

RUcore

Rutgers Community Repository

Format Overview:

RUcore Platform / NJVid Video Portal

Presented by:

Isaiah Beard

Digital Data Curator

Rutgers University Libraries



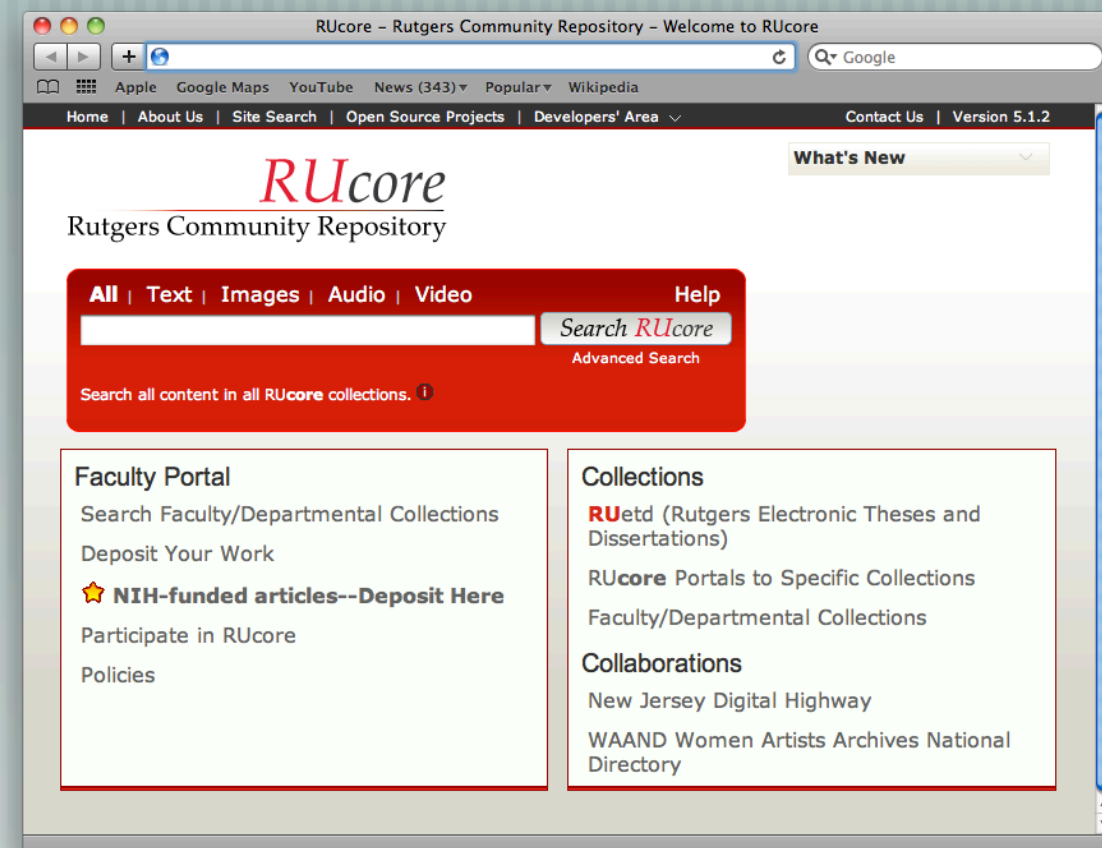
November 4, 2010 • AMIA/IASA 2010 • Philadelphia, PA

This portion of the survey covers the selection strategy and criteria for the preservation video formats used in the Rutgers Community Repository, the digital preservation platform for Rutgers University Libraries. RUcore is built upon open-source technologies when available, and key components of the platform are available for use by others using our OpenWMS and related software packages, available on the RUcore website, at <http://rucore.libraries.rutgers.edu>

Overview

RUcore is:

A repository of digital research and educational materials created and used by the University community and its strategic collaborators.



