Introduction to DSpace

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UNIVERSITY OF TEXAS – AUSTIN

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About the presenters

- **Mira Greene**
  - Involve with UTMB institutional repository since 2009
  - TDL member since 2007
  - Co-chair, TDL User Services Group

- **Sarah Sutton**
  - Manager of A&M-Corpus Christi repository since inception (Fall 2009)
  - TDL member since 2007
  - Co-chair, TDL User Services Group

Morning Schedule 9 – 11:30

- Introduction to DSpace and the TDL
- Creating Communities, Collections
- Submitting Items
- Creating Users and Groups

Afternoon 1:00– 4:00

- Workflows
- Adding and editing Metadata
- Editing/Deleting Items
- User permissions
- Q & A

TDL (Texas Digital Library)

- 2005—TDL formed by four Texas members of the Association of Research Libraries
  - UT Austin
  - Texas A&M
  - Texas Tech
  - University of Houston
- Now includes 15 member institutions

TDL (Texas Digital Library)

- **Angelo State University**
- **Baylor University**
- **Texas A&M University**
- **Texas A&M International University**
- **Texas A&M University-Corpus Christi**
- **Texas A&M University at Galveston**
- **Texas A&M University-Kingsville**
- **Texas A&M University at Qatar**
- **Texas State University**
- **Texas Tech University**
- **University of Houston**
- **The University of Texas at Austin**
- **The University of Texas at Brownsville and Texas Southmost College**
- **The University of Texas Southwestern Medical Center at Dallas**
- **The University of Texas Medical Branch at Galveston**

TDL (Texas Digital Library)

- The Texas Digital Library (TDL) is a consortium of higher education institutions in Texas that provides shared services in support of research and teaching.

- The mission of the TDL is to draw from the combined resources of its members to provide cost-effective, collaborative solutions to the challenges of digital storage, publication, and preservation of research, scholarship, and teaching materials.

TDL (Texas Digital Library)

- ## Institutional Services
  - Repositories
  - ETD Submission and Mgmt System (Vireo)
  - Preservation Network
- ## Faculty Services
  - Directory
  - Blogs/ Sites
  - Wikis
  - Journals
  - Conference system

Introduction to DSpace

What is DSpace?

- An open source software package that provides the tools for management of digital assets.
  http://www.dspace.org

  - *CAPTURES*
  - *DESCRIBES*
  - *DISTRIBUTES*
  - *PRESERVES*

- Coming soon: DSpace ver. 1.7.2

Examples

- http://repositories.lib.utexas.edu/
- http://repository.tamu.edu/
- http://repositories.tdl.org/utb
- http://repositories.tdl.org/tamucc/
- http://repositories.tdl.org/utmb/
- http://repository.tamu.edu/
- http://wtda.alc.org/
- Notice breadcrumbs and right-hand menu

CAPTURES...

- Digital material in any format
- If desired, directly from creators (faculty, etc.)

DESCRIBES...

- **Metadata**
  - Descriptive
  - Technical
  - Rights

DISTRIBUTES...

- Via WWW, with necessary access control
  - http://repository.tamu.edu/
  - Persistent identifiers "handles"

Handles

- Persistent Identifier—globally unique—attached to objects
  - Communities
  - Collections
  - Items

PRESERVES...

- Bitstream guaranteed

Who is using DSpace?

- Over 400 registered institutions worldwide

  - List of United States users available online

- More than 1 million digital assets; largest sites contain several hundred thousand items

- Primarily research/higher education institutions

- Cultural heritage organizations, state libraries/archives

- Some commercial users and service providers

- Active development community

DSpace—Then and Now

- 2002—came out of a partnership between developers at Hewlett-Packard and MIT

- 2007—DSpace Foundation (non-profit organization) formed

- 2009—Announcement of [DuraSpace](#)

