

# *Navigating the Born-Digital Wilderness*

The Ford International Fellowships Archive  
At Columbia University

Stephen Davis, Ben Armintor  
Columbia University Libraries

2015 Digital Library Federation Forum



COLUMBIA UNIVERSITY LIBRARIES / INFORMATION SERVICES



**FORD FOUNDATION**  
**INTERNATIONAL FELLOWSHIPS PROGRAM**

*linking higher education to social change*

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## Ford Foundation International Fellowships Program, 2001-2014

“The Ford Foundation International Fellowships Program (IFP) began with the conviction that social justice is advanced through equitable opportunities for higher education.

Foundation trustees and staff believed that, if given the right tools, socially committed individuals, grassroots leaders and social innovators from disadvantaged communities could succeed in postgraduate studies and would advance social change upon returning home.”



# 2011 Grant to Columbia

- Accession all paper and digital archives from a worldwide organization
- Build an online archive for the born-digital content
- Build out and share capacity for acquiring, processing, preserving and making accessible digital archives
- *Also:* create research fellowships, support external longitudinal study evaluation, etc.



# IFP Digital Content

- Content from 21 international partners and Secretariat
- Ongoing content deposits for 10-year program evaluation study
- Ca. 350,000 digital files
- Ca. 250 data file formats
- Content in 10 languages
- Content with 5 non-Roman character sets



# File Formats Received

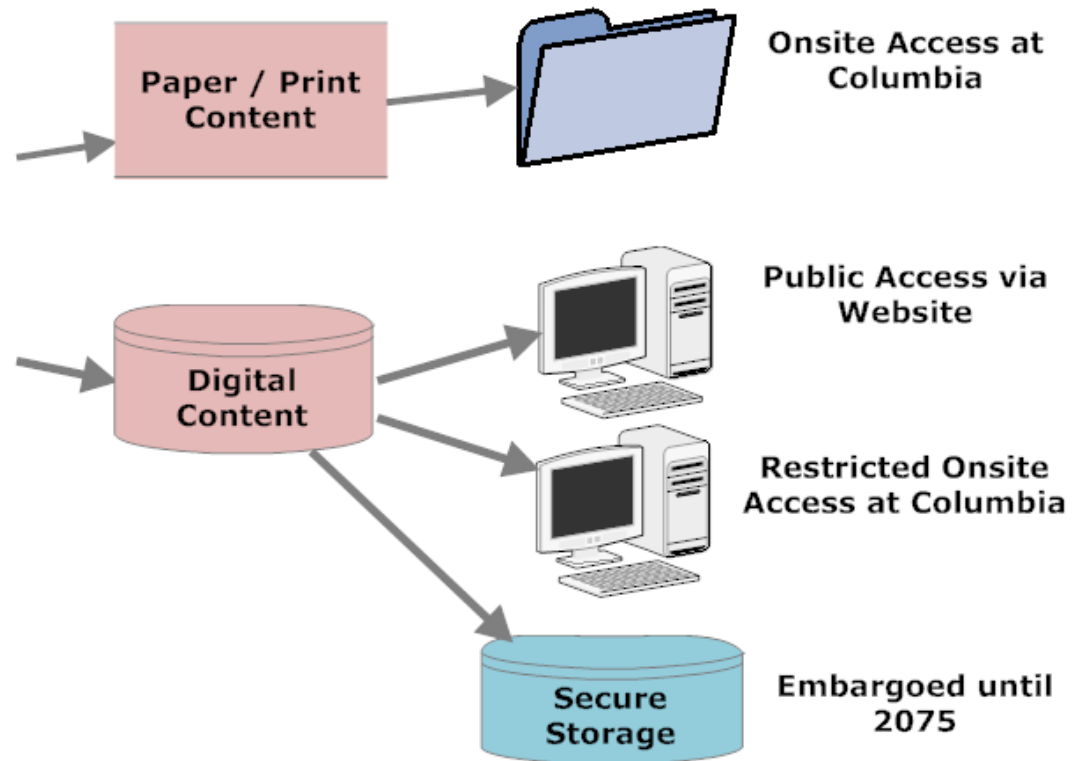
32, 3gp, a5p, accdb, adb, adp, adx, ai, aif, amr, asf, avi, axd, back, bat, bin, bk, blb, bmp, BridgeSort, btr, bup, cab, cat, cda, cdr, cfg, chm, cnf, cnm, con, css, cst, csv, cxt, d, dat, db, dbf, ddb, ddx, dfont, dir, dll, dmi, doc, doc-MRB, docm, docx, dot, ds\_store, dtd, dwz, dxr, edb, edx, emf, eml, emz, eps, exe, F&A, fcp, fff, fh9, fil, flp, flv, fol, frm, gdb, gdx, gif, hdb, hdx, hk4, hlp, hta, htm, html, ico, idx, ifo, inc, indd, inf, info, ini, itc2, itdb, itl, jar, jp2, jpe, jpeg, jpg, js, l, lck, ldb, ldif, lnk, log, m4a, m4v, mbx, mdb, mde, mdi, mdx, mht, mid, mls, mno, mov, mp3, mp4, mpeg, mpg, mpp, msf, msg, msi, mso, msv, mswmm, nri, ocx, odc, odt, ofa, oft, opd, opf, otf, p65, pab, pages, pcx, pdf, php, pif, plist, pm, pm!, pm0, pm5, pmd, pmh, pmi, pmj, pml, pmm, pmo, pmr, pms, pmx, pnc, pnd, png, pns, pnx, pot, pps, ppsx, ppt, pptx, prod, prod1, properties, psd, psp, pst, pub, qpw, qxd, r, ra, ra-att, rar, rdp, rel, rels, rem, rex, rpt, rsc, rtf, sav, sc4, sdb, sdx, sh, shs, snm, spi, spss, spv, spx, sql, svn-base, swa, swf, sys, tdb, tdx, thm, thmx, tif, tiff, tlb, tmp, toc, tpl, ttf, txt, txz, up, url, usr, utf8, vcd, vcf, vdproj, vob, vsd, wav, wbk, webarchive, wks, wma, wmf, wmv, wmz, wpd, wpl, wps, xla, xlk, xls, xlsb, xlsx, xlt, xlw, xml, xnk, xps, zip, no extension



