



THIS USER GUIDE IS DEPRECATED - FOR THE MOST UP TO DATE INFORMATION ON USING EPADD, PLEASE REFER TO THE

[CURRENT USER GUIDE](#)

# ePADD Installation and User Guide

*October, 2022*

*Version 9*

**ePADD** is a software application that supports archival processes around the appraisal, ingest, processing, discovery, and delivery of email archives. It is open source and licensed under an Apache Public License, v2.0. The latest information about the software can be found [here](#).

**ePADD** development is managed by Stanford University's Department of Special Collections & University Archives, in collaboration with partners at Harvard University and the University of Manchester.

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## Document Revisions

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9/10/2018	6.1 beta 1	Guide updated for all modules reflecting small fixes in 6.1 beta release
9/27/2018	6.1	Guide updated for all modules reflecting small fixes in 6.1 release

10/29/2018	7.0 beta 1	Guide updated for all modules reflecting major changes in 7.0 release
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1/31/2018	7.0	Guide updated for all modules reflecting major changes in 7.0 final release
7/29/2019	7.1	Guide updated for all modules reflecting changes in 7.1 release
2/20/2020	7.2	Guide updated for all modules reflecting changes in 7.2 release
5/29/2020	7.3 beta	Guide updated to reflect major changes in 7.3 beta release
6/29/2020	7.3	Guide updated for all modules reflecting changes in 7.3 release
1/15/2021	7.3.5 alpha	Guide updated for the Processing Module to reflect changes in the 7.3.5 alpha release
4/8/2021	8	Guide updated for all modules reflecting changes in 8 release
10/5/2022	9	Guide updated for the Appraisal Module and Processing Module to reflect changes in 9 release

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## 1 Overview

Welcome to ePADD, the all-in-one email appraisal, processing, discovery, and delivery solution for donors, archival repositories, and researchers. This installation and user guide will assist the new ePADD user in making the most of the program.

ePADD consists of four modules – Appraisal, Processing, Discovery, and Delivery – which are designed to facilitate the process of working with email archives. The application runs in a user-friendly and familiar web browser interface:

**Appraisal:** Allows creators, dealers, and curators to easily gather and review email archives on a local server (to ensure privacy) prior to transferring those files to an archival repository.

**Processing:** Provides archivists with the means to arrange and describe email archives on a local server.

**Discovery:** Provides the tools for repositories to remotely share a redacted view of email archives with users through a public web server discovery environment.

**Delivery:** Enables archival repositories to provide moderated full-text access to unrestricted email archives within a reading room environment on a local server.

## 2 Getting Started

This section will get you started working with ePADD from installation through navigating the software platform.

### 2.1 System Requirements

**OS:** 64-bit, Windows 7 SP1 / 10, Mac OS X 10.13 / 10.14, Ubuntu 16.04

**Memory:** > 8 GB RAM

**Browser:** Chrome 68 or later, Firefox 59 or later.

**Java:** Java Runtime Environment 64-bit, version 8 or later required.

## 2.2 Installing ePADD

ePADD has been optimized for Windows 10, Mac OS X 10.14, and Ubuntu 16.04 machines.

Follow the instructions below for your operating system.

Users are advised to remove previous versions of ePADD before installing a new version. To do so, delete the folder:

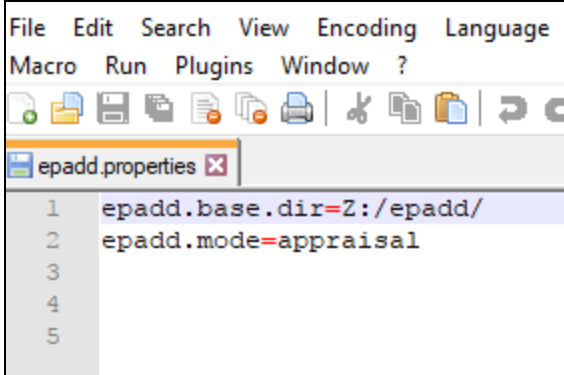
On Windows: C:\Users\<>username>\epadd-settings

