



# PANIC: Preservation & Archival of New media & Interactive Collections

Dr. Jane Hunter, Sharmin Choudhury (DSTC)

## Project Objectives

- Compare emulation, migration and metadata approaches to multimedia preservation;
- Determine the optimum media formats, authoring tools, metadata & preservation processes to maximize longevity, accessibility and preservation of multimedia objects;
- Develop recommendations and guidelines for multimedia content creators and collecting agencies;
- Implement metadata schemas, metadata capture tools, workflows for capturing essential metadata and automating preservation actions;
- Implement a Preservation Web Services Architecture that enables:
  - Automatic notification that a preservation action is required – monitor latest software version registries;
  - OWL-S ontologies for describing, discovering and matching preservation services;
  - Automatic discovery of appropriate preservation service(s);
  - Semi-automated invocation of preservation services;
  - Choreographing simple preservation services into more complex services.

## Preservation Issues

- Composite - digital (images, video, audio, text) + physical
- Highly proprietary – software & hardware dependent
- Dynamic, variable, chaotic, random – computer-generated, high interactivity, live, situation-dependent
- Ephemeral – high obsolescence rate, high fragility
- Difficult to capture – boundary problem
- High mobility – travelling exhibitions
- No standards or best practice guides
- Obsolescence of physical storage device
- Obsolescence of file formats
- Translation to new display device, playback software – may alter the “look”, “feel”, “meaning”
- Creator’s input is essential – need to capture/recreate key ideas, intentions, aspects, components

## Example

Nam June Paik  
The elements (1989)

- Lacquer cabinet
- 6 TV monitors with Laser discs
- Roots, 3 silk flowers
- 3 glass beakers
- 195x126x65 cm
- The Kenneth and Yasuko Myer Collection



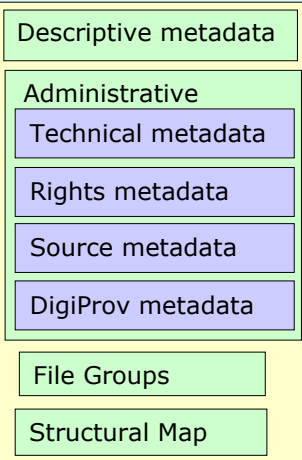
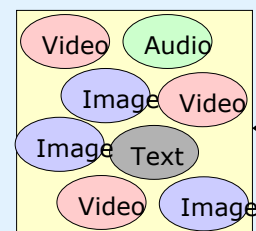
Copyright: Queensland Art Gallery

## Metadata Schema

### Extended METS Schema

Metadata Encoding and Transmission Standard

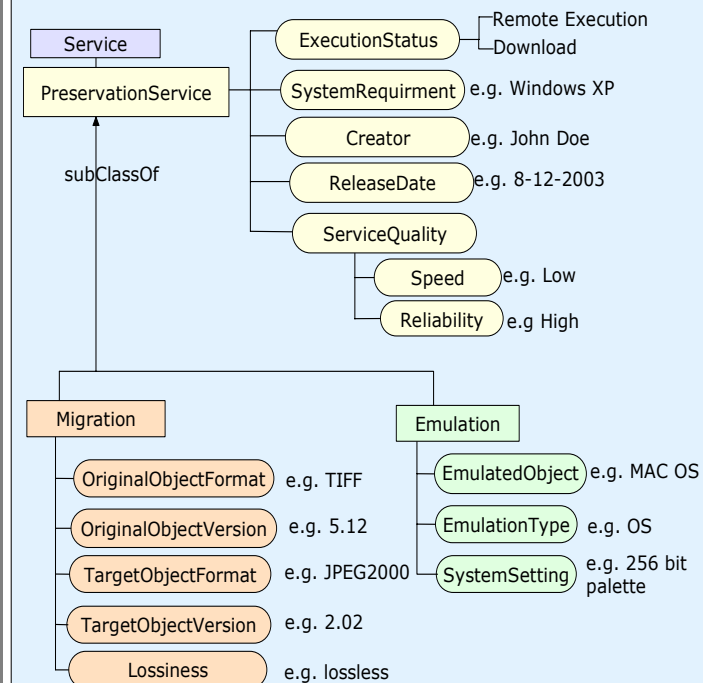
Composite Multimedia Object



Extensions  
Presentation Metadata  
Intention Metadata

- Images – TIFF, PNG, JPEG2000
- Audio – AIFF, WAV, MP3
- Video – MPEG-2, MPEG-4
- Composite object - SMIL Synchronized Multimedia Integration Language

## Preservation Services Ontology



## Web Services Architecture

