A Collaboration Model between Archival Systems to Enhance the Reliability of Preservation by an Enclose-and-Deposit Method

Shigeo Sugimoto

Grad. School of Library, Information and Media Studies,

University of Tsukuba, Japan

Digital Library Federation Fall Forum 2006, Boston

Background: Original Work of This Presentation

- **This presentation is based on the work presented at 5th International Web Archiving Workshop (IWAW05) in Vienna, Sept. 2005**

  A Collaboration Model between Archival Systems to Enhance the Reliability of Preservation by an Enclose-and-Deposit Method
  by *Koichi Tabata, Takeshi OKADA, Mitsuharu Nagamori, Tetsuo Sakaguchi, Shigeo Sugimoto (University of Tsukuba, Japan)*

MFA Boston: Collections Search Results – Mozilla Firefox

ファイル(F) 編集(E) 表示(V) 移動(G) ブックマーク(B) ツール(T) ヘルプ(H)

mfa BOSTON Museum of Fine Arts, Boston

tickets shop join give Site Search
my mfa members families educators

HOME VISIT CALENDAR EXHIBITIONS COLLECTIONS ABOUT THE

home > collections > collections search results

collections

- Advanced Search
- Art of Asia, Oceania + Africa
- Art of Europe
- Art of the Americas
- Art of the Ancient World
- Contemporary Art
- Musical Instruments
- Prints, Drawings + Photographs
- Textile + Fashion Arts
- Conservation + Collections Care
- Online Tours
- Recent Acquisitions
- Resources

join today

Collections Search Results

1-10 of 60 for: ukiyo-e

sort: ▲ | accessioned | artist | title | catalogue raisonné | culture | image

Detail | Thumbnail | Text go to page 1 next ▸

Collection Search
330,321 artworks
Advanced Search

*"Akashi no Shugetsu" (from the series "Ukiyo Genji Hakkei")**
Japanese, Edo period
Artist: Chôbunsai Eishi, Japanese, 1756–1829
Japan
Woodblock print (nishiki-e); ink and color on paper

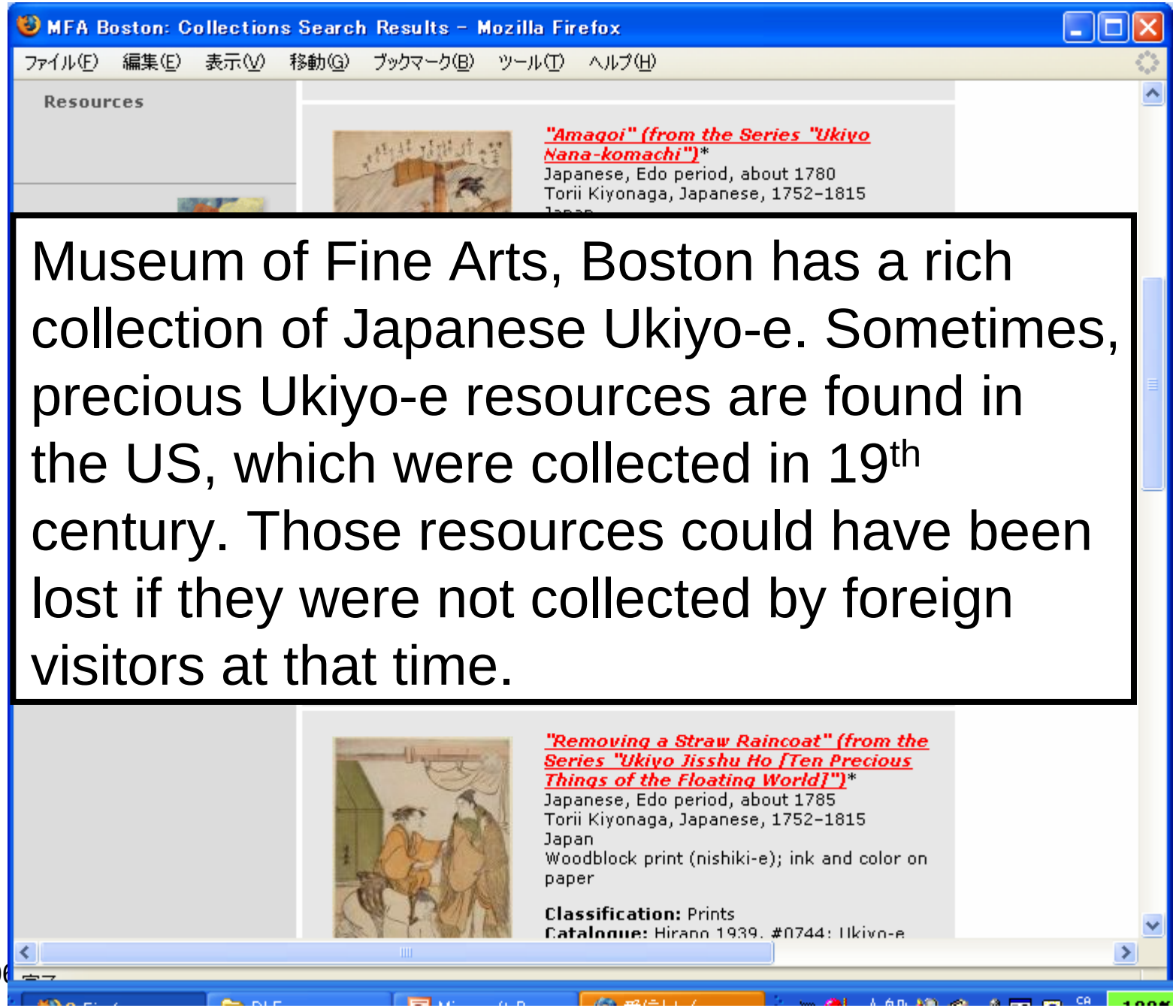
Classification: Prints
Accession number: 21.4936

*"Amagoi" (from the Series "Ukiyo Nana-komachi")**
Japanese, Edo period, about 1780
Torii Kiyonaga, Japanese, 1752–1815
Japan
Woodblock print (nishiki-e); ink and color on paper

Classification: Prints
Catalogue: Hirano 1939 #0303; Ukiyo-e

Done with your se
Tell us what you t

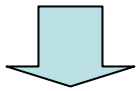
完了



Museum of Fine Arts, Boston has a rich collection of Japanese Ukiyo-e. Sometimes, precious Ukiyo-e resources are found in the US, which were collected in 19th century. Those resources could have been lost if they were not collected by foreign visitors at that time.

