cross-federate. This is a possibility that we will be looking into.

Finally, Sandra Miller participated in an IMLS sponsored research study about how managers of digital cultural collections control who can access collections and how those collections can be used. In a phone interview conducted on February 23rd, she responded to a full list of questions they were using for their survey. We’re looking forward to the results which should be published in an IMLS report and in other academic publications.

Conferences and Presentations:

- EDUCAUSE Mid-Atlantic Regional – January 14th, 2009 – Sandra Miller and Sheri Prupis
- MCNC – December, 2009 – George Laskaris
- VALE – January 8th, 2010 – Tom Nemeth and Bob Wolk
- Webwise – February 2nd-5th – Sandra Miller and Tom Nemeth
- NERCOMP – March 10th, 2010 – Sandra Miller and Sheri Prupis
- Internet2 – April, 2010 – George Laskaris
- ACM – April, 2010 – Sheri Prupis

Learning-on-Demand – The Learning-on-Demand Workgroup met on December 11th, 2009 to discuss needs, specifications, and policies for the development of this final NJVid collection.

Representatives from Rutgers, William Paterson University, Montclair State University, NJIT, and Brookdale Community College were in attendance. Although this workgroup had met the very first year of the grant, this meeting was the first real meeting because we were finally going to develop this collection. Some institutions already have some kind of LOD in place. They wanted to compare what they were doing with what NJVid would have. Others were just beginning to consider it and wanted to know how NJVid would handle their needs.

Several institutions use Camtasia Relay to record content and publish it into iTunes U. However, iTunesU can be restrictive (500GB limit) and only downloads to iPods. Another big question was whether or not students would be allowed to upload as well as faculty. In this meeting, it became quite apparent that the WMS was not easy enough to use for faculty. The group expressed a desire for a quick-and-easy metadata template. At this point in time, we thought we might be able to use the Annotation Tool for a quick-and-easy upload and would thus live outside the permanent NJCore collection hierarchy comprising personal video collections, instead. However, with the later knowledge gained of the Annotation Tool's delay, this initial approach to LOD changed.

On March 10th, 2010, Sujay Daniel released Documentation version 1.3 for NJVid Learning-on-Demand content creation. LOD roles within the institution are described. The specifications for upload and guidelines are described such as the fact that there will be no archival of the master file so local file backup becomes the responsibility of the contributor. Authentication and authorization is through Shibboleth. Supported input and output video formats are described as well as the file upload method. This preliminary documentation is attached in Appendix A. The test site for LOD is in place and will be presented to the LOD workgroup shortly.

Authentication and Authorization – Once NJTrust was established and implemented, this workgroup no longer needs to meet. If the need for a more granular approach to authenticating and authorizing access, such as specifically within a course management course website develops, this group will help to develop standards and guidelines. However, this is not within the scope of the grant.

Sustainability – This workgroup began to pick up steam in the final year. The workgroup convened on December 10th, 2009, to pick up where the Advisory Board meeting had left on in its brainstorming of “where do we go from here.” The possibility of moving NJVid from just videos to a repository of other types of items such as electronic theses and dissertations (ETDs) was brought up. VALE would like to see NJCore expand beyond video and include There is also a lot of interest from institutions and consortia outside of New Jersey to join NJVid (they don't want to reinvent the wheel). However, fine-tuning the repository and developing the appropriate support for ETD ingestion could create more development costs.

Another alternative is the possibility of expanding our borders beyond New Jersey and including institutions or consortiums from other locations. There has been so much interest. However, at this point, NJVid is looking to sustain itself as is and possibly search out funding for further

development costs from other resources. Ultimately, it was decided to work backwards from NJEDge.Net's costs and develop different levels of pricing according to collection usage that would meet those costs. Since NJEDge.Net is a 5013C, fees would need to be managed by them.

Another conference call was held on January 22nd, 2010, in which the first possible pricing models were discussed. Ashish Rajadhyaksha, graduate student in William Paterson University's MBA program, was brought on board to develop an appropriate business model. Other resources were looked at such as the Ithaca Case Studies in Sustainability, "Sustaining Digital Resources: An On-the-Ground View of Projects Today", CollegeAnywhere, Discovery Education, Academic Education, etc. A "fees for service" policy was abandoned as EDUCAUSE presenters from other consortia have found this not to be viable. A flat fee appears to be much more viable.

Another meeting was held on February 3rd, 2010 in which alternative funding methodologies were examined in depth. Ashish shared his first draft of the NJVid Sustainability Study and Business Plan and Sujay Daniels' cost analysis was discussed. From that time on, several meetings have occurred in which discussions concerning NJVid's means of revenue to cover costs and several more drafts of the NJVid Sustainability and Business Plan have resulted. This process is ongoing and very focused at this point in time.

