### Taiwan E-Learning and Digital Archive Program / MCN Taiwan – Standard SIG / Metadata Architecture and Application Team

# Application of CDWA Lite / OAI-PMH among Digital Museum Archives – MuseFusion Platform

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## ABOUT MCN TAIWAN - Standards SIG

- The prime target of this group is the cultural heritage communities.
- This SIG research and exchange ideas about digitization related standards, and are especially interested in the feasibility of data interchange and integration to promote standards shared across different cultural heritage groups.

### **MCN Taiwan-Standard SIG**

- MCN Taiwan-Standard SIG 1st workshop was held at Academia Sinica on 4/16,2008
  - Main Topic : 「The Impact of Standards」
- MCN Taiwan-Standard SIG 2nd workshop was held at Academia Sinica on 5/30,2008
  - Main Topic : 「Musefusion Platform Tutorial」

## The Need for Data Exchange

- Currently most of our members' digital archives are distributed in different institutions and content providers, without integrated retrieval / search mechanism
- There are successful experiences by adopting archives description standard (ex: CDWA Lite) and network technology (ex: OAI-PMH), then achieving Data Sharing and integration
- So MCN Taiwan Standard SIG tried to implement the prototype: MuseFusion for our digital archives collections as well.

## 2008 preliminary project proposal

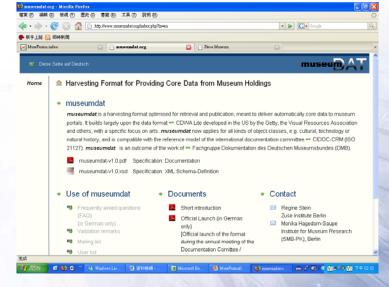
- Objectives-
- Evaluate the feasibility of CDWA Lite (1) describing Taiwan's culture and archives;
   used as the data exchange format in Taiwan's environment base on OAI-PMH technology
- 2. Establish the Best Practice of CDWA Lite metadata records generation (include the formation of: metadata mapping tables / cataloging manual / control vocabulary...etc.)



## Related Projects Observation<sup>1</sup>

Museum Collection
 Sharing Working Group:



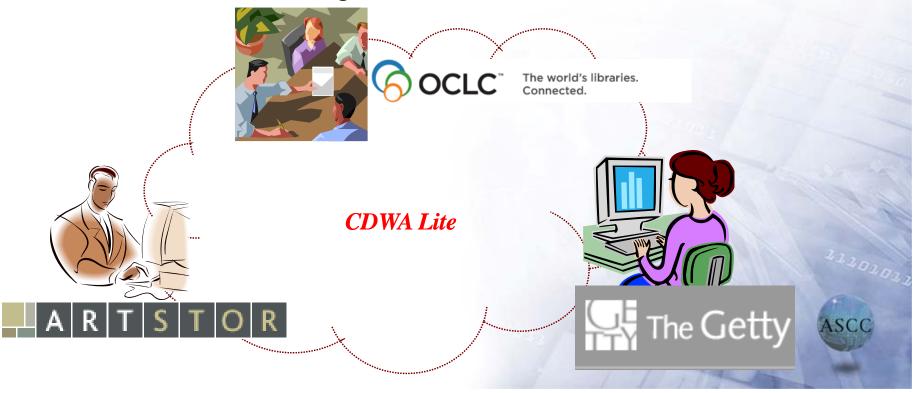


 Museumdat (by German Museum Association)