Background and Goal

- Archiving/preservation of digital resources at many libraries, museums, archives, governmental sectors, etc.



Heterogeneity of archives

  - Size of Archives
  - Type of Archived Resources
  - Architecture and Interface of Archival System
  - Archive and Preservation Policies
  - Language for Describing Metadata

Background and Goal (cont'd)

- Are the archives of digital resources really reliable?

  Risks
  - Shortage of human resources and funding to keep archives alive
  - Organizational changes
  - Natural and human-caused disasters

High risks especially in small communities

Background and Goal (cont'd)

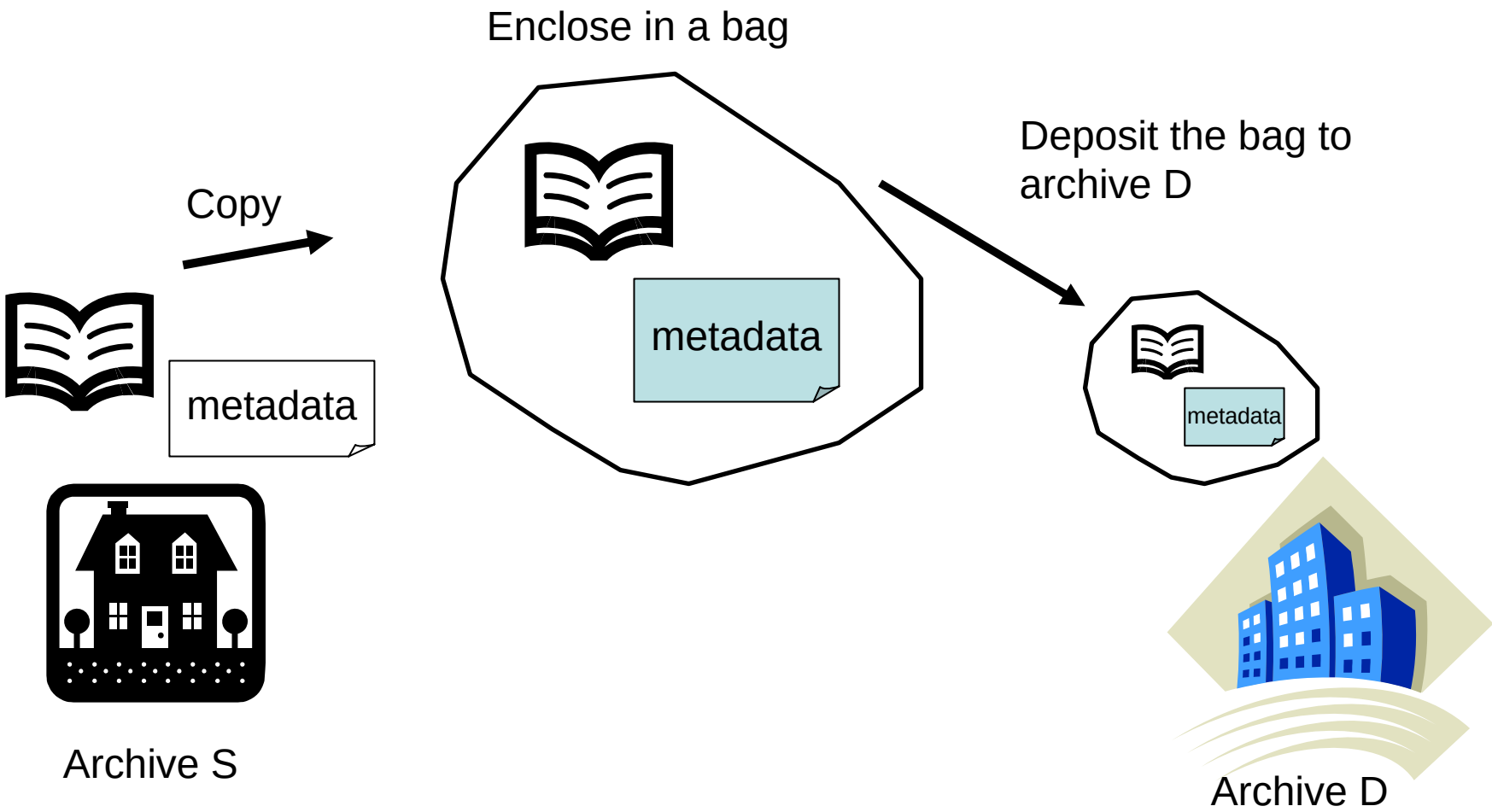
- Crucial issues to make digital archives highly reliable
  - Simplicity
  - Inexpensiveness in system cost and in human labor