Mac: /Users/<username>/epadd-settings

### 2.2.1 Installing ePADD on Windows

Please download the latest ePADD distribution files (.exe) from <https://github.com/ePADD/epadd/releases/>. **You will need to have the Java Runtime Environment version 8 or later installed on your machine for ePADD to work properly.**

When you run ePADD for the first time, a directory for the Appraisal Module is created to store working files. When ePADD starts up, it checks this directory and relies upon it to resume earlier work. If the software does not locate this directory, ePADD will create it. The ePADD Appraisal Module directory is located at c:\users\<>username>\epadd-appraisal.



```
File Edit Search View Encoding Language
Macro Run Plugins Window ?
epadd.properties
1 epadd.base.dir=Z:/epadd/
2 epadd.mode=appraisal
3
4
5
```

Example of the custom configuration file

Some settings can be configured using a custom configuration file, *epadd.properties*, which must be in plain text and created in the user's home directory (typically c:\users\<>username>\). If the file is not present, ePADD will revert to the existing defaults.

Editing this file is only necessary if you wish to change the defaults, for instance, if your default directory does not contain enough space.

1) Using a text editor, edit the existing epadd.properties file.

2) Add to it from the following list of properties.

**epadd.settings.dir=** The location of the epadd-settings folder. The default is [c://users/<username>/epadd-settings](#). Note the use of the forward slash in the configuration file.


**epadd.base.dir=** The location of the ePADD module folders (epadd-appraisal, epadd-processing, epadd-discovery, and epadd-delivery). The default is [c://users/<username>/epadd-appraisal](#), etc. Note the use of the forward slash in the configuration file.

**epadd.mode=** Defines the default module upon opening ePADD. Value should be one of the exact strings, 'appraisal', 'processing', 'discovery', or 'delivery' (without quotes). Match is case insensitive. The default is appraisal.

**admin=** Defines the admin name and email address to appear on the debug screen. The default is Peter Chan, [pchan3@stanford.edu](mailto:pchan3@stanford.edu).

3) Save the file.

Depending on your network permissions, you may be asked to allow ePADD access to your internet connection. ePADD requires an internet connection to download email from an email account using the IMAP protocol.

Upon running ePADD, the application icon  will appear in the Windows Taskbar. If you do not see the icon, it may be hidden from view. Consult 'Windows help & learning' - <https://support.microsoft.com/en-gb/windows> - for more information. Right-click on the ePADD icon at any point to open an ePADD window or to quit ePADD.

**Note:** The Discovery Module is run through a separate distribution file:

Epadd-discovery-standalone.jar

This is accessible via <https://github.com/ePADD/epadd/releases/>. Be careful not to use the standard ePADD application in a discovery environment. The epadd discovery application should be used in a public discovery environment because it is more secure than the standard ePADD application. For example, it does not allow any modifications to the archive.

ePADD saves all data in folders in the c:\users\\ directory, unless you have defined a different location using the epadd.properties file. We recommend as best practice making periodic backups of all ePADD related folders in this directory, which may include: epadd-settings, epadd-appraisal, epadd-processing, epadd-discovery, and epadd-delivery.

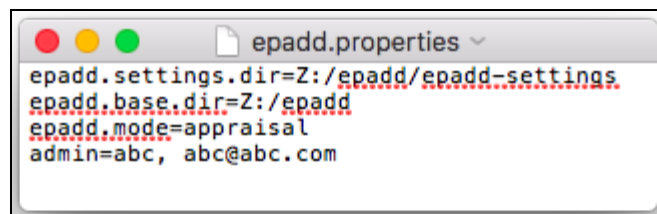
**Note:** Depending on your system RAM, ePADD allocates up to 64GB RAM to the application by default. If you wish to run a non-standard amount of RAM, you may wish to run the Java application directly from the command line (epadd-standalone.jar). From the Command Prompt, you can run the application using this command: java -Xmx#g -jar epadd-standalone.jar, where # identifies the amount of RAM (in GB) you wish to allocate.