  - A merger of Fedora Commons and DSpace Foundation

  - The two flagship repository platforms will be sustained

  - Will offer new technologies and services responding to the dynamic environment of the Web and to new requirements from existing and future users
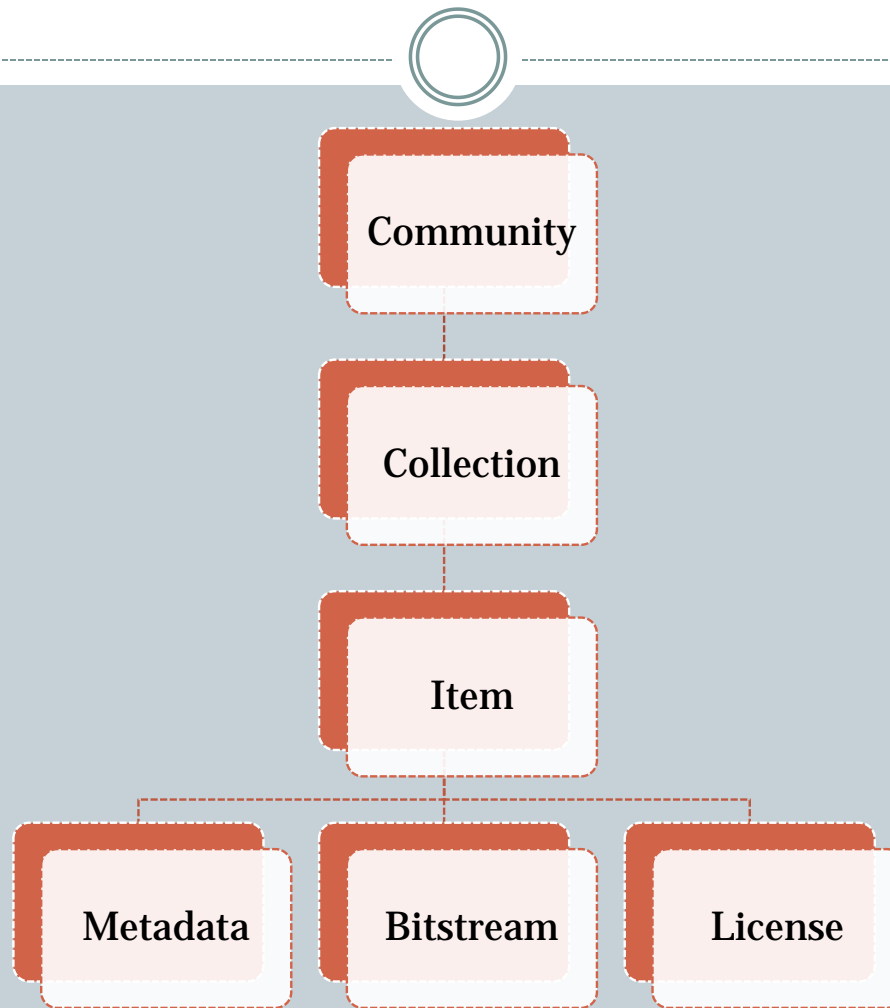
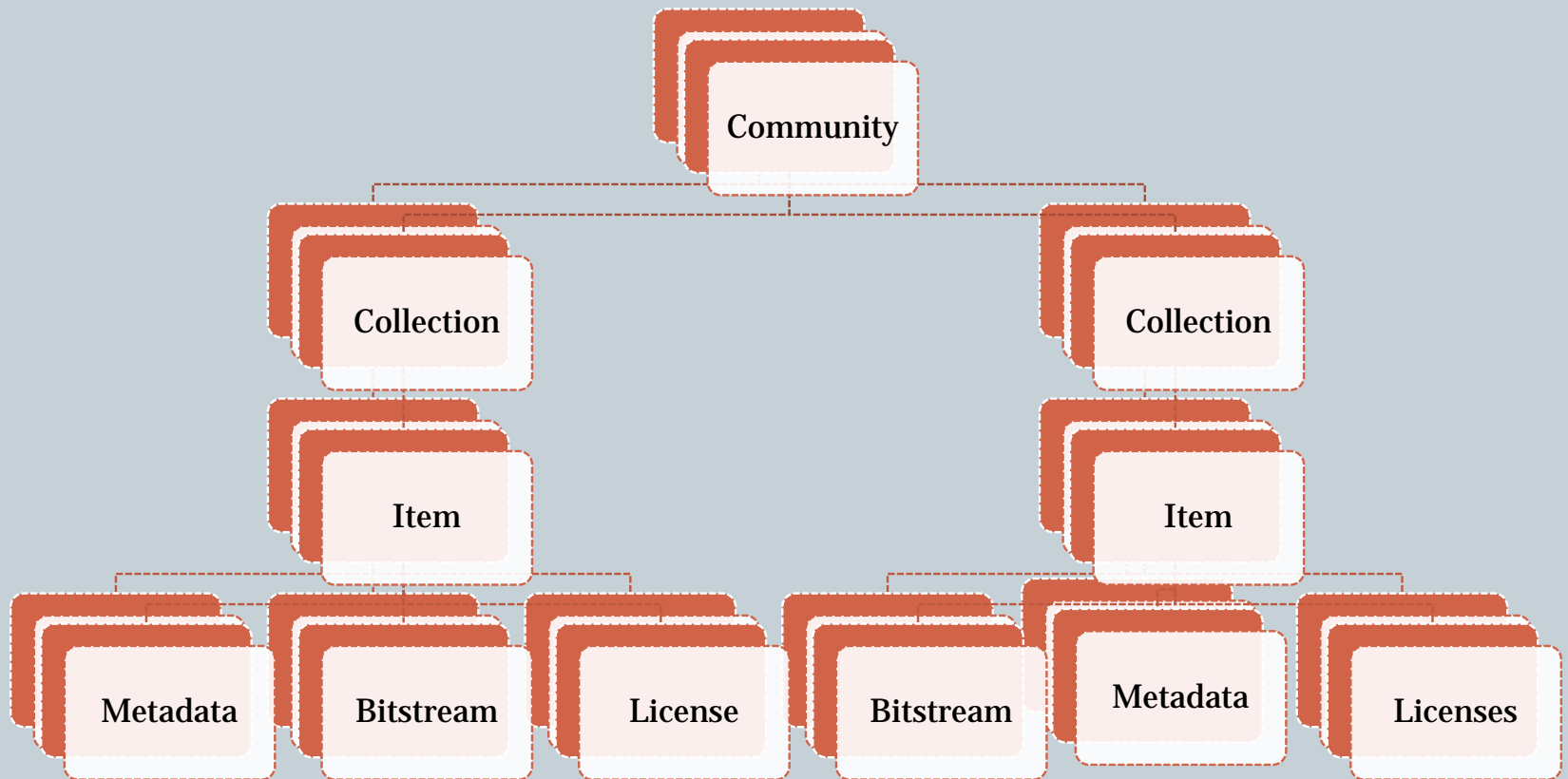# Communities & Collections