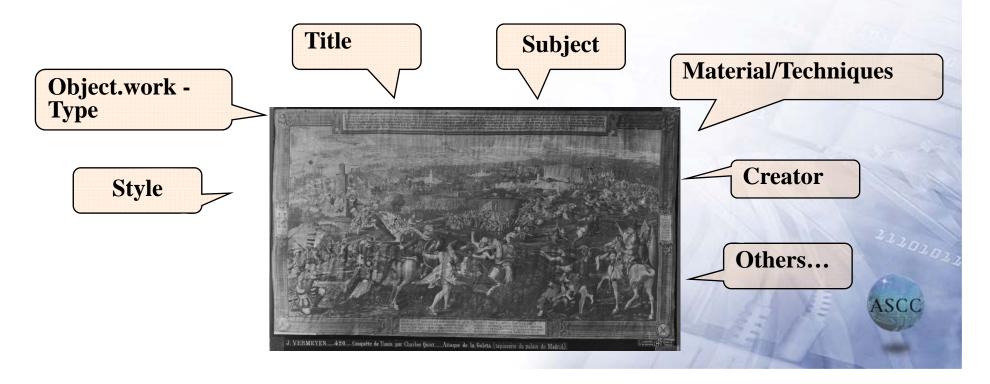
## Museum Collection Sharing Working Group<sup>1</sup>

 From 2006, ARTstor, the J. Paul Getty Trust and RLG Programs/OCLC have worked together to develop an XML schema to describe cultural materials and their surrogates to provide an easier and more sustainable model for contributing to union resources. – CDWA Lite



## Museum Collection Sharing Working Group<sup>2</sup>

 CDWA Lite - an XML schema based on the core elements from CDWA, a framework for documenting and organizing information on cultural works and images.



## The Adoption of OAICatMuseum

- OAICatMuseum is software which allows museums to disclose descriptions of collection items as well as pointers to digital surrogates. It can be used to efficiently share digital images with trusted partners.
- The software used for this prototype was a modified version of OCLC Research's open source software OAICat, which has been uniquely tailored to the needs of museums



### **Members of Standard SIG**

- 中央研究院 (Academia Sinica)
- 國立台灣博物館 (National Taiwan Museum)
- 國史館 (Academia Historica)
- 行政院客家委員會 (Council for Hakka Affairs, Executive Yuan)
- 行政院農委會林業試驗所 (Taiwan Forestry Research Institute)
- 宜蘭公正國小 (Yilan Gung-Jeng Elementary School)
- 檔案管理局 (National Archives Administration)
- 國立故宮博物院 (National Palace Museum)
- 國立自然科學博物館 (National Museum of Natural Science)
- 國立歷史博物館 (National Museum of History)

## **Communities in MuseFusion**

- Each of the members provide few records to Musefusion, and there are about 50 records now in Musefusion system, created by Museum / Archives / Biodiversity and Herbarium Community
- There are 18 CDWA Lite Elements adopted By MuseFusion, Include all the mandatory elements
- These elements are verified through real usage and user requirements to suit the situation of Taiwan's culture and environment



### Elements in MuseFusion<sup>1</sup>

- Object/Work type (CDWA Lite <1.1 Object/Work type>)
- Title (CDWA Lite <2.1.1 Title>)
- Other Title
- Name of Creator (CDWA Llite <4.1.1.1 Name of Creator>)
- Measurements (CDWA Lite <5.Display Measurements>)
- Materials/Techniques (CDWA Lite<7.Display Materials/Techniques>)
- Style (CDWA Lite <10. Style Wrapper >)
- Creation Date (CDWA Lite <12. Display Creation Date >)
- Earliest Date (CDWA Lite <13.1.2 Earliest Date>)
- Latest Date (CDWA Lite <13.1.3 Latest Date>)



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### Elements in MuseFusion<sup>2</sup>