Performance Summary

This reporting period finds the project on budget. William Paterson University purchased the Flash server to test Wowza and expended the funds allotted by the grant (\$6,122) with a match of \$4,068. We may need to purchase further storage options which will bring the match up even higher.

The timeline on the Annotation Tool has been pushed back quite a bit because of specification changes and loss of one programmer. However, the timeline for Learning-on-Demand, although delayed a bit, is still in place to be accomplished before the end of the grant. The FMG test was accomplished in a timely manner and the Commercial Video Launch was accomplished right on target last November. Progress is being made on the development of the Business Plan for NJVid. We should be able to meet that target on time before grant's end.

As a final note, we'd like to point out the fact that NJVid is getting more and more attention in the outside world. Jane Hutchison, President of CCUMC and Chair of VALE Digital Media Committee who negotiates the licensing fees for NJVid's Commercial Video Content, commented on the copyright morass and NJVid's approach to dealing with it for New Jersey:

...many of us are confused regarding our ability to stream copyrighted materials...We have been working in the state of New Jersey with the help of an Institute of Museum and Library Services grant, to provide digital video delivery to the institutions of higher education as well as others. NJVid, the name of our project, provides content in the public domain, homegrown teacher or course related content, and commercial content.

We have worked out agreements with several distributors so that our institutions can license video content in-perpetuity and stream to their users through Shibboleth, our authentication program.

Hutchison, J. (2010). From the President...*The Leader*, (28)2, 1.

Another mention was made in NorthJersey.com's article on "High tech quickly changing college libraries" (4/23, 2010)

Streaming video is also being sought by both students – to help with research – and faculty – to help in planning classes. William Paterson received a federal grant to help develop NJVid, a statewide digital portal that allows access to videos.

http://www.northjersey.com/news/education/91887824_High_tech_quickly_changing_college_libraries.html

Lastly, NJVid was mentioned in Library Journal in their coverage of the ALA Midwinter digital Media Discussion Group meeting (1/17/2010):

When the discussion moved to the storage, management, re-use, and curation of digital content through cloud computing, NJVid(New Jersey Digital Video Repository) was broached as one successful such model. NJVid, a grant-funded, statewide digital video portal and repository, serves the state's educational institutions, libraries, museums, archives, and cultural centers.

http://www.libraryjournal.com/article/CA6715430.html?rssid=191&utm_source=feedburner&utm_medium=email

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NJVID Learning on Demand Content Creation

Documentation version 1.3

March 10, 2010

Introduction

Learning on demand is an NJVid module that allows authorized institutional users to upload supported presentation format videos directly to the NJVID website. This module will streamline and speed up the content creation and deposit process for contributors from the teaching and learning community, where quick upload of videos is preferred over long term archival.

LoD Roles

Institutional Admin [ICM]

This role is assigned to a person at every institution. Every institution assigns an ICM who overlooks registration, access and video uploads for that respective institution. He assigns the user roles based on the user affiliation and monitors usage for that Institution.

Duties:

- Oversees the usage of the Institutional account and makes sure the account is not close to the storage limit.
- ICM is the POC for each institution and responsible for training all users within the Institution.
- Grants roles to users within institution where role is missing. (Roles have to be faculty, student, staff.)
- ICM can add or remove users through the web interface
- Manages Learning on demand objects for any user (cancel, monitor)

Super Administrator [SCM]

Super-admin is handled by the hosting service – someone at NJEDge or NJVID.

Duties:

- Assigns and manages Institutional admins
- Sets storage limits/institution (*Data Store Size = X GB for each Institution*). Each institution can have a different value.
- Monitors all jobs for any user or institution.
- Can delete or add users
- Everything Institutional Admin or User can do.