  - Interoperability among archives over time

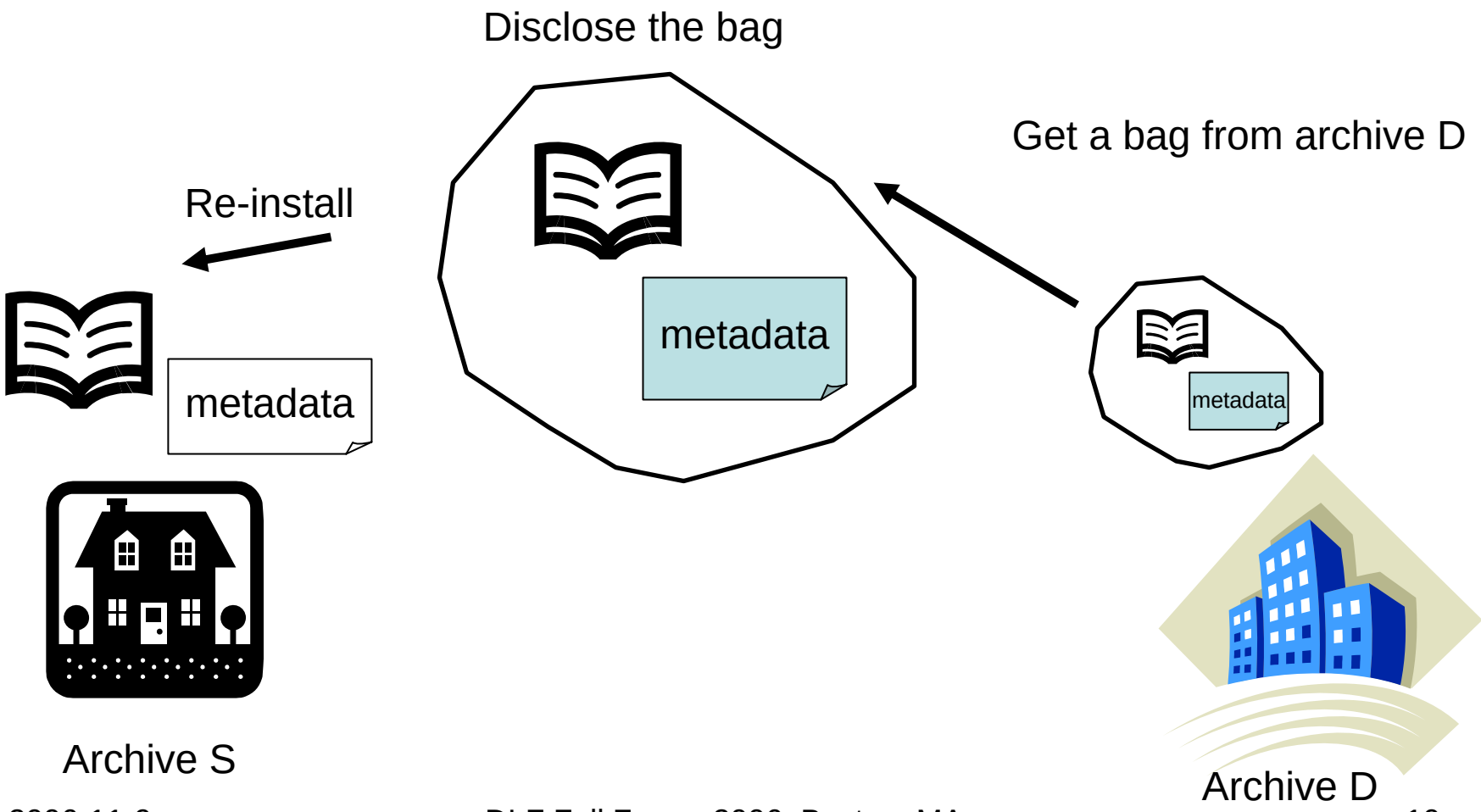
Background and Goal (cont'd)

- Our approach, "Enclose-and-Deposit"
  - Enclose a preserved resource into a bag with an appropriate description and deposit the bag to a collaborating archive (or archives)
- Preservation by Collaborating Archives
  - Simple collaboration protocol to reduce costs and to enhance interoperability
- Use XML to realize a Bag
  - Simple and Stable

Enclose and Deposit

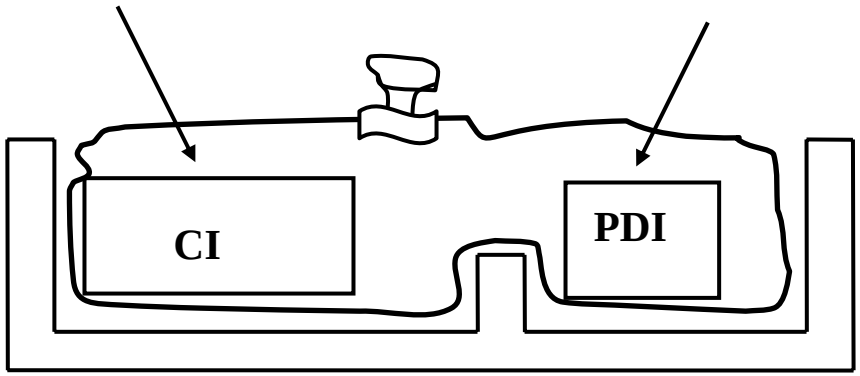


Enclose and Deposit



Bag and AIP

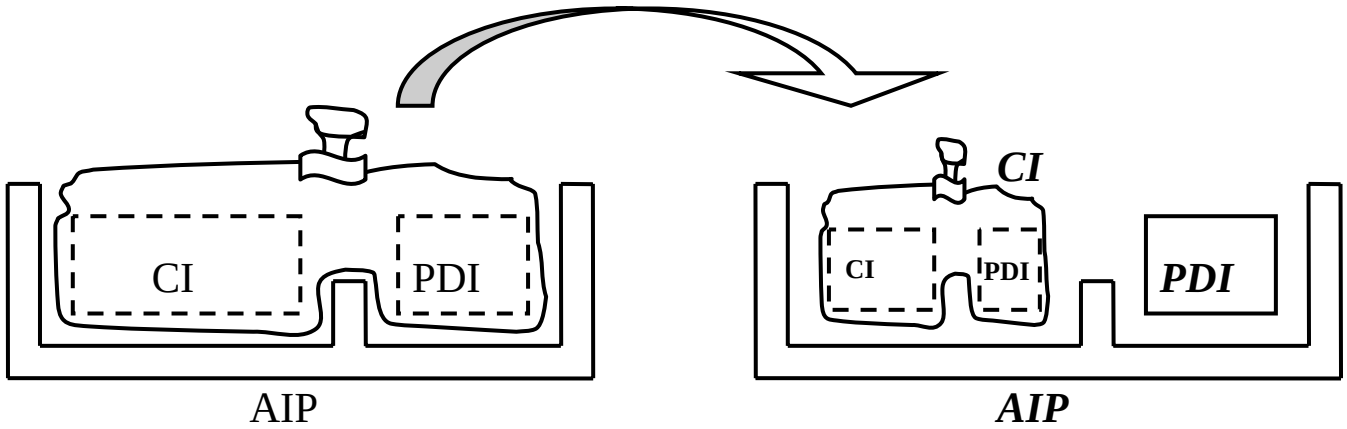
Content Information **Preservation Description Information**