# IFP Workflow Overview

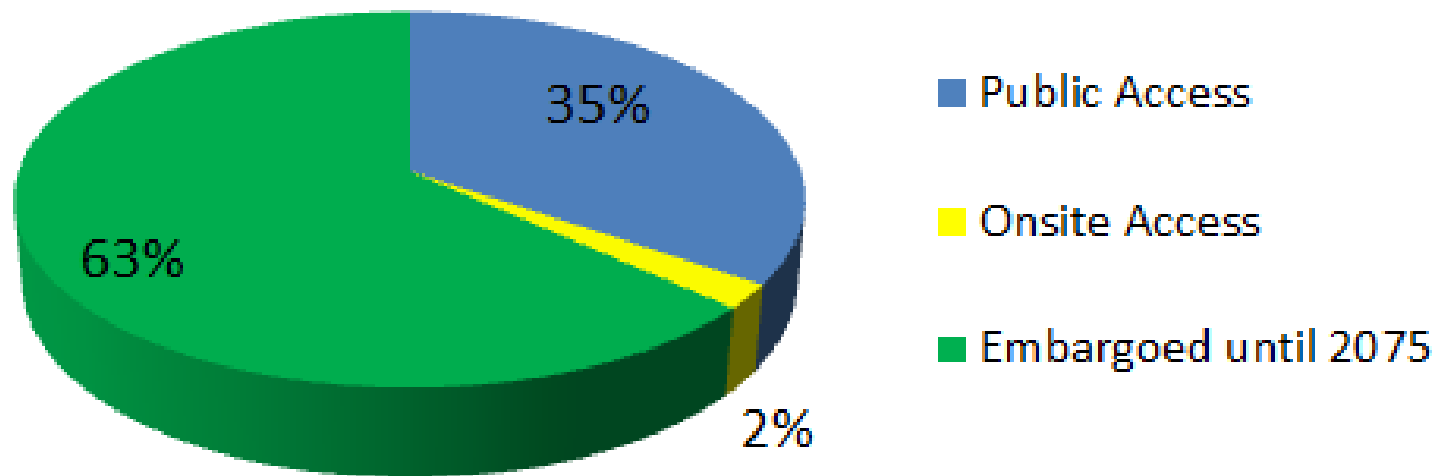
## IFP Offices:

Russia  
Philippines  
Gaza / West Bank  
Mozambique  
Brazil  
Chile and Peru  
China  
Egypt  
Ghana  
Guatemala  
India  
Indonesia  
Kenya  
Mexico  
Nigeria  
Senegal  
South Africa  
Tanzania  
Thailand  
Uganda  
Vietnam  
NY Secretariat  
[ + CHEPS]