Communities & Collections

- ## Communities
  - ○ Can contain sub-communities OR collections
- ## Collections
  - ○ Can contain items
- ## Items
  - ○ Contains metadata and bitstreams (files)
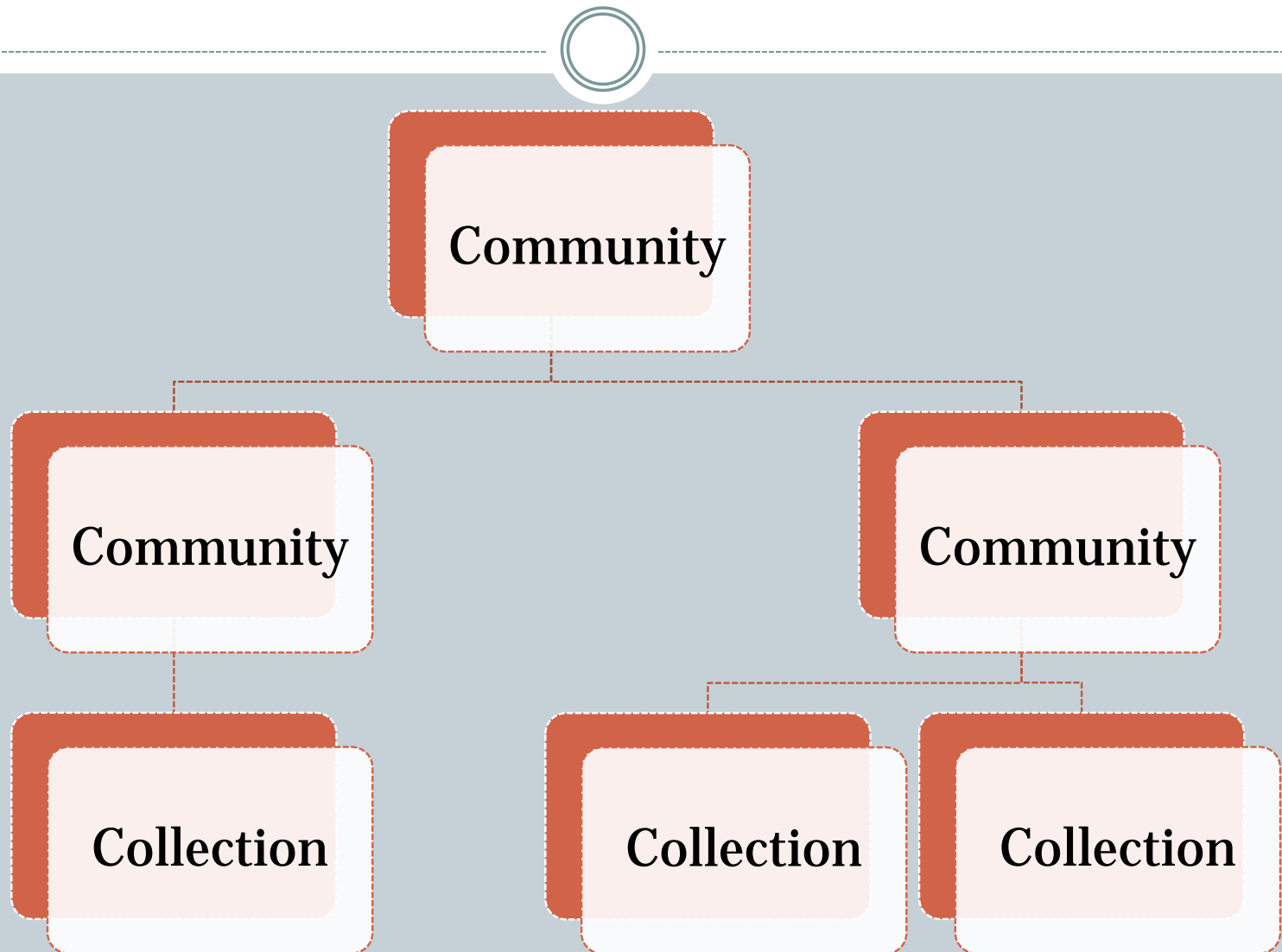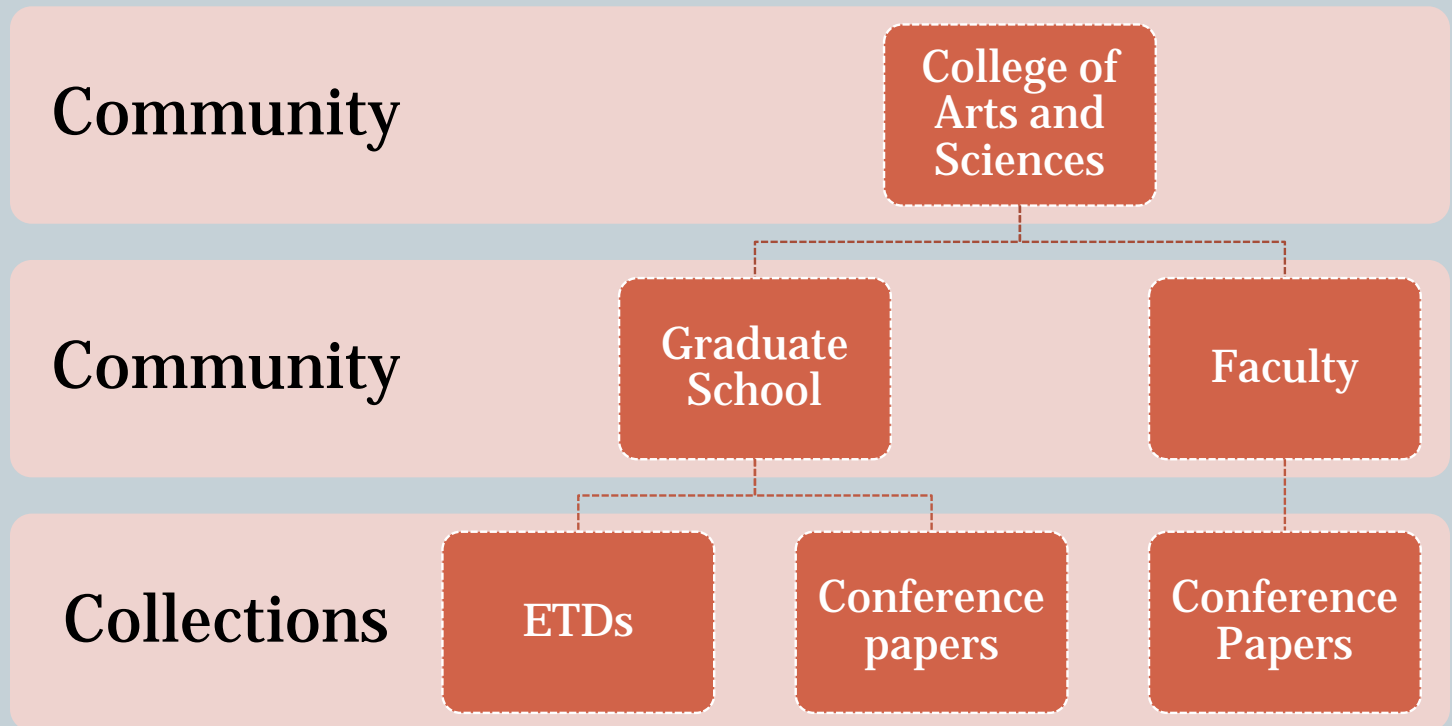
DSpace Data Model

DSpace Data Model

DSpace Data Model

DSpace Data Model

Communities & Collections

Steps to creating communities:

1. Log in
2. Click Communities & Collections (under Browse)
3. Click on Create Community (under Context)
4. Give the community a name and add a short description and introductory text (optional)
5. Upload a logo file (optional)
6. Click Create to finish

Communities & Collections

Steps to creating collections:

1. Log in
2. Click Communities & Collections (under Browse)
3. Choose the community in which you wish to create a collection
4. Click on Create Collection (under Context)
5. Give the collection a name and add a short description and introductory text (optional)
6. Upload a logo file (optional)
7. Click Create to finish

Communities & Collections

To create a sub-community, navigate to the community in which the sub-community will exist and then follow the same steps for creating a community.
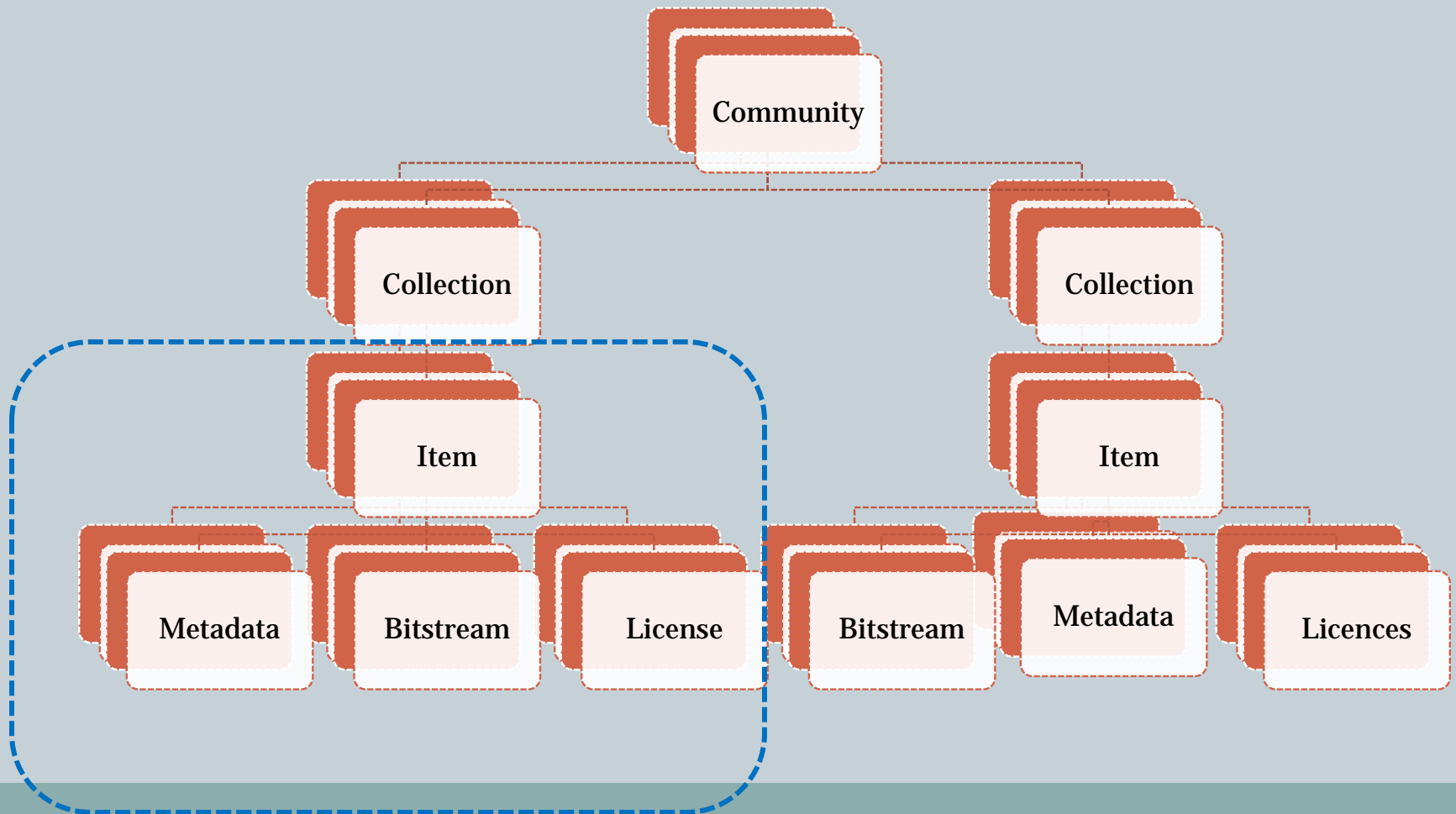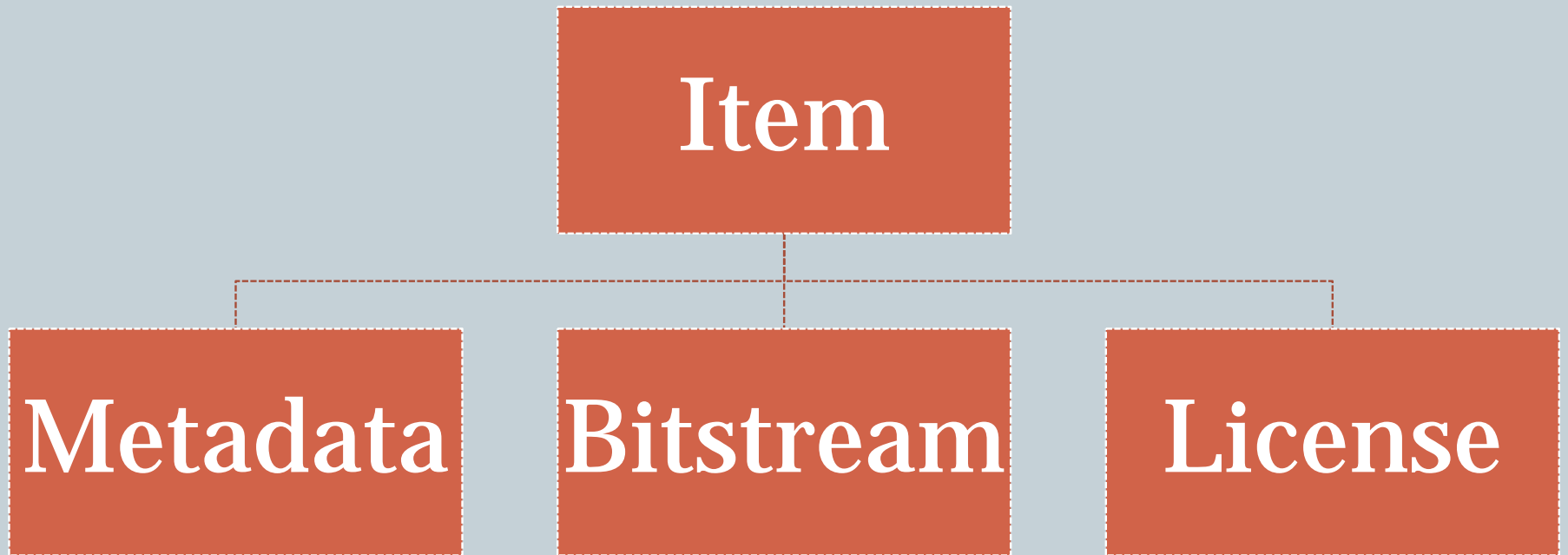
Hands on: Create Community & Collection