**Note:** The user can optionally create and modify a named entity kill list to suppress text strings that ePADD has identified as entities from appearing as such within the software. To do so, create a text file titled 'kill.txt' in the ePADD-settings folder. Each line of the document should contain a single named entity. Save the file and restart ePADD. The entities you listed should be suppressed.

## 2.2.2 Installing ePADD on OSX

Please download the latest ePADD distribution files (.dmg) from <https://github.com/ePADD/epadd/releases/>.

When you run ePADD for the first time, a directory for the Appraisal Module is created to store working files. When ePADD starts up, it checks this directory and relies upon it to resume earlier work. If the software does not locate this directory, ePADD will create it. The ePADD Appraisal Module directory is located at Macintosh HD/Users/<username>.



```
epadd.settings.dir=Z:/epadd/epadd-settings
epadd.base.dir=Z:/epadd
epadd.mode=appraisal
admin=abc, abc@abc.com
```

Example of the custom configuration file

Some settings can be configured using a custom configuration file, *epadd.properties*, which must be plain text and created in the user's home directory (typically HD/Users/<username>/). If the file is not present, ePADD will revert to the existing defaults. Editing this file is only necessary if you wish to change the defaults, for instance, if your default directory does not contain enough space.

Follow the following steps to edit the configuration file.

1) Using a text editor, edit the existing *epadd.properties* file.

2) Add to it from the following list of properties:

**epadd.settings.dir=** The location of the *epadd-settings* folder. The default is <HOME>/epadd-settings.


**epadd.base.dir=** The location of the ePADD module folders (*epadd-appraisal*, *epadd-processing*, *epadd-discovery*, and *epadd-delivery*). The default is <HOME>/epadd-appraisal, etc.

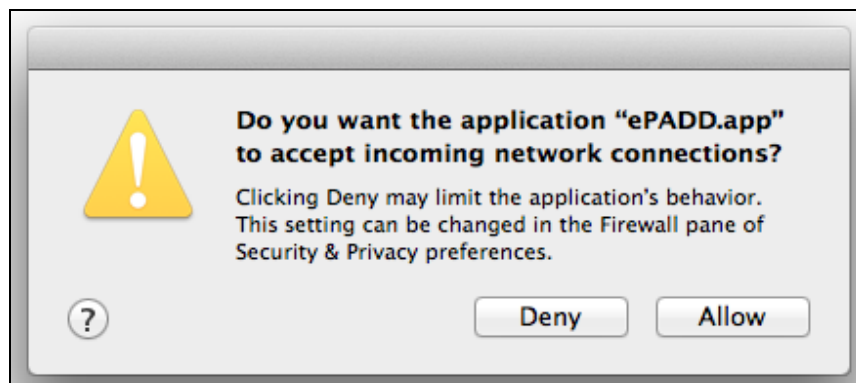
**epadd.mode=** Defines the default module upon opening ePADD. Value should be one of the exact strings, 'appraisal', 'processing', 'discovery', or 'delivery' (without quotes). Match is case insensitive. The default is appraisal.

**admin=** Defines the admin name and email address to appear on the debug screen. The default is Peter Chan, [pchan3@stanford.edu](mailto:pchan3@stanford.edu).

3) Save the file.

Depending upon your network permissions, you may be asked to allow ePADD access to your internet connection. ePADD requires an internet connection to download email from an email account using the IMAP protocol.

In Mac OSX, the application icon  will appear in the OSX Finder Toolbar. Right-click on this icon at any point to open an ePADD window or to quit ePADD.



ePADD requires an internet connection to download email using the IMAP protocol

**Note:** The Discovery Module is run through a separate distribution file `epadd-discovery-standalone.jar`, accessible via <https://github.com/ePADD/epadd/releases/>. Be careful not to use the standard ePADD application in a discovery environment. The `epadd` discovery application should be used in a public discovery environment because it is more secure than the standard ePADD application. For example, it does not allow any modifications to the archive.

ePADD saves all data in folders in the Macintosh HD/Users/<username>/ directory. We recommend as best practice making periodic back-ups of all ePADD related folders in this directory, which may include: `epadd-settings`, `epadd-appraisal`, `epadd-processing`, `epadd-discovery`, and `epadd-delivery`.