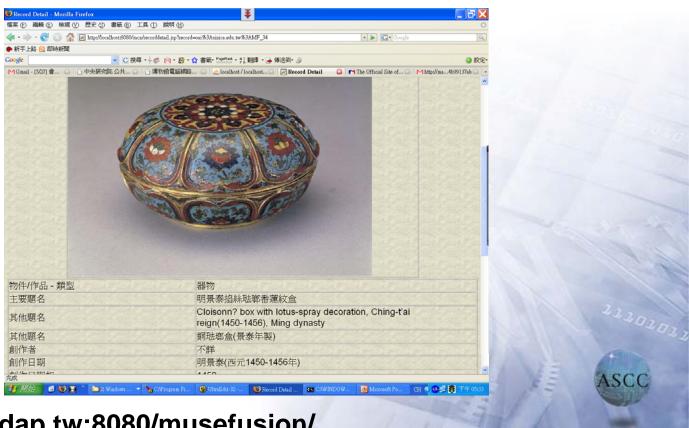
- Current Repository (Cdwa Lite <14.1.1 Location/Repository Name>)
- Discovery Location (Cdwa Lite <14.1.1 Location/Repository Name>)
- Subjects (CDWA Lite <15.1.2. Sub-element: Indexing Subject Term >)
- Classification (CDWA Lite <16.1. Sub-element: Classification >)
- Description (CDWA Lite <17.1.1. Sub-element: Description/Descriptive Note >)
- Inscriptions (CDWA Lite <18.1 Inscriptions>)
- Resource Source (CDWA Lite, p32, 22.1.10 Resource Source)
- Resource link (CDWA Lite p30-[22.1.1 Link resource])

## **CCO Specified Elements**

- 材質/技法 (Materials/Techniques)
- 風格 (Style)
- 創作日期 (Creation Date)
- 典藏單位/所在地 (Location/Repository Name)
- 分類 (Classification)

## MuseFusion: Web-based Interface

 Data retrieval and management through web-based user interface



http://mcntw-stds.teldap.tw:8080/musefusion/

## Problem about cataloging Creator<sup>1</sup>

- The cataloging of Creator
  - Water-Powered Armillary (Sphere) and Celestial (Globe) Tower: Su, Song of Sung Dynasty (original inventor), National Museum of Natural Science (research and re-create)

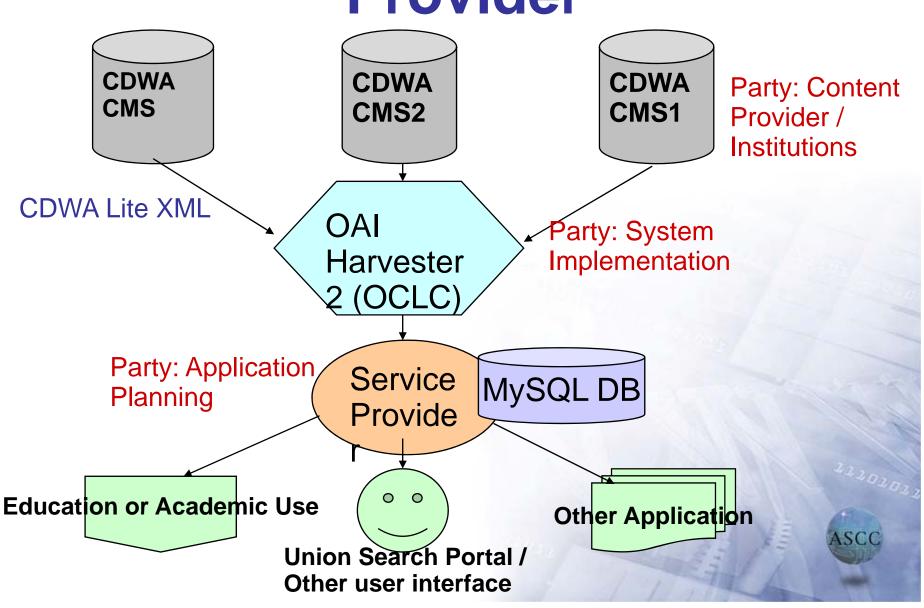


## Problem about cataloging Creator<sup>2</sup>

 National Taiwan Museum : National Taiwan Museum, Nomura Ichiro 野村一郎 (architect) Araki Eiichi 荒木榮一 (assistant)