Overview

RUcore is:

Open Source

Platform Independent

Format Agnostic

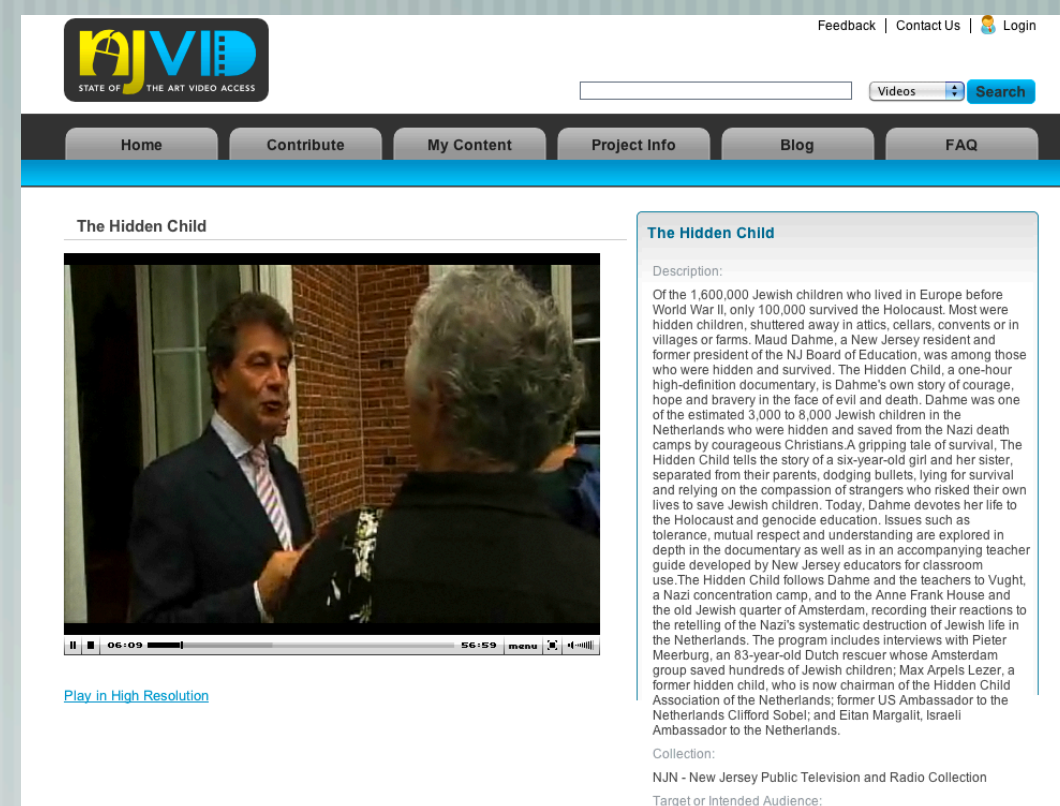
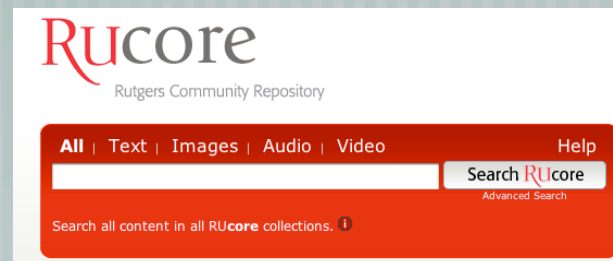
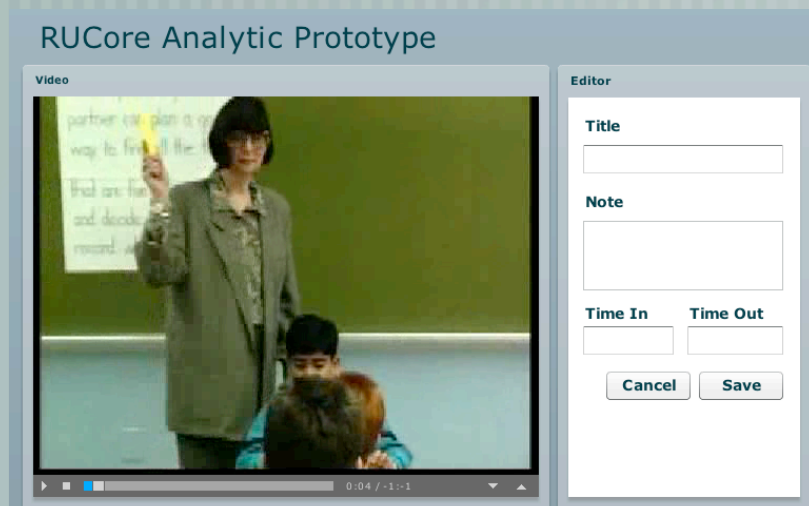