**Note:** Depending on your system RAM, ePADD allocates up to 64GB RAM to the application by default. If you wish to run a non-standard amount of RAM, or if your installation is running more slowly than you would expect, you may wish to run the Java application directly from the command line (`epadd-standalone.jar`). From the Command Prompt, you can run the application using this command: `java -Xmx#g -jar epadd-standalone.jar`, where # identifies the amount of RAM (in GB) you wish to allocate.

**Note:** The user can optionally create and modify a named entity kill list to suppress text strings that ePADD has identified as entities from appearing as such within the software. To do so, create a text file titled 'kill.txt' in the `epadd-settings` folder. Each line of the document should contain a single named entity. Save the file and restart ePADD. The entities you listed should be suppressed.



### 2.2.3 Compatibility Note

Important: Releases from 6.0 onward package all email archive files using the BagIt specification, and are not backwards compatible with previous releases earlier to v. 5. Users should migrate v. 5 ePADD folders using the script available via <https://github.com/ePADD/epadd/releases>.

ePADD 5.0 is not compatible with previous versions. Please contact Peter Chan ([pchan3@stanford.edu](mailto:pchan3@stanford.edu)) for assistance in migrating from v4.1 to v5.0.

## 2.3 Running ePADD

To run ePADD, simply double-click the executable file.

## 2.4 Selecting a Module

The first time you run ePADD, it will default to the Appraisal Module. For testing, this may be changed by manually pointing the browser to `localhost:9099/epadd/switch-module`. However, for production, it is best practice to first close ePADD, and change the default module using the `epadd.properties` file (see section [2.2: Installing ePADD](#) in this guide for more details on configuring ePADD).

Note that an email archive must first be ingested into ePADD and exported through the Appraisal Module before it can be accessed in the Processing Module, and exported once again to the Discovery and Delivery Modules before it can be accessed in those modules.



Selecting a module during testing by navigating to `localhost:9099/epadd/switch-module`

The four modules are:

**Appraisal Module** – Provides creators, curators, and archivists with a toolset to load, review, and manage an email archive on a local server prior to accessioning that archive to a repository. The module includes various methods to help a user determine the relevance and importance of email messages, to identify and flag sensitive messages, and to impose restrictions on access. Email can be exported from this module to the Processing Module.

**Processing Module** – Enables an archivist to organize and edit an email archive on a local server following the initial appraisal of materials. Includes the ability to annotate messages, to identify and flag sensitive information, to further refine entity extraction, and to approve/assign authority headings. Email processed through this module can be exported to the Discovery and Delivery Modules. (Note that the Discovery Module is downloaded and run separately; see sections [3.7: Exporting Email to the Processing Module](#) and [5.2: Mounting the Discovery Module Under a Web Server](#) for further information).

**Discovery Module** - A separate, public web-based discovery environment designed to allow remote users to search email correspondents, headers, and extracted entities, while limiting full-text access to the materials.

**Delivery Module** – Provides end users with a suite of sophisticated search functionalities to query and review the full content of unrestricted email messages in a collection. This is a client-facing module that is designed to provide mediated access to the processed email archive on a local server running on a managed workstation.

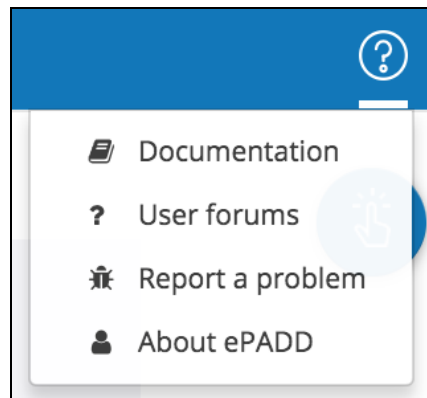
**Note:** While users can access a Discovery Module from the settings menu, implementing the module from a web server to provide public access requires additional work. Additional information about the Discovery Module can be found in *Section 5*.