Rule

Each institution that wants to participate in this module

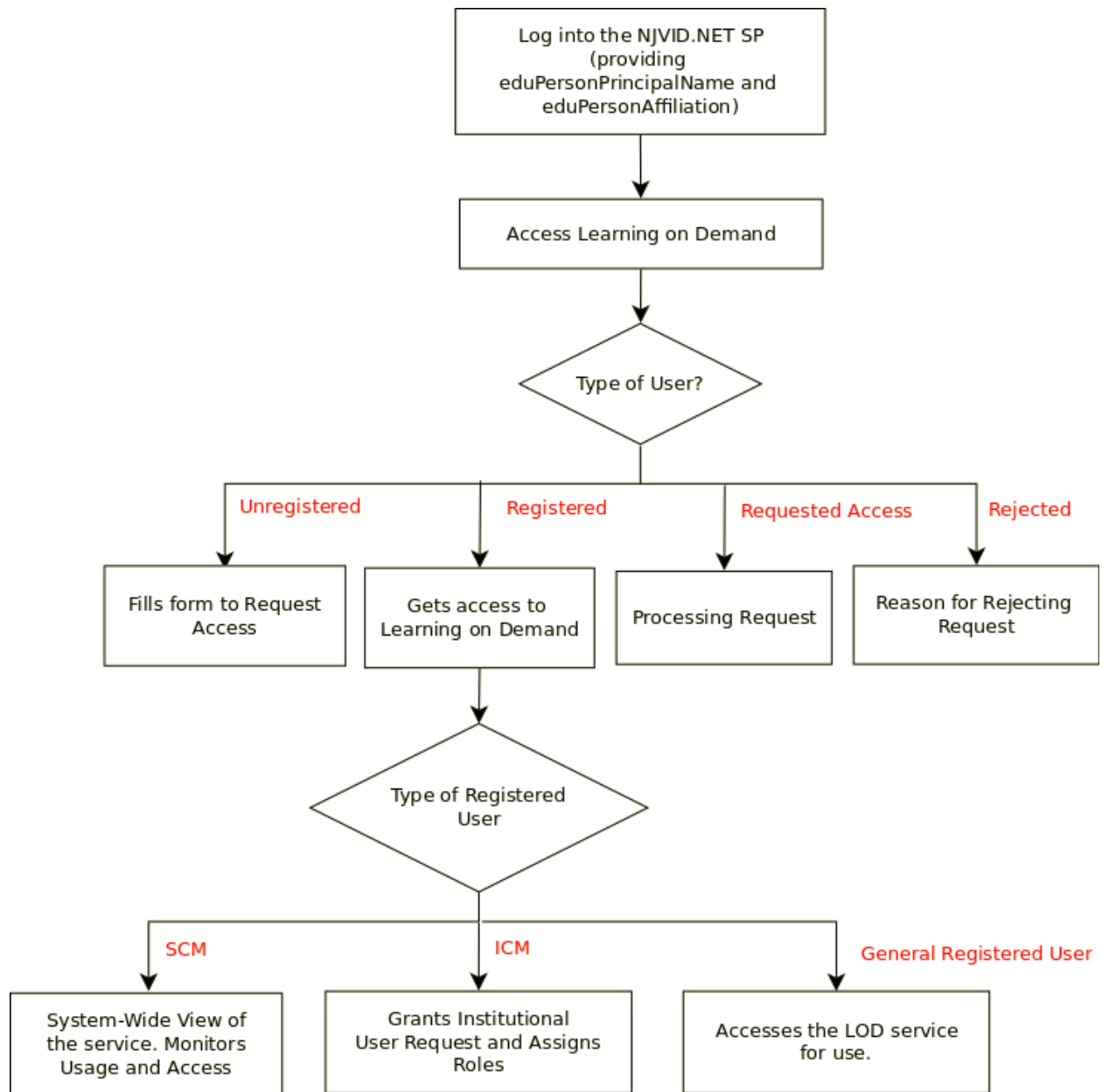
- will need to assign an ICM (also the POC)
- is assigned a storage limit.
- ICM is responsible for managing the storage quota among their users.
- will need to release “eduPersonScopedAffiliation” and “eduPersonPrincipalName” attributes through Shibboleth to the NJVID service provider.
- does not require archival of the master file and is thus responsible for keeping a local backup copy (local backup storage is cheap!)
- understands that purged objects cannot be recovered

Authentication and Authorization

Authentication is through Shibboleth. The Identity Provider must pass “eduPersonScopedAffiliation” [e.g. staff@wpunj.edu] **and** “eduPersonPrincipalName” [e.g. joe@wpunj.edu]. We will try to avoid content without attribution to a specific user in an organization. Non-release of these attributes will lead in content without creator titles. Non-shibboleth users will not be able to upload content through this system in NJVID.

Authorization: First-time user: Once a user logs through their IdP, they will need permission from their I-admin for access into the LoD system. The user fills a form and an email is sent to the I-admin for approval. On seeking approval, the user can start adding videos and managing their own content.

Returning-users: User logs through Shibboleth and can immediately start managing and adding content.



Creating Learning on Demand Video

Supported Input Video formats

- AVI
- MPEG
- WMV
- MOV

Supported Output Video formats

- FLV
- MP4

File Upload Method: It can be one of the following

- Can be from their computer. File browse
- FTP or HTTP Location: To be used when file size is large or and when videos were sent to Rutgers or NJEDge to convert DVD/Tapes to file. The encoders will send the video creator the URL of the ingested file. FTP location can include authentication details.