A key feature of RUcore is its flexibility. RUcore isn't just about video; it stores a wide variety of object types. Still images, documents, audio, video and soon data sets, are all safely preserved digitally on this platform. Consideration is also given to analog vs. born-digital object types, and an extensible, flexible metadata and cataloging platform rounds out the suite of tools offered.

Overview: Video

RUcore is:

The primary platform behind research and statewide video content preservation and delivery systems.



RUcore
Rutgers Community Repository

AMIA/IASA Conference 2010 • November 4, 2010

RUcore is flexible in its public-facing and end-user components as well. Aside from serving in an institutional repository capacity, RUcore preserves, catalogs, and serves objects – video included – for academic institutions as a content-delivery mechanism; for cultural heritage institutions to preserve and present their valuable objects; and development is proceeding for researches to use the platform as a powerful analytic tool.

RUcore's technologies are key in the deployment of a statewide Video Portal known as NJVid (<http://njvid.net>), preserving multiple hours of community-contributed video content. It also delivers thousands of hours of commercial streaming video purchased by institutions within the state as part of their educational curriculum.

Formats & Standards Rationale

Sustainability

- Use well-established formats, standards and workflow processes.
- Seek use of open, unencumbered and/or multi-platform technologies where practical.



The preservation mandate for RUcore requires careful selection of container formats and codecs for preservation, and video is no exception. Great care was exerted to ensure we did right by the valuable analog moving images that are being preserved in RUcore. The storage of many of these objects on decaying and obsolete analog formats means that in the very near future, the digital archival masters stored here will be the last surviving copies of this material.

This means that the preservation format we select must be unencumbered by vendor lock-in or significant proprietary issues, and must be widely supported and accessible to more than one or two hardware/software platforms.

Formats & Standards Rationale

Reliability

Use tried and tested video technology standards in widespread use

Accessible by multiple hardware and software platforms

Well-documented: Familiar to most preservationists and editing houses



For this reason, we take the cautious route. There's nothing bleeding-edge or exceedingly trailblazing in our format selection, and this is done deliberately. We prefer to err on the side of caution and wide format acceptance in entrusting our analog video content to a particular codec or container format.

Formats & Standards Rationale

Migration to New Formats

New technologies and formats are carefully reviewed and considered for viability, adoption rates, and should have at least the same sustainability as the preceding prevailing format.



Of course, the formats we select today will not last forever. Digital preservation is a continual moving target, and periodic review of our decisions must take place. New formats are evaluated and reviewed, and our current formats are re-evaluated to determine whether they still retain wide acceptance and support.

If a decline in support for the current selections is detected, new options are considered, proposals drafted, and our steering committee evaluates and makes the final decision, with developers and impacted parties constantly kept in the loop.

Formats & Standards Rationale

Documentation

On RUcore website: (in developer's area)

Concise and always updated:

<http://page2pixel.rutgers.edu/standards>



RUcore

Rutgers Community Repository

AMIA/IASA Conference 2010 • November 4, 2010

The RUcore website (<http://rucore.libraries.rutgers.edu>) documents our policies, meeting minutes, decisions and workflow processes for all of our format choices. Our current listing of standards and recommendations are also kept in concise form on my staff blog, at the above URL.