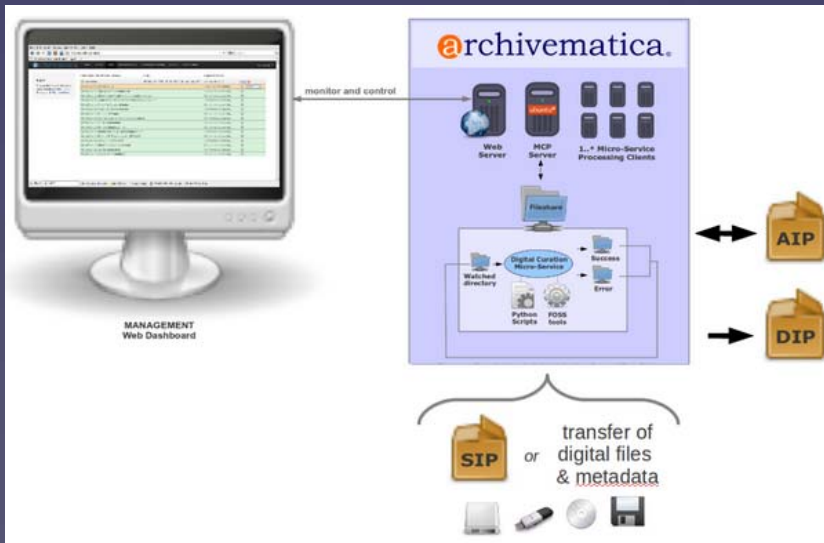
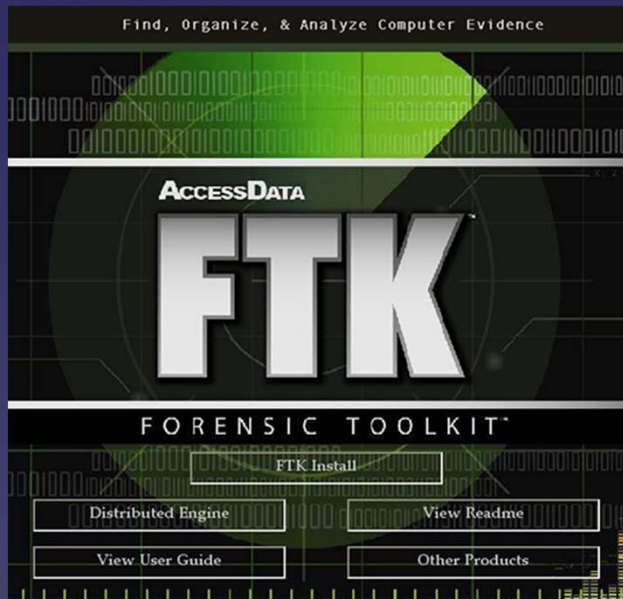


# IFP Content Access

## IFP Digital Content Access Breakdown







**Fedora™**

# Metadata?

- *No conventional file-level metadata*
- Instead we used the following as surrogate metadata:
  - Office of origin
  - Original file name
  - Original folder path from hard drive
  - File format type (normalized)



# “Metadata” Examples

*Country:* Palestine

*Folder path:* Recruitment/Guidelines/2006/

*File name:* IFP Guidelines Arabic 2006.doc

*Resource type:* Document

*Country:* Philippines

*Folder path:* /COMPUTER B (Program Officer)/IFP PHILIPPINES SLIDE  
PRESENTATIONS/Bali Presentations/

*File name:* Indonesia (Needs Assessment).ppt

*Resource type:* Presentation/Slideshow

*Country:* South Africa

*Folder path:* /

*File name:* 0033.JPG

*Resource type:* Image



# The Ford IFP Archive website...



## ABOUT IFP

The IFP program began in November 2000 with four pilot sites. In Asia, the program was initiated in Vietnam. In Africa, the first competition was held in West Africa (Ghana, Nigeria and Senegal). In Latin America, IFP began in the Andean Region as Southern Cone (Chile and Peru). Russia was the final pilot site. The first 96 Fellows from these countries were named in 2001. In February 2002, 173 new Fellows from the pilot site countries and from India, China, Kenya, Tanzania, Uganda, Mexico and Guatemala were announced. During 2002, the program expanded to seven additional countries and territories: Brazil, Egypt, Indonesia, Mozambique, Palestine, Philippines and South Africa. For the selections in 2003, the program expanded to Thailand.