Create and Submit an Item

DSpace Data Model

DSpace Data Model

Create and Submit an Item

Steps to submitting an item:

1. Log in
2. Choose the community/collection you wish to submit to
3. Select "Submit a new item"
4. Describe the item (metadata)
5. Browse for and upload the file (bistream(s))
6. Make corrections if necessary
7. Grant the license

Hands on: Create and Submit an Item

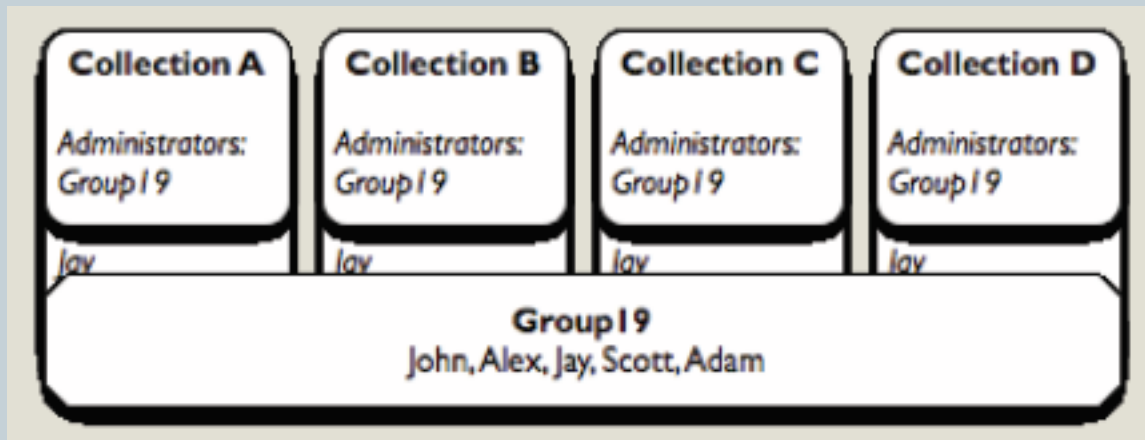# Users & Groups

Users and Groups

- Users
  - Individuals that have a role in the system
- Groups
  - Groups of users that share roles