Preservation Formats

For Analog Video

Uncompressed AVI is our preservation format of choice.

Usually captured from the source into our Matrox Axio digitization system, and exported from Adobe Premiere.



Our choice for preservation of analog video has been, and for at least the near-to-moderate term continues to be, Uncompressed AVI, 10-bit 4:2:2 with uncompressed PCM audio.

Preservation Formats

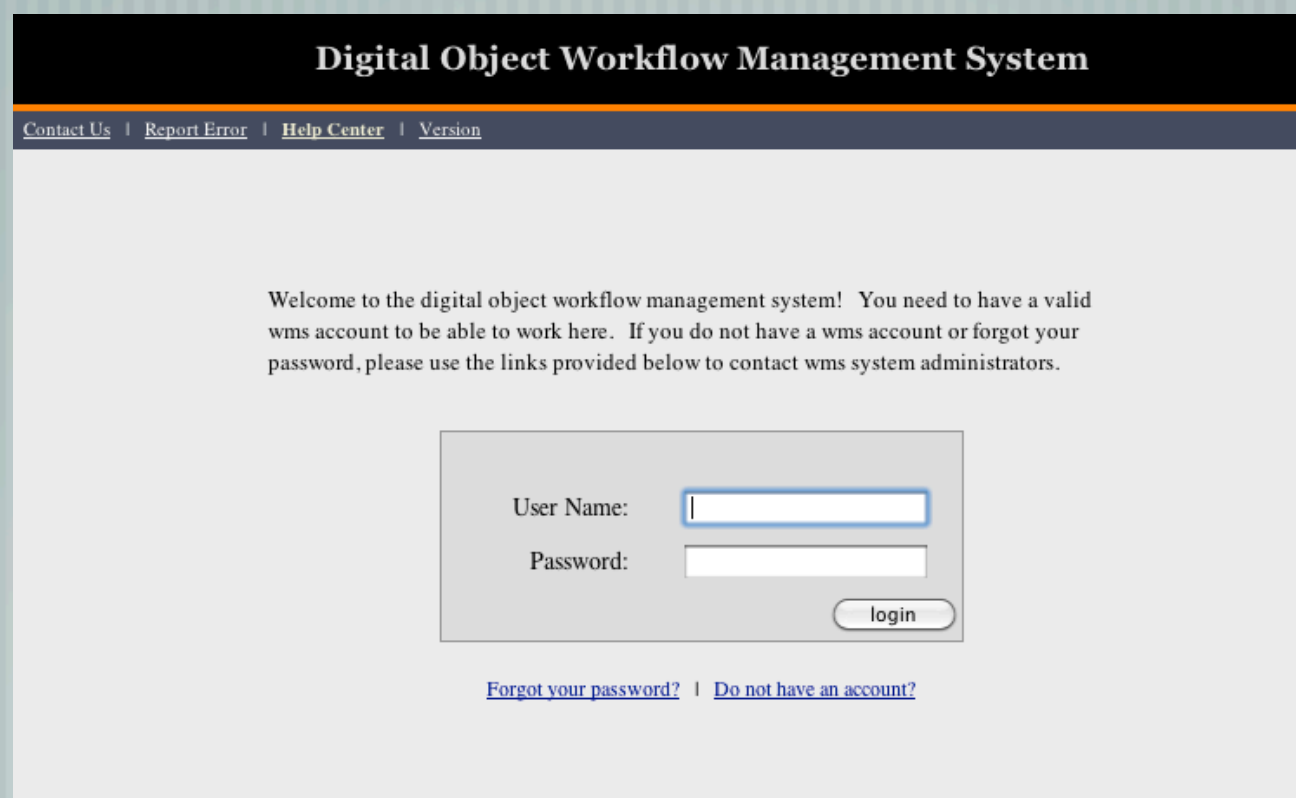
— [Why AVI?