[Learn More >](#)

## ABOUT THE COLLECTION

The archives cover the issues of social justice, community development, and access to higher education, and include paper and digital documentation and audiovisual materials on the more than 4,300 IFP Fellows as well as comprehensive planning and administrative files of the program.

### COLLECTION GUIDE (FINDING AID)

[Link to IFP Collection Guide](#)

### ARCHIVED IFP WEBSITES

[IFP Web Archive](#)

### IFP COMMUNITY AND RESEARCH

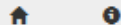
[IFP Legacy Website](#)[IFP Alumni Tracking Study](#)

## IFP COUNTRIES




 FORD FOUNDATION INTERNATIONAL  
FELLOWSHIPS PROGRAM ARCHIVE

Start a new search...



IFP Countries ▾

 Palestine

The America-Mideast Educational and Training Services (AMIDEAST), Cairo - a leading American non-profit organization engaged in international education, training and development activities in the Middle East and North Africa - was the Ford IFP International Partner in the Middle East, responsible for the programs in Egypt and Palestine. The Palestinian arm of the program initially maintained two local offices for West Bank and Gaza Strip, which later merged into a single office and closed down in Nov 2012. 149 Palestinian men and women were selected as IFP Fellows. The IFP Fellows from Palestine included women activists, village council members, representatives of charitable organizations, refugee camp committees, and grassroots NGOs. Four out of five IFP Fellows received funding for master's degree programs, the remainder for Ph.D programs, at universities around the world. AMIDEAST also supports the work of Palestine Chapter of the International Fellowships Program Alumni Association (IFPAA).

The Palestinian Office shipped 5 linear feet of paper records to the archives in October 2012. Digital materials were received in January 2013. 115 Fellows consented to give researchers access to their files. The materials in English and Arabic include administrative program files, fellow files, audiovisual materials and archived AMIDEAST website.



Archival video from the collection

## BROWSE DIGITAL MATERIALS

[Browse Palestine Records](#)

## COLLECTION GUIDE (FINDING AID)

[Link to series IV.13](#)

## ARCHIVED IFP WEBSITES

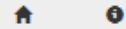
[IFP Web Archive - Palestine](#)

## IFP COMMUNITY

- [IFP Legacy Website - Palestine](#)
- [AMIDEAST](#)

# FORD FOUNDATION INTERNATIONAL FELLOWSHIPS PROGRAM ARCHIVE

Start a new search...



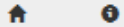
IFP Countries ▾

## Palestine

Name	Size
Focus Groups	11 items
PAT and Placement	39 items
Pre Departure Orientation	1 items
Recruitment	7 items
Reentry	2 items

# FORD FOUNDATION INTERNATIONAL FELLOWSHIPS PROGRAM ARCHIVE

social justice



IFP Countries

1 - 20 of 614

20

## Refine Your Search

### OFFICE

- > Ghana 152
- > South Africa 115
- > Thailand 81
- > Tanzania 75
- > Senegal 74
- > Palestine 71
- > Kenya 37
- > Uganda 5
- > Chile and Peru 4

### RESOURCE TYPE

- > Documents 529
- > Presentation/Slideshow 53
- > Spreadsheet 27
- > Structured Text/Data 4
- > Html 1

Showing results for: social justice

- Relevance
- Title
- Office



1. LEADERSHIP FOR SOCIAL JUSTICE INSTITUTE.ppt - 4 MB

**Office:** Thailand

**Folder Path:** /Orientation and Needs Assessment Workshop/2006 Skills Assessment

...Orientation and Needs Assessment Workshop 2006 Skills Assessment LEADERSHIP FOR SOCIAL JUSTICE INSTITUTE.ppt... LEADERSHIP FOR SOCIAL JUSTICE INSTITUTE.ppt...



2. Program Files/Pre-departure activities/Materials from Pre departure Orientation/Social Justice slide show.pdf - 897 KB

**Office:** Kenya

**Folder Path:** /Program Files/Pre-departure activities/Materials from Pre departure Orientation

...Program Files Pre-departure activities Materials from Pre departure Orientation Social Justice slide show.pdf...Program Files/Pre-departure activities/Materials from Pre departure Orientation/Social Justice slide show.pdf...