Archived Resource enclosed in a bag

Archival Information Package (AIP) of OAIS

Bag and AIP

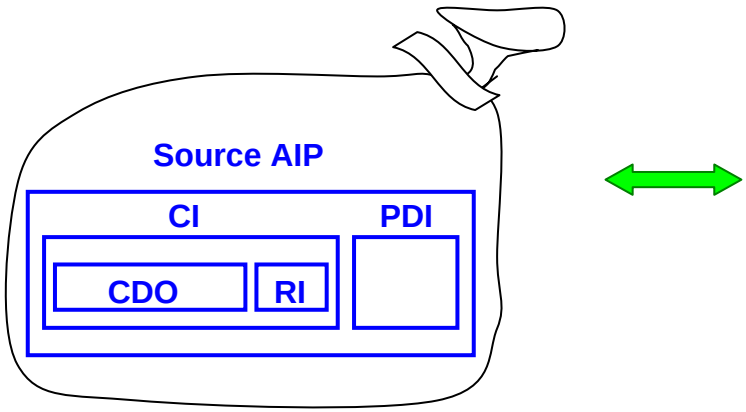


Source Archive: S

Destination Archive: D

Concept of Deposition between OAISs

Bag in XML



A Bag created
from a source AIP

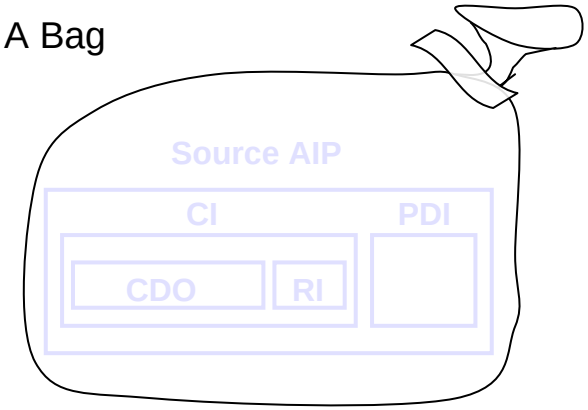
```
<?xml version=”1.0” encoding=”xxx”?>
<AIP>
   <CI>
     <CDO>xxx</CDO>
     <RI>xxx</RI>
   </CI>
   <PDI>xxx</PDI>
</AIP>
```

XML Implementation of a Bag

A Skeleton of an XML instance which encloses Source AIP

Manual to Open a Bag

A Bag



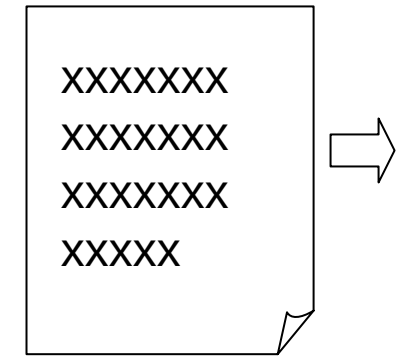
Realized as an XML instance

```
<?xml version="1.0" encoding="xxx"?>
<AIP>
  <CI>
    <subCI><CDO>xxx</CDO><RI>xxx</RI></subCI>
    <subCI><CDO>xxx</CDO><RI>xxx</RI></subCI>
    <subCI><CDO>xxx</CDO><RI>xxx</RI></subCI>
  </CI>
  <PDI>xxx</PDI>
</AIP>
```

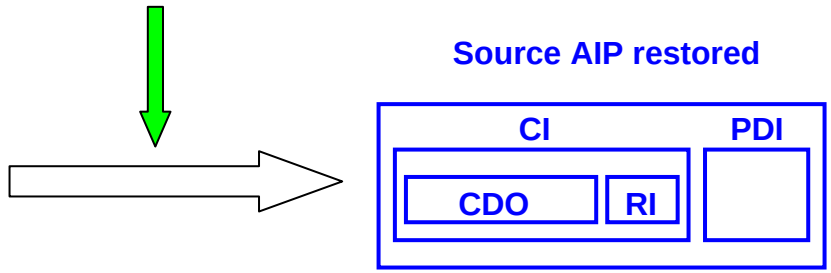
An XML instance

(A Example of multiple Objects)