Collection A	Collection B	Collection C	Collection D
Administrators: Group19	Administrators: Group19	Administrators: Group19	Administrators: Group19
Jay	Jay	Jay	Jay

Group19
John, Alex, Jay, Scott, Adam

Special Groups

- "Administrator"
  - Group of system administrators
- "Anonymous"
  - Anyone

Create Users and Groups

Steps to create users:

1. Select "People" (under Administrative – Access Control)
2. Click "Create a new e-person"
3. Add the new person's name and contact information
4. Click "Create E-person"

Create Users and Groups

Steps to create groups

1. Choose "Groups" (under Administration – Access Controls)
2. Select "Create a new Group"
3. Give the group a name
4. Use "Search members" to add e-people the new group
5. Click "Add" next to the e-people you want to add to the group
6. Click "Save"

# Hands on: Create a Group and add members

Workflow

Workflow Steps

- ## No Workflow Steps
  - Item is made available upon submission
- ## Workflow Step 1 (Accept/Reject)
  - Can accept or reject a submission
- ## Workflow Step 2 (Accept/Reject/Edit Metadata)
  - Can accept or reject a submission and edit metadata
- ## Workflow Step 3 (Edit Metadata)
  - Can edit metadata before making item available

Workflow Steps
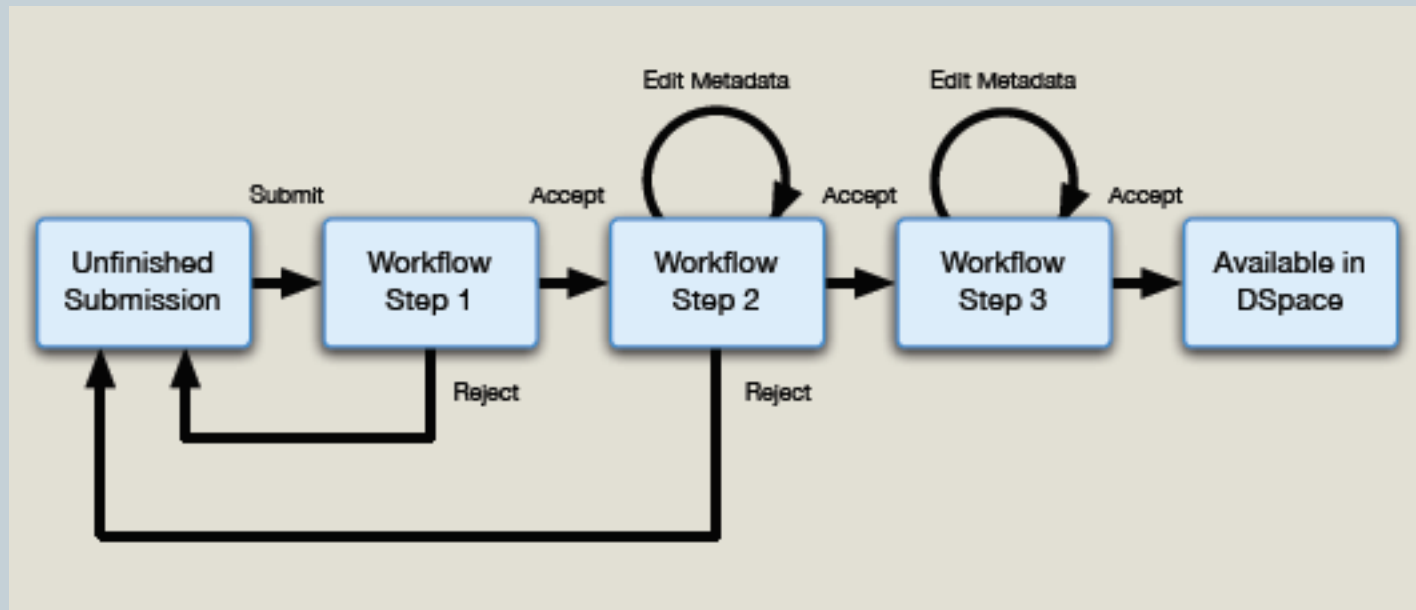
Authorizations

- ***Bitstream***
  - READ –can open the file
  - WRITE –can alter the file
- ***Item***
  - READ –can view the item
  - WRITE –can modify the item
  - ADD/REMOVE –can add or remove bitstreams
- ***Collection***
  - ADD/REMOVE –can add or remove items from the collection
  - DEFAULT_ITEM_READ –new items receive this READ attribute
  - DEFAULT_BITSTREAM-READ –new bitstreams receive this READ authorization
  - COLLECTION_ADMIN –can edit or withdraw items, or map items into the collection
- ***Community***
  - ADD/REMOVE –can add or remove collections from the community