- Workflow is straightforward, uncomplicated, no barrier to entry
- Fits well with our conservative, cautious, “tried and true” approach to format selection
- Transparency puts minds of our preservationists at ease
- It just works! And has for a long while.

Digital Asset Management with the Workflow Management System (OpenWMS)

Cataloging and Repository Object Control

Permits cataloging of digital objects, ingest and management of their collections and metadata

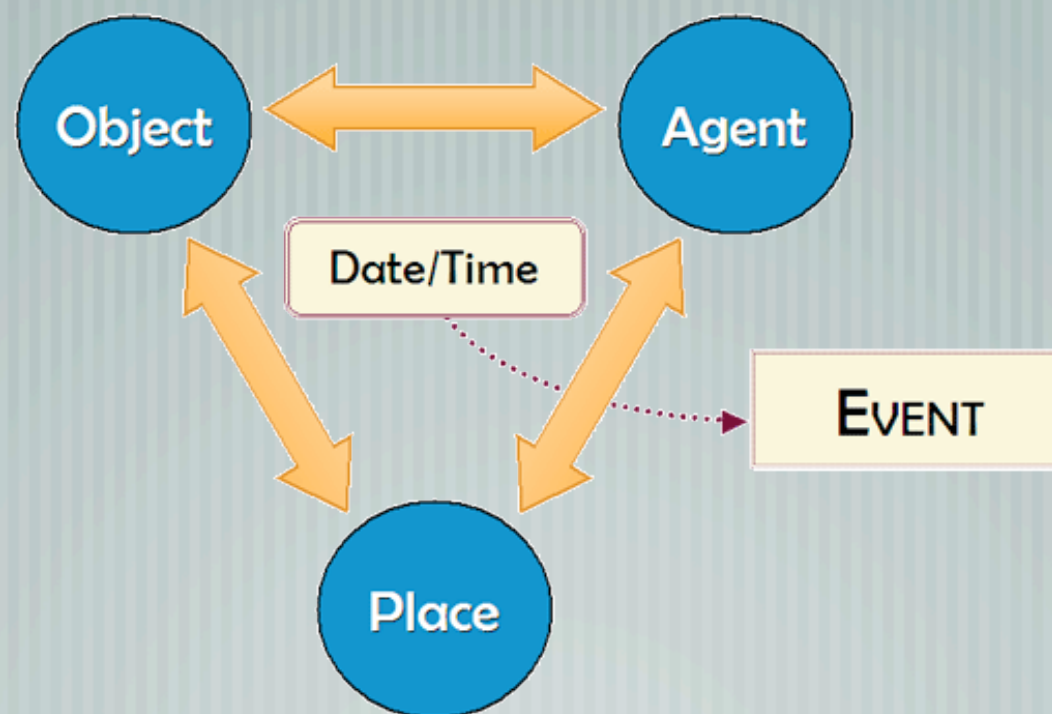


The screenshot shows the login interface of the Digital Object Workflow Management System. At the top, there is a black header with the text "Digital Object Workflow Management System" in white. Below the header is a dark blue navigation bar with links: [Contact Us](#), [Report Error](#), [Help Center](#), and [Version](#). The main content area is white and contains a welcome message: "Welcome to the digital object workflow management system! You need to have a valid wms account to be able to work here. If you do not have a wms account or forgot your password, please use the links provided below to contact wms system administrators." Below the message is a login form with two input fields: "User Name:" and "Password:". To the right of the "Password:" field is a "login" button. Below the form are two links: [Forgot your password?](#) and [Do not have an account?](#).

As mentioned earlier, our developed tools permit us to bundle our preservation video object, along with presentation formats and metadata, into a single preservation object that is preserved using the FEDORA repository platform.