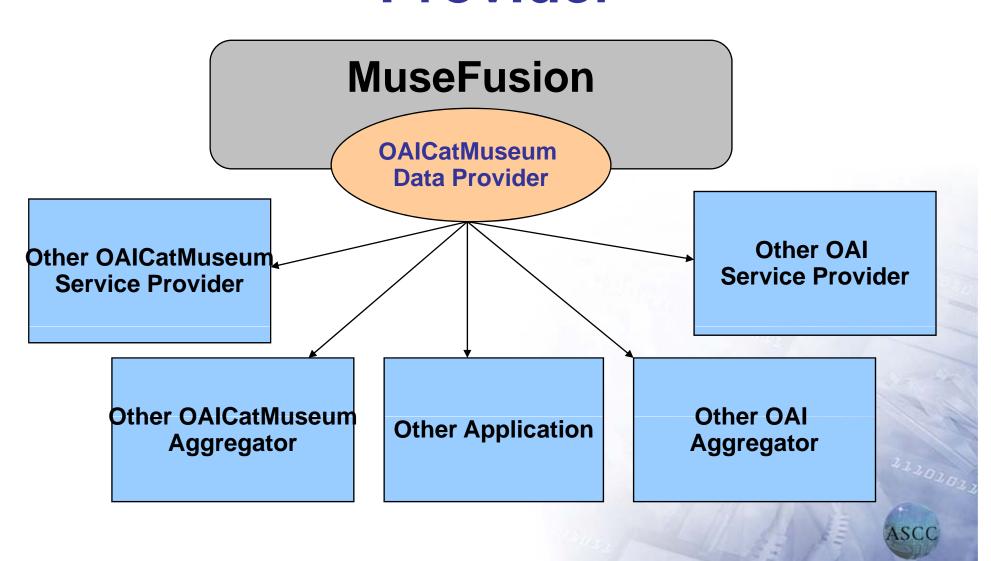


## MuseFusion: As a Service Provider



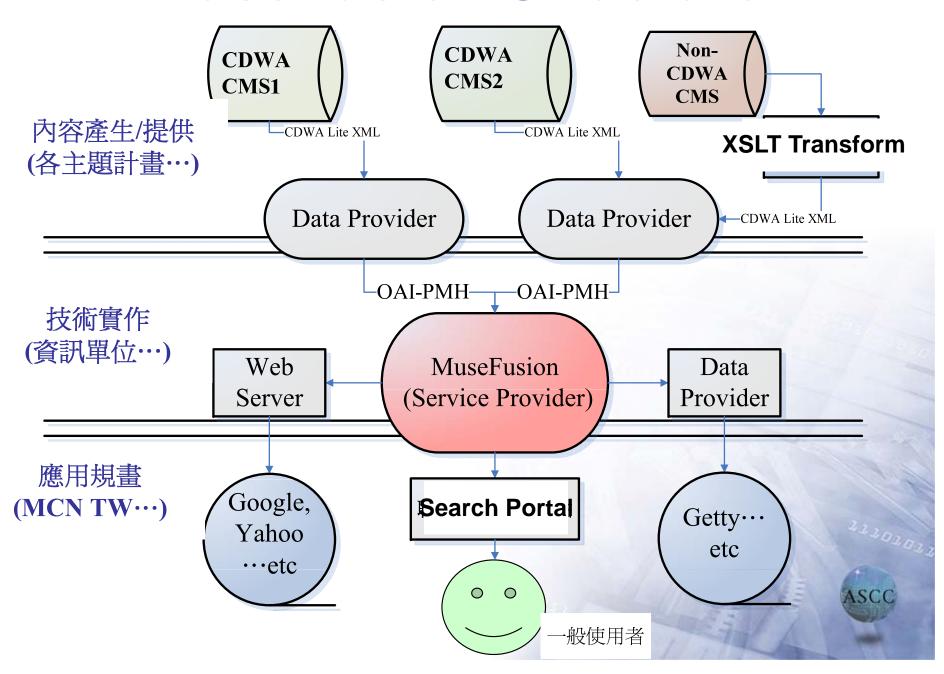
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## MuseFusion: As a Data Provider



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### **MuseFusion Structure**





### **MuseFusion Features**

Structure	CDWA Lite
Content	CCO, AAT
Format / Encoding	XML, UTF-8
Exchange	OAI / OAICatMuseum

### Thanks For Your Attention~

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