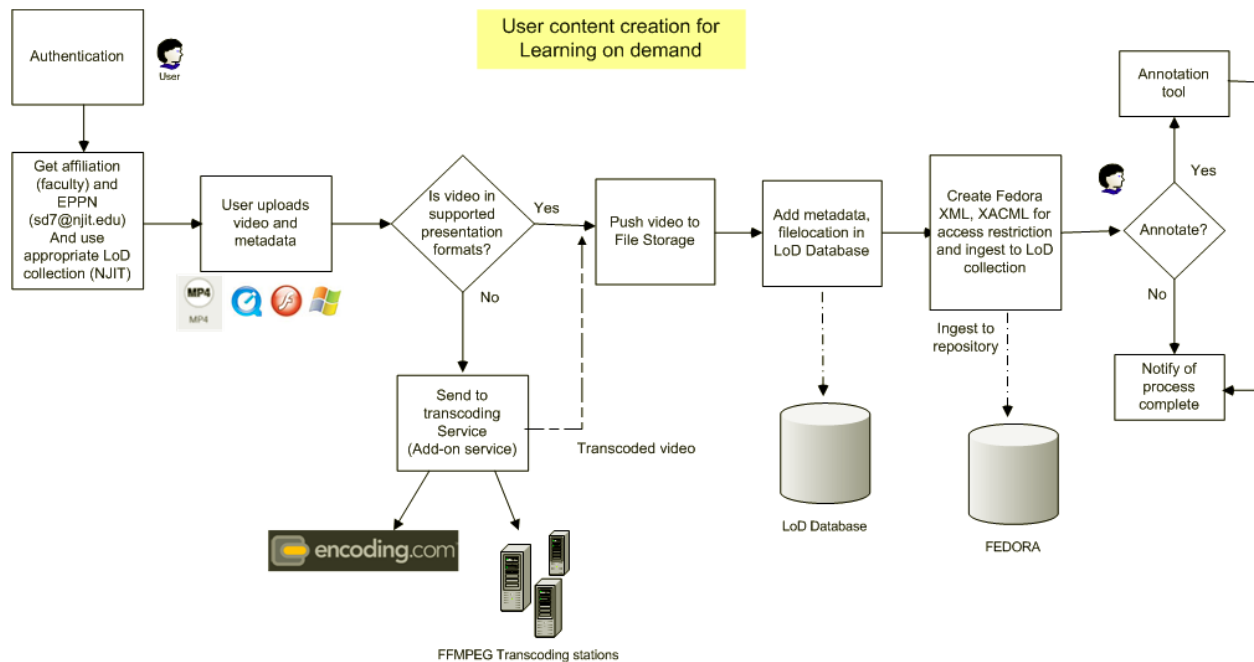
Digital Transcoding

Institutions willing to pay for transcoding (conversion from unsupported formats to supported streaming formats) will utilize the services of a third-party encoding solution called encoding.com (currently being tested and developed) or our own solution using FFmpeg (in the future). For the alpha testing, the service will use encoding.com.

Workflow:

After users are authorized for the service, they will be presented with their profile screen where they will be able to see their institutional usage, jobs (videos uploaded to be encoded) in progress and the videos they have uploaded. This service allows transcoding videos to the formats supported by Learning on Demand, this is required when the user uploads unsupported video formats to Learning on Demand.

To upload a video, the user fills out the title, description and metadata pertaining to the video and may optionally provide a HTTP or FTP location. The file is tested to see if it is in the proper and supported NJVID presentation format. If it is in the acceptable format, then the video is uploaded to a file storage location, and this location and the metadata is stored in a database. If the file is not in a supported format then the file is sent to Encoding.com for conversion. The LoD service communicates with Encoding.com through Encoding.com's API service and monitors all jobs in queue and process start/complete. A Fedora XML Object is created to maintain consistency with NJVID and allows integration with the existing search engine as well as to support the annotation tool. Once the video has been entered into the database and ingested into the repository, the user is given the option to create annotations.



Questions

- How do we handle Institutions that have multiple colleges and share the same domain name and want separate quotas. Example: Rutgers
- What metadata do we store in the Fedora XML object?
- If the ICM specifies the role for a user, when does the role expire? Should the role expire? What if the role changes?

Features planned in next release

- playlists
- access restrictions (share via link, etc)
- finer statistics

 Lod CC: Sujay Daniel (Mgr/architecture/design), Vineet Phillips (programming lead), Lawrence Xiao (intern/programming)
 Annotation tool - Chad Mills, Rutgers University
 Encoding: encoding.com