**Note:** We have designed ePADD with the expectation that a given workstation will typically run one specific module at a time, though we recognize this will not always be the case. If you are exploring ePADD for development purposes, and planning to run multiple modules on a single workstation, you may navigate between modules by manually navigating to `localhost:9099/epadd/switch-module` using the web browser address bar. Please note that it is always best practice to close the archive using the ‘Close’ header menu option, and to fully quit ePADD, before beginning work in another module.

Please note that it is always best practice to fully quit ePADD and restart ePADD before beginning work in another module. You *must* fully quit and restart ePADD in order to switch to another module from either the Discovery or Delivery module.

## 2.5 Navigating ePADD

The navigation bar at the top of the screen will present you with primary menu options aligning with the functionality of a particular module. Selecting one of these primary menu options will bring you to a sub-menu offering the potential to carry out related tasks. ePADD is flexible and does not require that the user navigate through a given module in any particular order. Links to documentation, user forums, and other helpful information can be found via the **Help** dropdown located in the far right of the navigation bar.



**Documentation and other information can be accessed from the Help dropdown**

Collections in Processing, Discovery, and Delivery can be closed, and the users return to the collection browse menu, using the 'Close' header menu option, providing additional clarity when working with multiple collections. Note: As always, the user can only work with one collection at a given time.


Additionally, users must manually save their work in Appraisal, Processing, and Delivery, using the 'Save' header menu option.

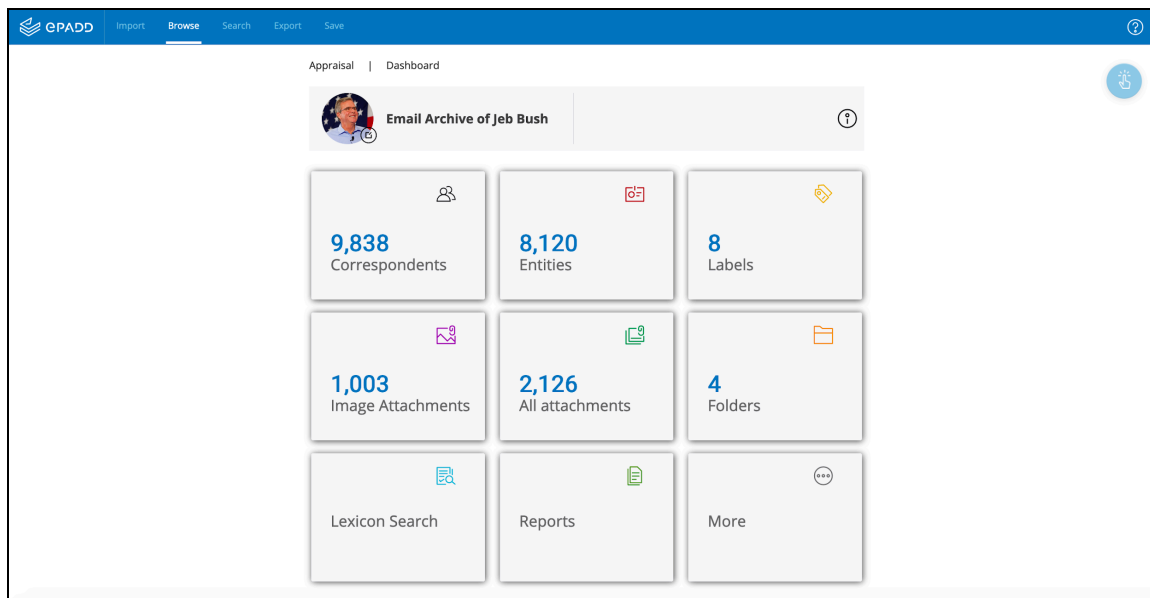
The user can generate a link to a specific message within a given module by selecting the 'Link' option, next to the unique message ID. The generated link appears in the address bar. After loading a collection, pasting the link will take you immediately to that message.