A manual prepared by the source archive for archive managers in future

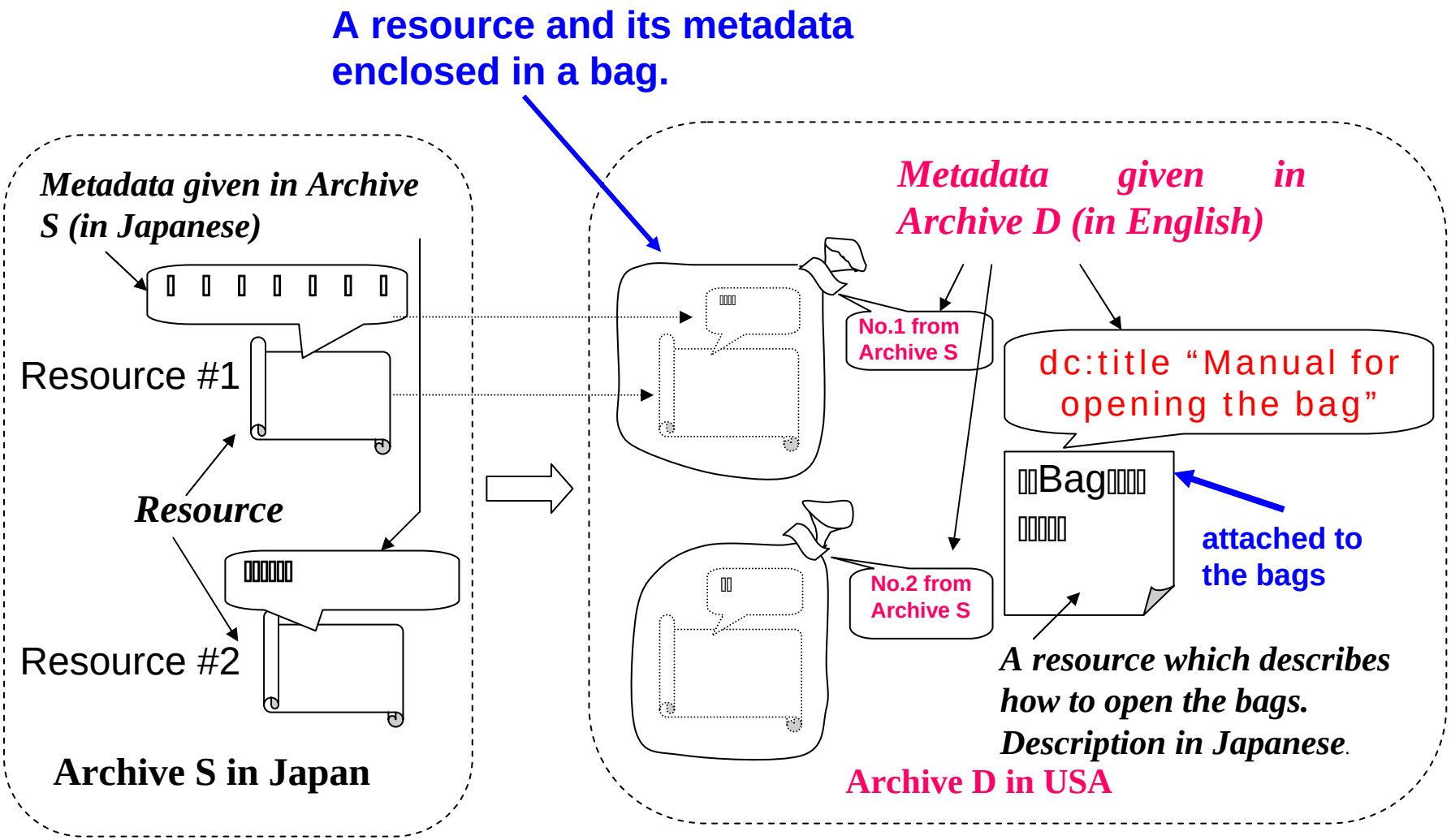


describes how to open and restore the bag in the source archive environment



A Manual required to restore a bag

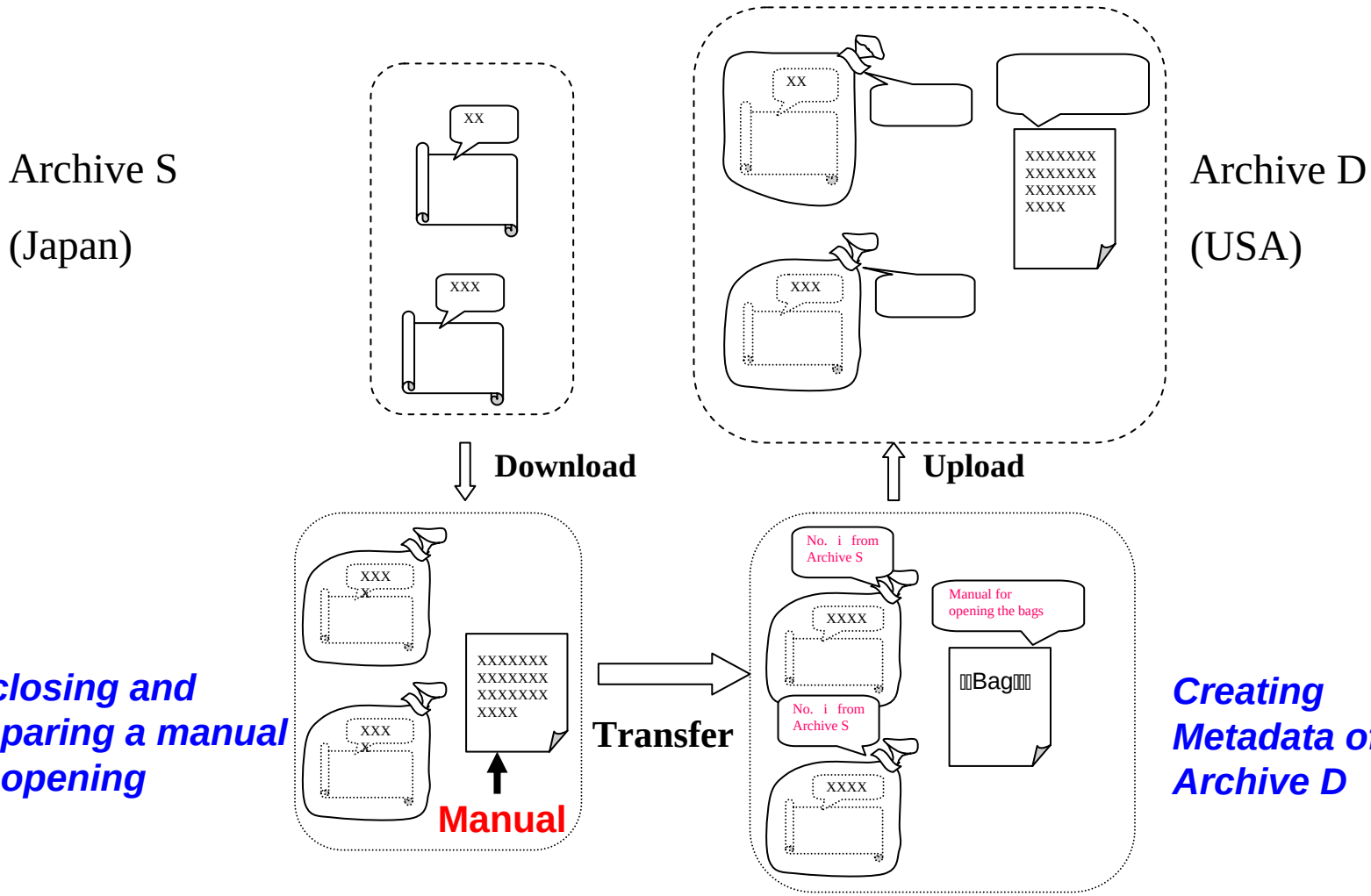
Manual to Open a Bag



An enclose-and-deposit Model between Archives

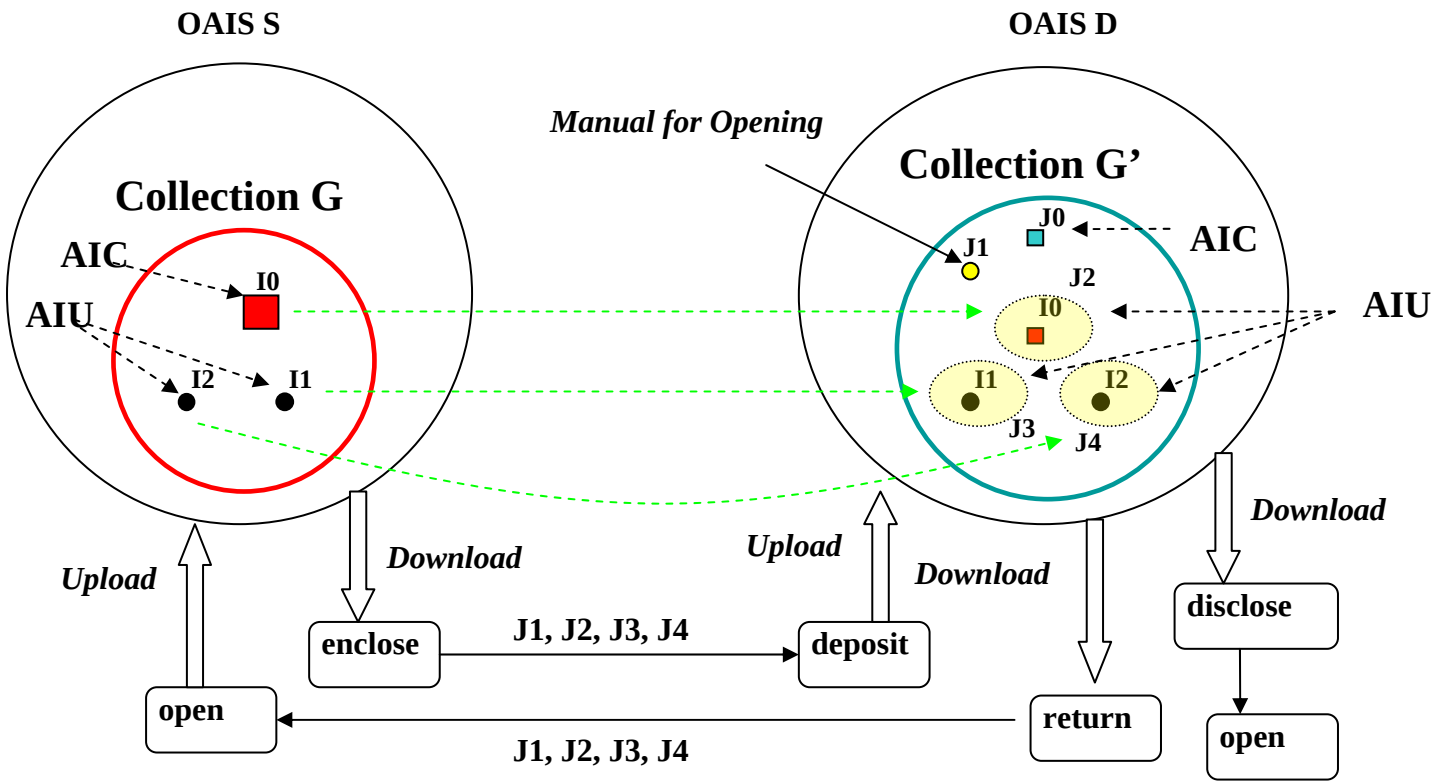
(example: collaborating archives in Japan and USA)

Enclose and Deposit



Procedure for an Enclose-and-Deposit Method

Enclosing a Collection



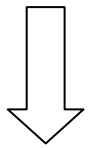
AIC: Archival Information Collection
AIU: Archival Information Unit

Enclosed instance

Depositing a Collection between OAISs

Encoding of a Collection

```
<?xml version="1.0" encoding="xxx" ?>
<Collection>
  <AIP><CI><CDO>yy0</CDO><RI>xxx</RI></CI><PDI>xxx</PDI></AIP>
  <AIP><CI><CDO>yy1</CDO><RI>xxx</RI></CI><PDI>xxx</PDI></AIP>
  <AIP><CI><CDO>yy2</CDO><RI>xxx</RI></CI><PDI>xxx</PDI></AIP>
</Collection>
```



