



Preserving Malaysia's Culture and Heritage Objects – An E-Science/ Culture Approach

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Introduction

- Malaysia is a country with rich and diverse culture and heritage where many races live a harmonious life.
- It is imperative that an effort to preserve culture and heritage objects should be carried out or Malaysia risks of losing her cultural and heritage diversity due to modernization and adoption of foreign cultures and values.

Introduction

- The most important aspect of the effort is the transformation of these objects into digital form and the eventually organization to a final product a digital cultural and heritage objects archive.
- In turn, a crucial component in preserving and archiving of these objects are adequate computing resources and data storage.

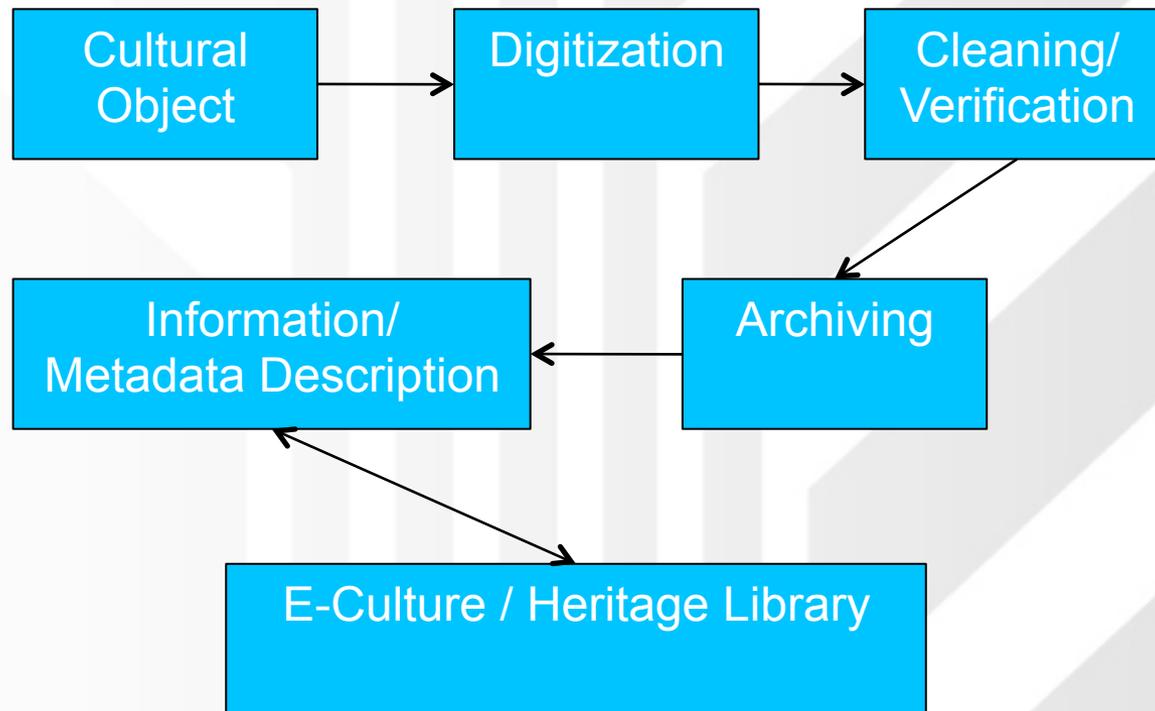
Introduction

- Grid technology holds the key to a viable solution for long-term preservation and processing of highly heterogeneous and geographically distributed digital archives.
- Through Grid services, computational and data-intensive grid resources for data analysis can be realized.