More settings may be available under the **More** option on the Browse screen, including verifying the bag checksum. This function will verify that the checksum of the bag is

consistent with ePADD's expectations. This may be especially helpful to ensure that an email archive transferred from a donor has not been corrupted or otherwise tampered with.

**We recommend keeping regular backups of your epadd-appraisal, epadd-processing, and/or epadd-delivery folders in case of file corruption.**


You can view more information about the archive by clicking on the information button adjacent to the email archive title at the top of most pages: 

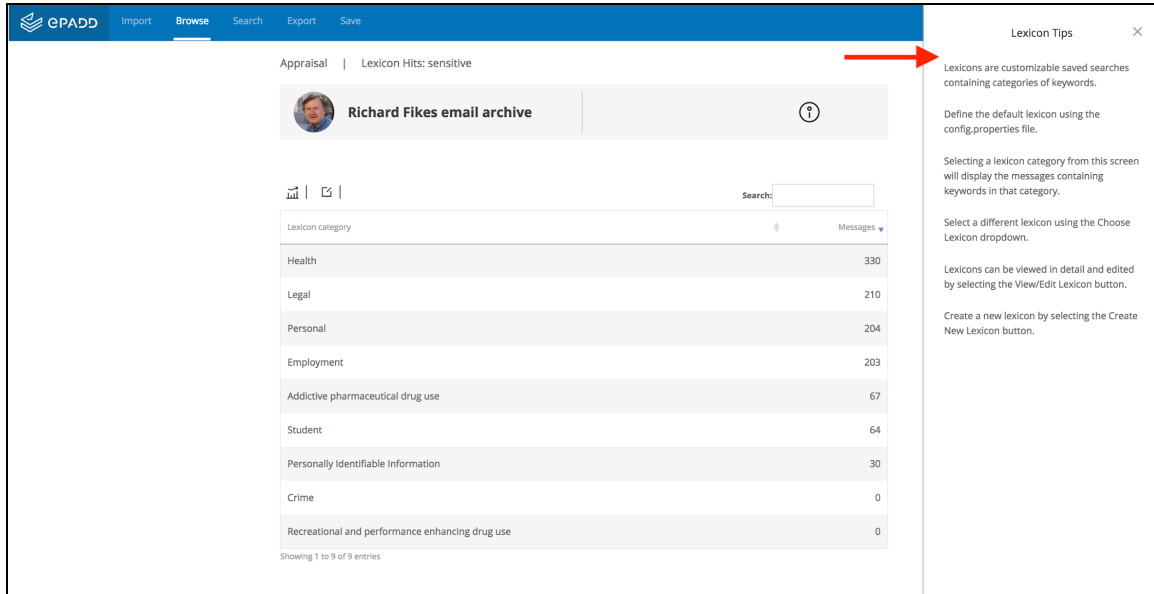


Archive Owner Name: **Jeb Bush**  
Archive Owner Email: **jeb@bush-brogan-2002**  
Date Range  
**1970-01-15 to 2011-01-09**  
**1 message undated**

Messages: **3,313**  
Sent by owner: **1,126**  
Attachments: **481**  
Images: **138**  
Documents: **289**  
Others: **54**

To view additional statistics for the email archive, select the **Reports** option from the Browse menu.

Tips and other helpful information can be accessed on many screens by selecting the help drawer button located in the top right corner of a screen: 



An example of a screen which provides helpful information accessed via the help drawer. 