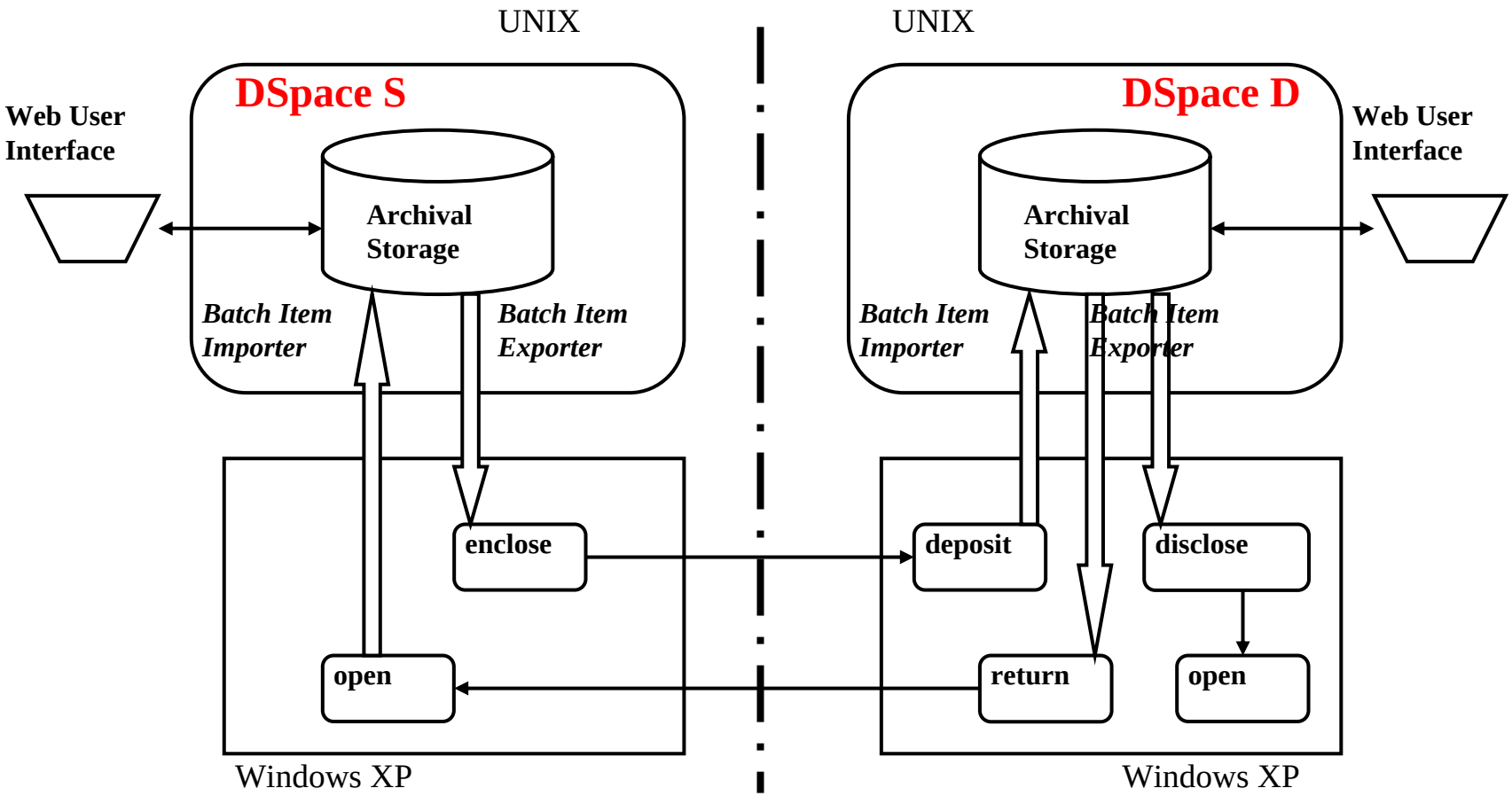
Disclosure

CDO	RI	PDI
C:/ppp/qqq/1/rrr0.xml	**xxx**	**xxx**
C:/ppp/qqq/2/rrr1.xml	**xxx**	**xxx**
C:/ppp/qqq/3/rrr2.xml	**xxx**	**xxx**

CDO: Location of the enclosing document instead of data objects

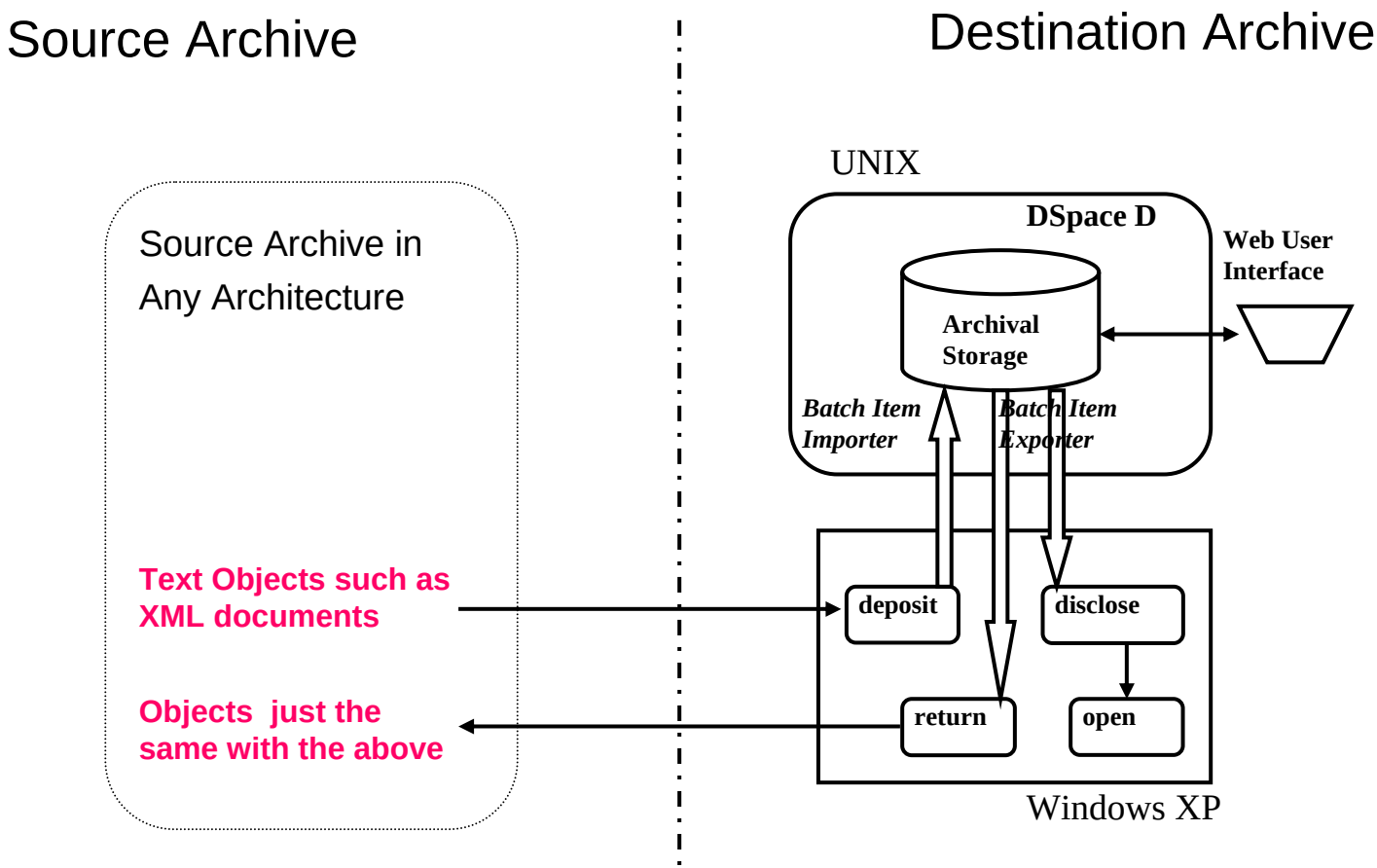
Table of Source AIPs obtained by Disclosing the Bag of Bags