3. Program Files/Pre-departure activities/Materials from Pre departure Orientation/The African Debate on Social Justice- Bonus.pdf - 167 KB

**Office:** Kenya

**Folder Path:** /Program Files/Pre-departure activities/Materials from Pre departure Orientation

...Program Files Pre-departure activities Materials from Pre departure Orientation The African Debate on Social Justice- Bonus.pdf...Program Files/Pre-departure activities/Materials from Pre departure Orientation/The African Debate on Social Justice- Bonus.pdf...



# Lessons Learned from the Ford IFP Archive Project

- Survey the born-digital content before acquiring it
- Plan in advance for dealing with confidential content, personally identifiable information (PID), copyright and related issues
- If possible, arrange with original content owners how content should be organized before delivery
- Assume that there will be unexpected data types and conditions
- Try to use (and help develop) 'best practices'



# Technology strategies ...

# Goals of the Ford IFP Web Interface

- Build on well-established digital preservation practices
- Make content available on our general repository platform
- Provide a familiar interface for browsing the content

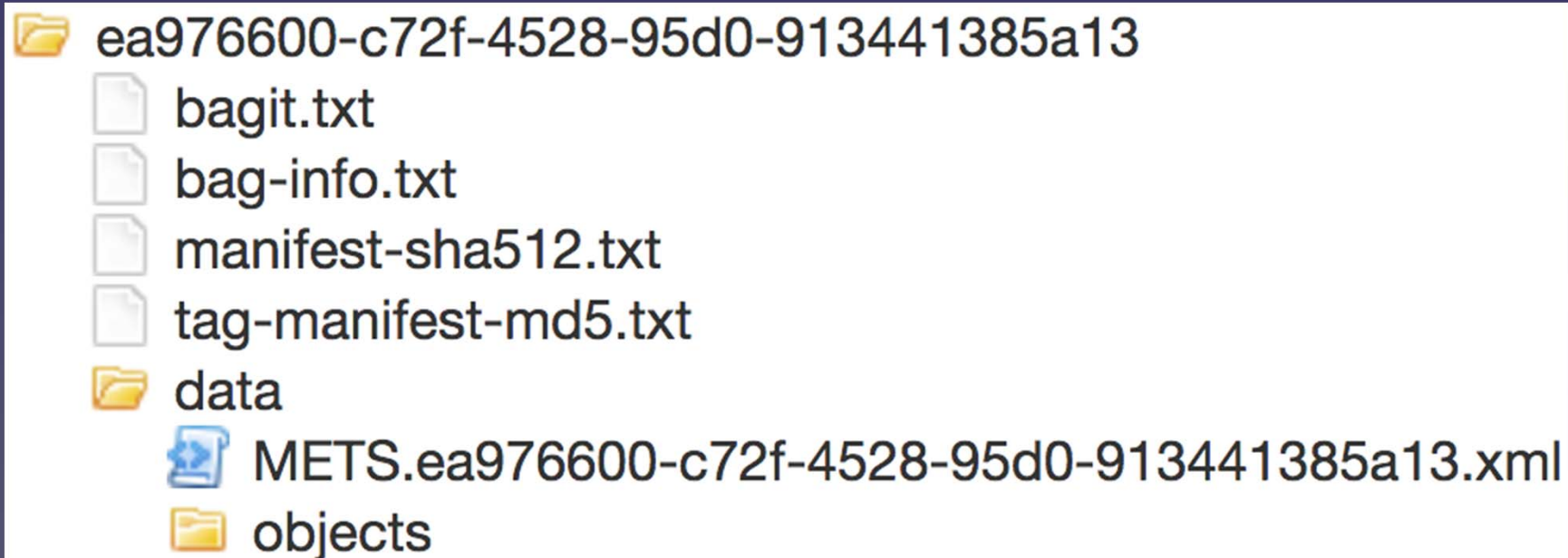


# Or to Paraphrase...

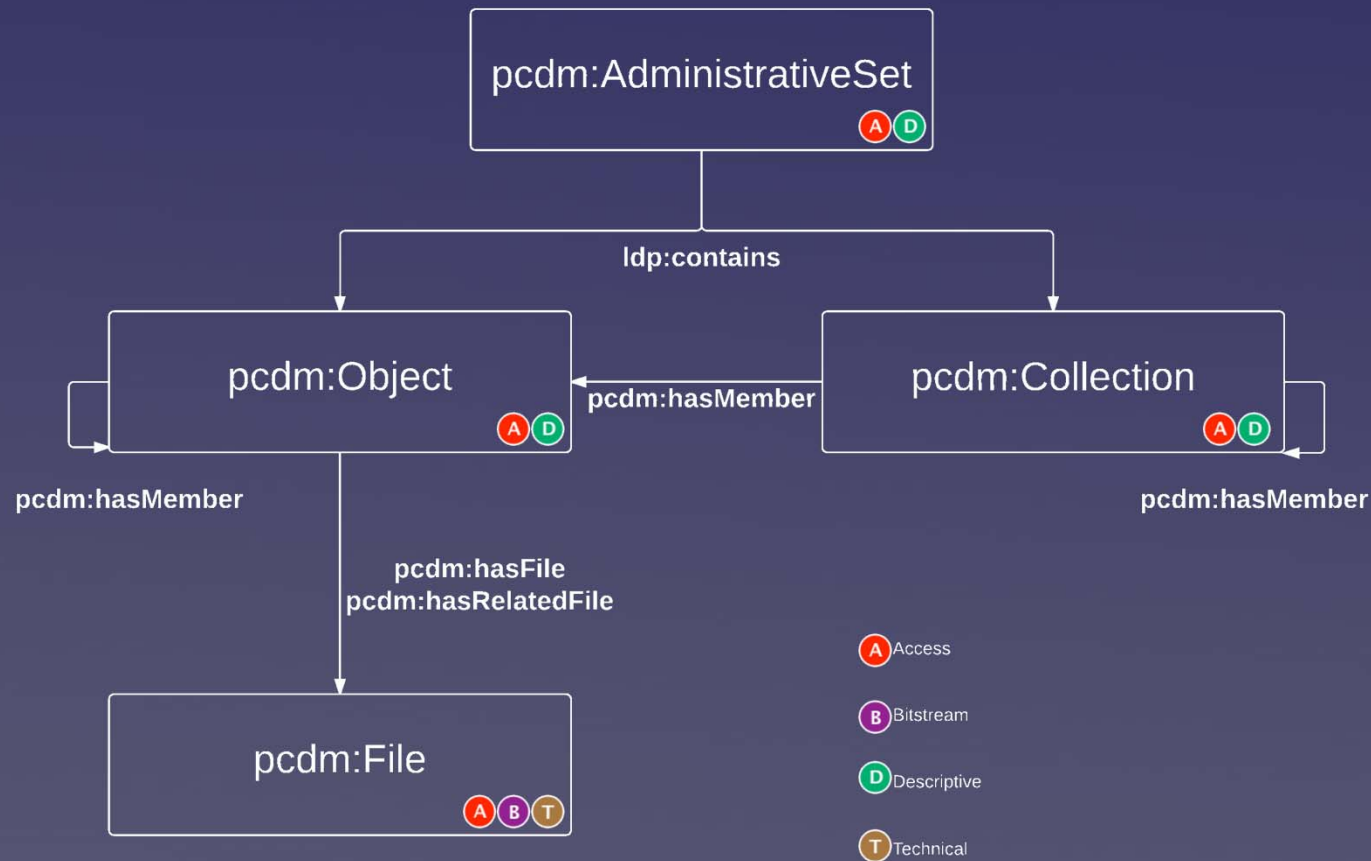
- Reconstruct the submitted disk images
- From Archivemata AIPs
- In Fedora (3.x)
- Accessed via Hydra web apps



