

Name: PANIC (Preservation webservices Architecture for Newmedia and Interactive Collections)

URL: <http://metadata.net/newmedia/>

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The PANIC (Preservation webservices Architecture for Newmedia and Interactive Collections) project is one of the current research activities being undertaken by the MAENAD [Multimedia Access across Enterprise, Networks and Domains] group at the DSTC, Australia. It is based at the University of Queensland. The DSTC is a national IT research and Development Centre that focuses on the needs of the Government, Defence, Health, Telecommunications, Finance and Education sectors. It draws on the research and collections of US organisations such as the Guggenheim, BAMPFA [Berkeley], and San Francisco MoMA, as well as the collections of its own National Gallery, Queensland Art Gallery, and MAAP [Multimedia Art Asia Pacific].

It identifies the problems regarding long-term access to new media artworks as

- Highly fragile, and sensitive to environment
- Ephemeral – high obsolescence rate
- Difficult to capture – boundary problem
- High mobility – traveling exhibitions
- Valuable
- No standards or best practice guides [Hunter and Choudhury, 2003]

The goal of the PANIC project is to provide an Integrated Preservation Framework which supports:

- Very large, heterogeneous, distributed collections
- Multiple formats
- Changing organizational needs
- Which is flexible and adaptable
- That supports new emerging formats, software, recommendations
- Incorporates recommender services/decision support
- And is cost-effective

Using a variety of case studies, the project's key stated objectives are to:

- Review current and proposed strategies and existing projects that focus on the preservation of new media art, e.g. Compare emulation, migration and metadata approaches to multimedia preservation
- Develop a classification set (i.e., a *Type* vocabulary) for multimedia objects and determine the criteria necessary to classify digital objects into such categories.
- Quantitatively and qualitatively analyze and compare various strategies (emulation, migration, documentation) for preservation of the different classes of new media art by applying them to a number of case studies.

- Conduct interviews with content creators to determine their attitudes to preservation strategies and the possible effects of preservation on creative integrity, meaning, authenticity, originality.
- Based on the test cases, extend and refine existing strategies or develop new strategies for the preservation of multimedia digital objects.
- Develop tools, workflows and software applications to support preservation strategies e.g., metadata/documentation input tools, automatic reformatting software, questionnaires.
- Develop recommendations and guidelines for multimedia creators and collecting agencies with respect to: multimedia formats, authoring tools, platforms, metadata etc. to facilitate preservation and ensure maximum longevity and accessibility of artworks whilst also ensuring that the artistic integrity, authenticity and originality is maintained during any preservation processes.
- Determine the optimum preservation strategy for each class of multimedia object
- Develop an ontology for describing preservation services
- Implement an Web service architecture for preservation services

Results so far with regard to Preservation Metadata Generation:

- **Preservation Metadata Input Tool (PRESMINT)**
- Metadata schema
- Test Cases

PRESMINT (**PRE**servation **ME**tadata **IN**put **T**ool) is designed to collect information regarding a digital object so that it can be archived and preserved. It takes into account the current state of the digital object, intention behind the creation of the object and the attitude of the creator regarding preservation of the digital object.

PRESMINT is partially based on the Variable Media Questionnaire developed by the Guggenheim Museum and utilizes the classification for artworks developed by them. The metadata schemas at the heart of PRESMINT are the METS schema and the Audiovisual extensions to the METS schema, both of which have been developed by the Library of Congress.

PRESMINT has six components. A summary and screen shot of each component and launch tool link are given on the website under ‘results’:

- **Dublin Core Metadata:** Collects Dublin Core Metadata and the classification(s) information of the digital object.
- **Digital Object Technical Metadata:** Information about the multimedia component that make up the digital object.
- **Intent Metadata:** Metadata in relation to the artistic intention.
- **Presentation Metadata:** Information regarding how the work is to be presented during exhibitions.
- **Attitude Metadata:** The object creators attitude towards the preservation process.

- **Structural Metadata:** The Spatio-temporal structure of the work, defined in SMIL using software such as Fluition SMIL Authoring Tool.

Presentations listed on website include:

- "PANIC: A Semi-Automated Digital Preservation System based on Semantic Web Services", JCDL, Tucson, Arizona, June 7-11, 2004
- "PANIC Project Overview", Presented to the International Review Advisory Board, Brisbane Australia, April 20th, 2004
- "PANIC Poster", eHumanities ARC Research Network workshop, Sydney Australia, December 12th, 2003
- "PANIC: Preservation and Archival of Newmedia and Interactive Collections", ECDL, Trondheim Norway, August 17-22, 2003
- "PANIC", DSTC-Demo Day, Brisbane Australia, May 8th, 2003
- "Preservation of New Media Art", DC-ANZ Conference, Canberra Australia, March 26-28, 2003