Implementation



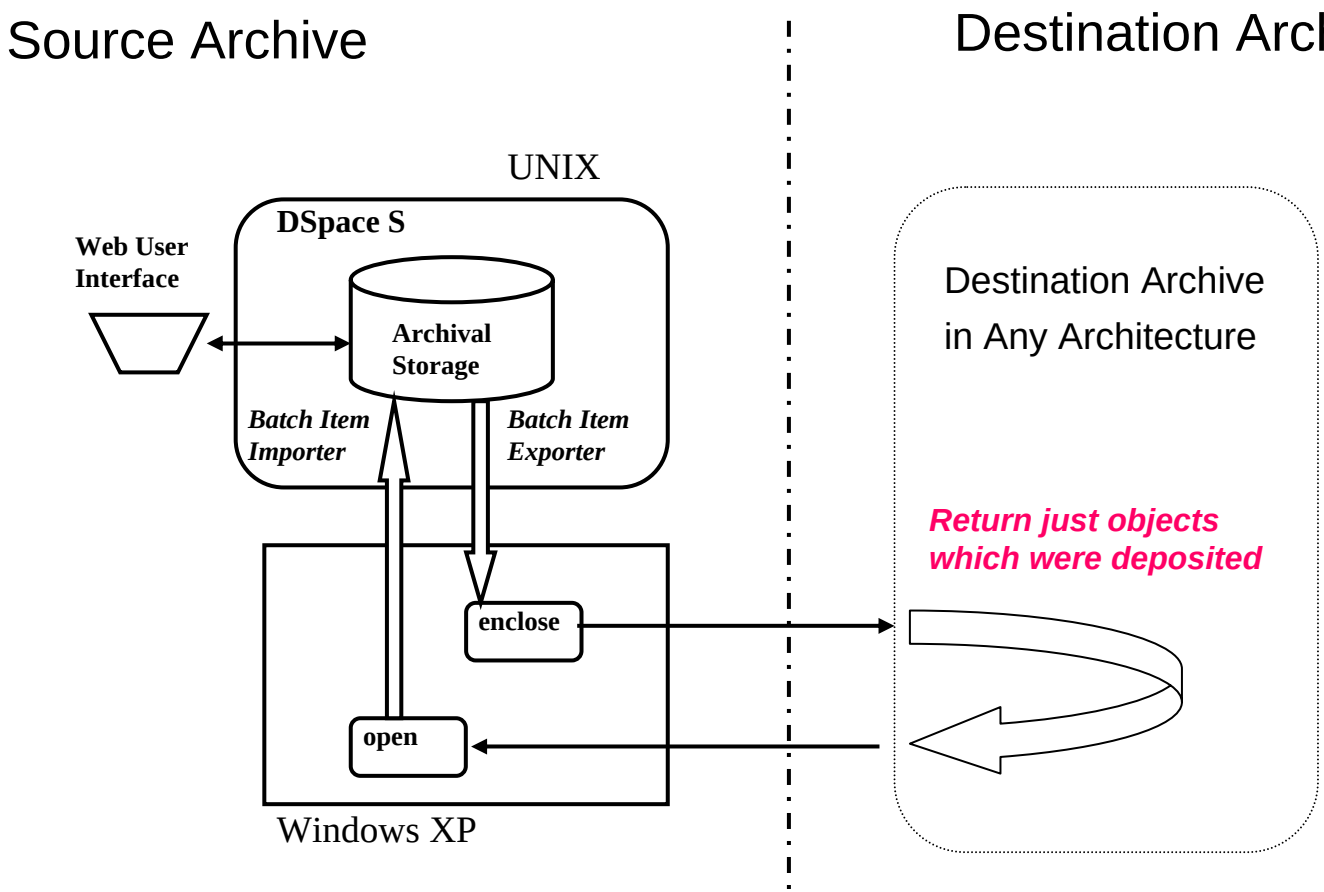
Experimental Implementation for verifying the functionality of the "Enclose-and-Deposit" model using DSpace

Implementation



Verification of the Destination Side using DSpace

Implementation



Verification of the Source Side using DSpace

Summary

- A Simple Scheme for Decreasing Risks of Preservation
- Simplicity is Essential for Heterogeneous Communities

Thank you!