# Archivematica produces BagIt Archives with a difference



# The Portland Common Data Model for Repository Content



# Mapping Archivemática/BagIt to PCDM

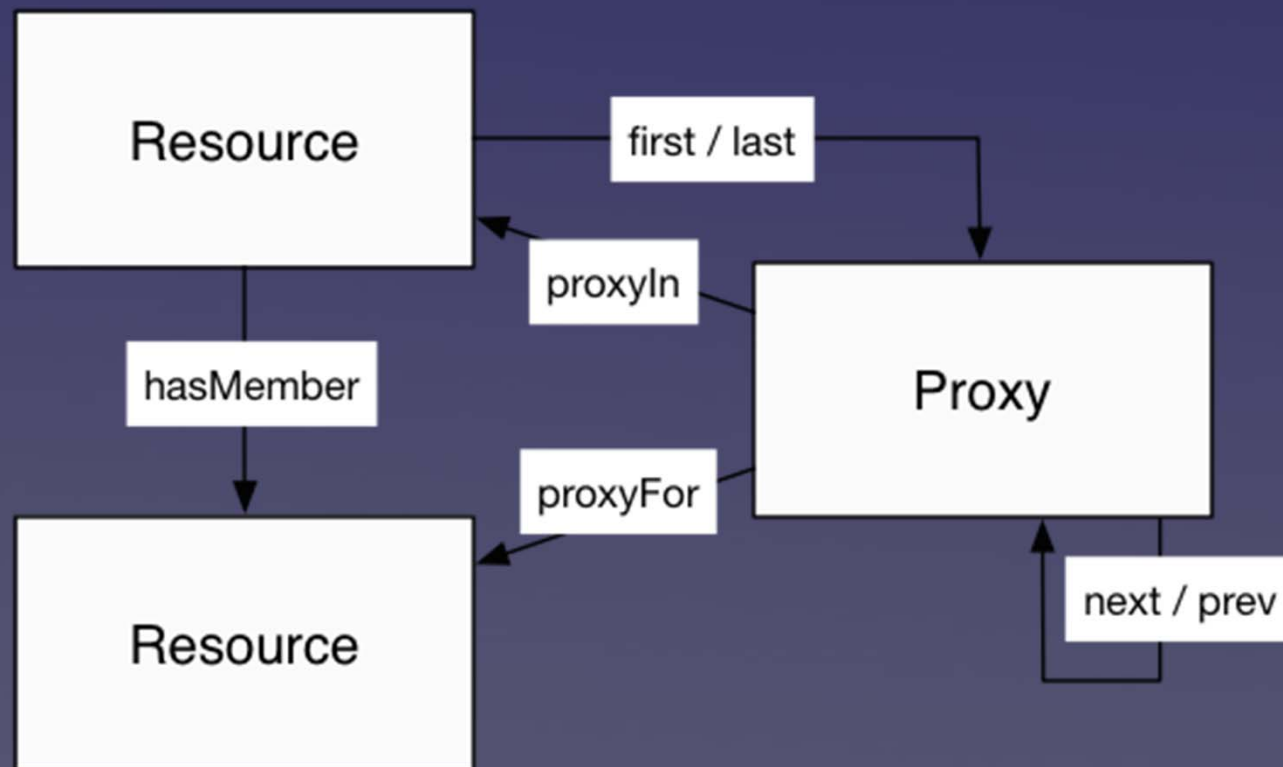
BagIt Data	PCDM/Repository Target
The archive	AdministrativeSet
bag-info.txt	Collection (description)
Manifest & METS	Collection (structure)
Data/objects	FileSets (Object subclass)



# Making the Structure Navigable

PCDM Recommends ORE Proxies for List Structure

Optional Ordering Construction





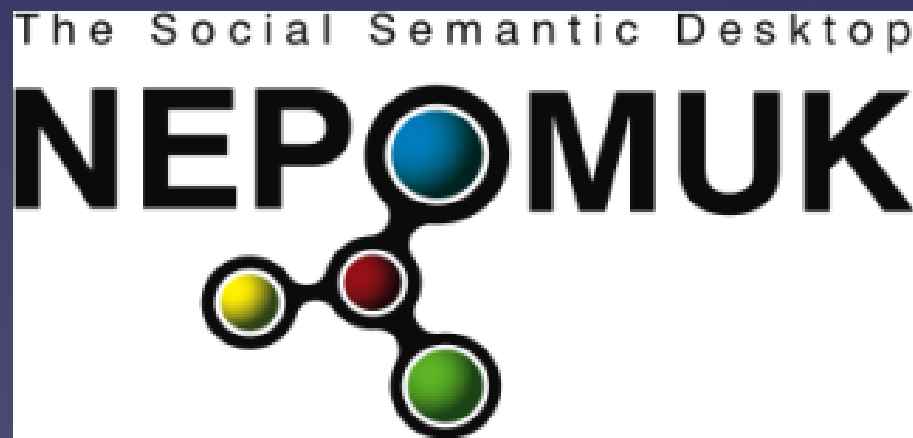
... but we don't think of a file system like a linked list

[All Content](#) » [Contextual Background Materials](#) » [Photos, video](#) » [Images of IFP](#)