Workflow for Collections

Steps to create a workflow:

1. Select the community and collection you wish to edit

2. In the Context box, select Edit Collection

3. Edit the collection metadata (Edit Metadata tab)

4. Choose the Assign Roles tab

5. Assign e-people and/or groups to the roles that are relevant to the collection and the workflow you have selected

Hands-on: Workflow for Collections

Metadata Registries and Templates

Metadata

- **Descriptive Metadata**
  - Qualified Dublin Core
  - Limited expansion to other formats

Metadata

- **Submission Forms**
  - Customizable in configuration files
- **Editing Metadata**
  - Can be done after submitting
- **Adding Metadata**
  - Can be done after submitting
- **Metadata Registry**
  - Creates new metadata field names
- **Item Template**
  - Default values

Editing/Deleting

Removing Items: Withdraw vs. Delete

- **Withdraw**
  - Removes item from view
  - Does not show up in search results
  - Recoverable
- **Permanently Delete ("Expunge")**
  - Unrecoverable
  - Handle is not reused
  - Can only be done by a repository administrator

Removing and Deleting Items

Steps for removing and deleting items:

1. Navigate to the item you wish to remove/delete

2. In the Context box, choose "Edit this item"

3. Choose "Withdraw" to withdraw the item from the repository OR choose "Permanently Delete" to expunge the item from the repository permanently
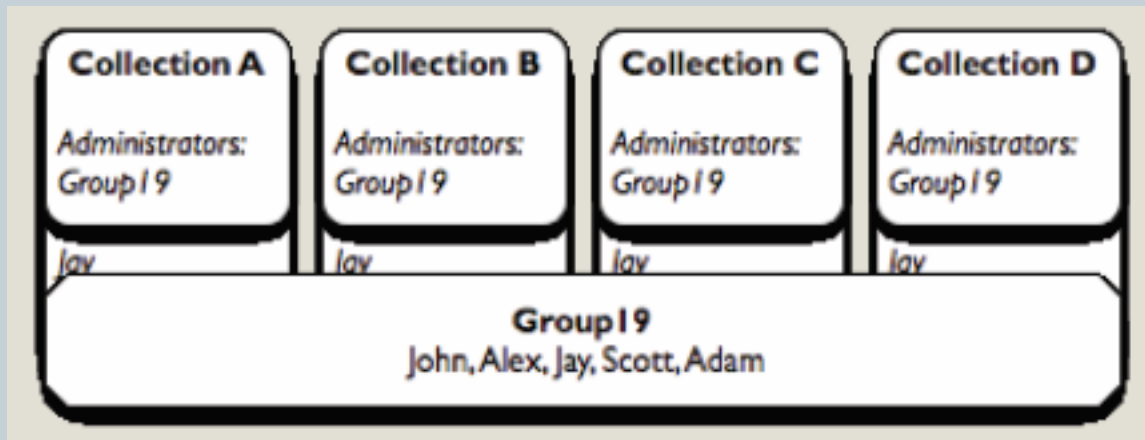
Hands-on: Removing and Deleting Items

Users and Permissions

Refresher On Users and Groups

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Authorizations

Steps for adding authorizations/policies to a community:

1. Click on "Authorizations" (under Administrative – Access Control)

2. Click on the Community whose policy you wish to create/modify

3. Choose either "Add a new policy" or "Edit" to modify an existing group policy

4. Choose the action (permission) you want to give the group

5. Choose the group to whom the action is being given

6. Choose "Save"

Authorizations

Steps for adding authorizations/policies to a collection:

1. Choose the collection
2. Choose "Edit Collection" (under Context)
3. Choose the "Assign Roles" tab
4. Choose the e-people or group to whom the role is assigned
5. Choose "Save"

Hands-on: Restricting Access

Introduction to DSpace

QUESTIONS?

Resources—DSpace (TDL)

- TDL/DSpace   http://www.tdl.org/repositories/
- DSpace Doc   http://wikis.tdl.org/tdl/Repositories
- TDL Groups   http://www.tdl.org/members/groups/
- TDL email   info@tdl.org (to join the TDL mailing list)
- TDL support   support@tdl.org
- Texas ETD Assc.   http://txetda.wordpress.com/
- TDL User Services   tdl_services_ug@utlists.utexas.edu
   Group   (email Ryan Steans, rsteans@austin.utexas.edu, to be added to the list)