Digital Asset Management with the Workflow Management System (OpenWMS)

- Provides us with event-based control of our digital objects



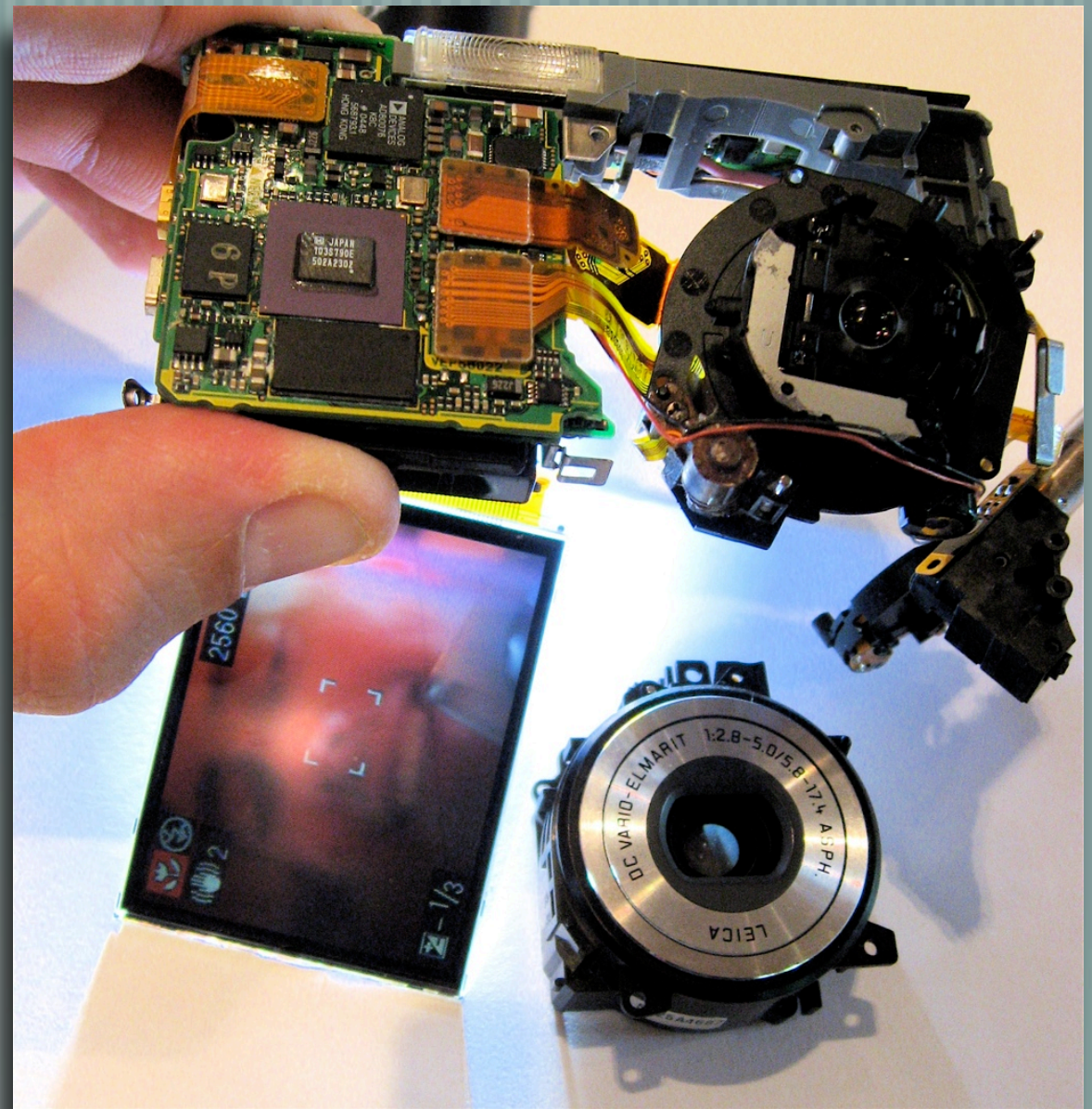
Formats/Standards Contact:

Isaiah Beard

Digital Data Curator

Rutgers University Libraries

<http://page2pixel.rutgers.edu>



November 4, 2010 • AMIA/IASA 2010 • Philadelphia, PA