Name	Size
 Alumni.doc 	1 MB
 Fellow Quotes_1A, 1B, 2003.doc 	64 KB
 From Doan T Tuyen.doc 	24 KB
 From My Phuong - Fruit Basket.doc 	25 KB
 From Tuan Anh.doc 	26 KB
 Hoa Sung-NVTung 041108.doc 	31 KB
 NPToai Comments on return.htm 	3 KB
 Ngon nui-N Viet Tung 0411181.doc 	27 KB
 Poems by Fellows	1 items



# Don't worry! There's an ontology for that.

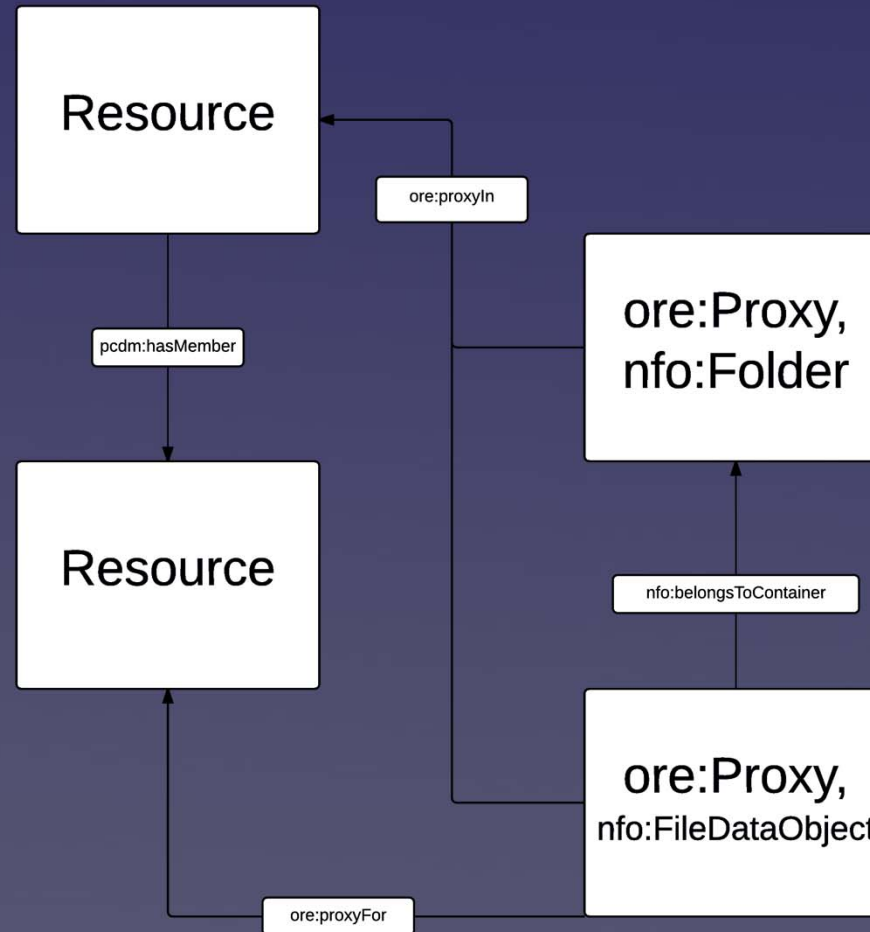


[belongsToContainer](#)

Type	rdf:Property, rdfs:Resource
Domain	<a href="#">nie:DataObject</a>
Range	<a href="#">nfo:DataContainer</a>
Superproperties	dcterms:isPartOf, <a href="#">nie:isPartOf</a>
Subproperties	--
Description	Models the containment relations between Files and Folders (or CompressedFiles).

# ORE + NEPOMUK

## An Alternate Ordering Construction



# Describing Files for Discovery

Leveraging External & Collaboratively Authored Vocabularies

- dc:type – file type genre
  - Cross-referencing UDFR, PRONOM, Getty, SKOS into a PCDM vocabulary for file types
  - <http://pcdm.org/file-format-types#>
  - <https://github.com/duraspace/pcdm/blob/master/pcdm-ext/file-format-types.rdf>



# Benefits of Common Practices and Shared Modeling

- A practice for separately linkable contexts (eg file folders)
- A common practice for describing file categories, articulated in a number of frequently used vocabularies
- Well-documented, shareable modeling practices



# Thank you!

- IFP Website:  
<https://dlc.library.columbia.edu/ifp>
- IFP Project Page:  
<https://library.columbia.edu/bts/ford-ifp.html>