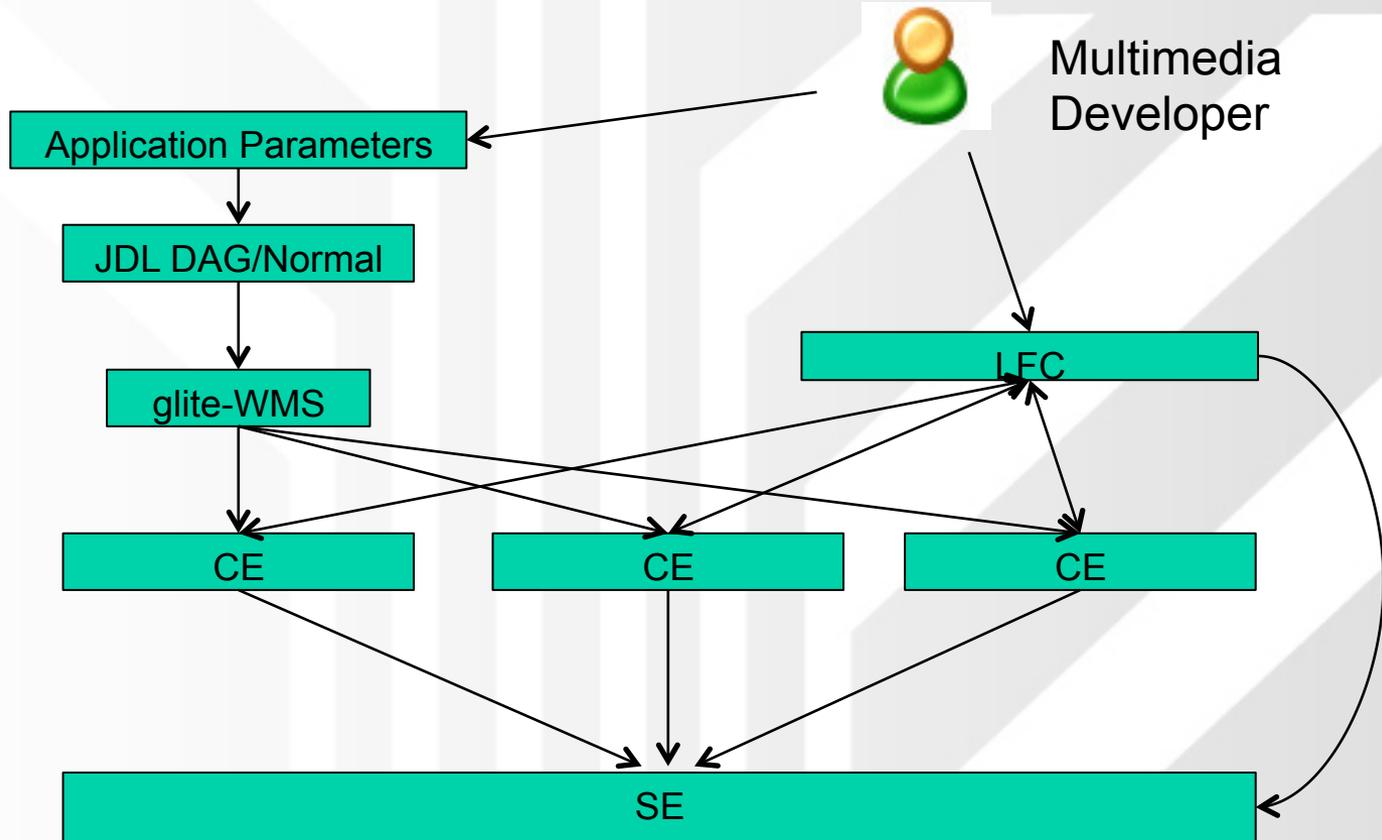
Culture and Heritage “Objects”

- **Physical or "tangible cultural heritage" includes buildings and historic places, monuments, artifacts, etc. and Intangible cultural heritage like folklores, performances and religious rites**
- **Considered by local communities to be worthy of preservation for the future**
- **Available (digital format) in several different forms:**
 - 2D and 3D still images
 - 2D and 3D Motion “images”, video
 - 3D motion-captured data for preservation of 3D movements

Culture/Heritage Object Preservation Framework



Object Digitization Process



Cleaning and Verification

- The result from the digitalization process shall be verified by cultural/heritage domain expert for its correctness and accuracy especially the name of objects, dance, rites, brief annotations on the objects, etc
- The metadata information of the object is stored in AMGA metadata server.

Archiving

- Objects stored in common multimedia (High Definition) file format (e.g. AVCHD, DivX, x264, jpeg, etc..) and in accordance to the standard already developed in Europe and Asia
- Physical object files are stored in Storage Element with at least one replicate.
- Links to physical object files are stored in LFC.

E-Culture and Heritage Library

- As the final product - Consist of Cultural and Heritage objects in digital format.
- Accessible from both grid and non-grid environment
- Shall be enabled to work as “input source” to another workflow other projects.

Future Work

- To develop user interface for multimedia developer based on GENIUS Grid Portal
- To develop E-Culture and Heritage Digital Library interface
- Gridify more Software/Tools to digitize culture and heritage “object”

Thank you