### 3 Appraisal Module

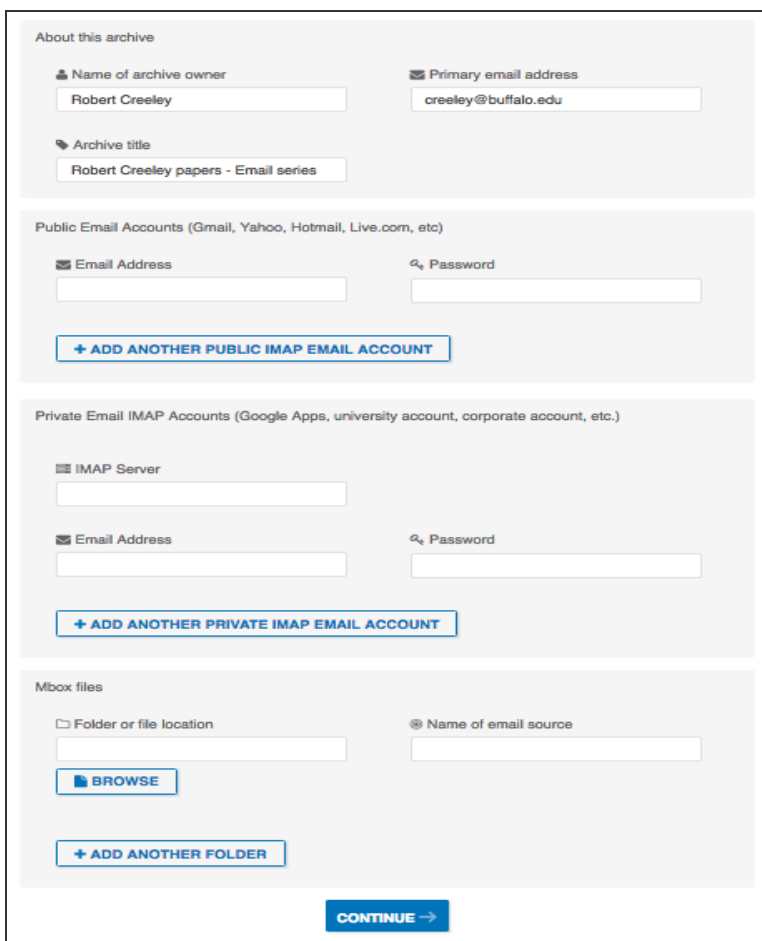


#### Appraisal Navigation Bar

The **Appraisal Module** provides creators, curators and archivists with a robust toolset to load, review and manage the email of an individual (or optionally, a group of individuals) prior to accessioning that mail to a repository. The module includes various tools to help a user determine the relevance and importance of email messages, to identify and flag sensitive messages, and to impose restrictions on access.

### 3.1 Importing email

The Appraisal module is the default module (although this can be adjusted using the `epadd.properties` file). When first launched, you will find yourself on the **Import** screen. This interface is where you enter information (name and an associated email address) about the owner of the email account (optional), as well as specify the location and account info, if applicable, of the MBOX files or IMAP email accounts that ePADD will be ingesting for review and potential transfer to an archival repository. You can select multiple accounts, as well as multiple MBOX files, by selecting the *Add another account* or the *Add another folder* buttons. Note that many email clients do not allow incoming IMAP connections due to their security settings, before attempting an import using IMAP, verify that your account will allow it.



The screenshot displays the 'Import' interface with the following sections:

- About this archive:**
  - Name of archive owner: Robert Creeley
  - Primary email address: creeley@buffalo.edu
  - Archive title: Robert Creeley papers - Email series
- Public Email Accounts (Gmail, Yahoo, Hotmail, Live.com, etc):**
  - Email Address: [empty]
  - Password: [empty]
  - + ADD ANOTHER PUBLIC IMAP EMAIL ACCOUNT
- Private Email IMAP Accounts (Google Apps, university account, corporate account, etc.):**
  - IMAP Server: [empty]
  - Email Address: [empty]
  - Password: [empty]
  - + ADD ANOTHER PRIVATE IMAP EMAIL ACCOUNT
- Mbox files:**
  - Folder or file location: [empty]
  - Name of email source: [empty]
  - BROWSE
  - + ADD ANOTHER FOLDER

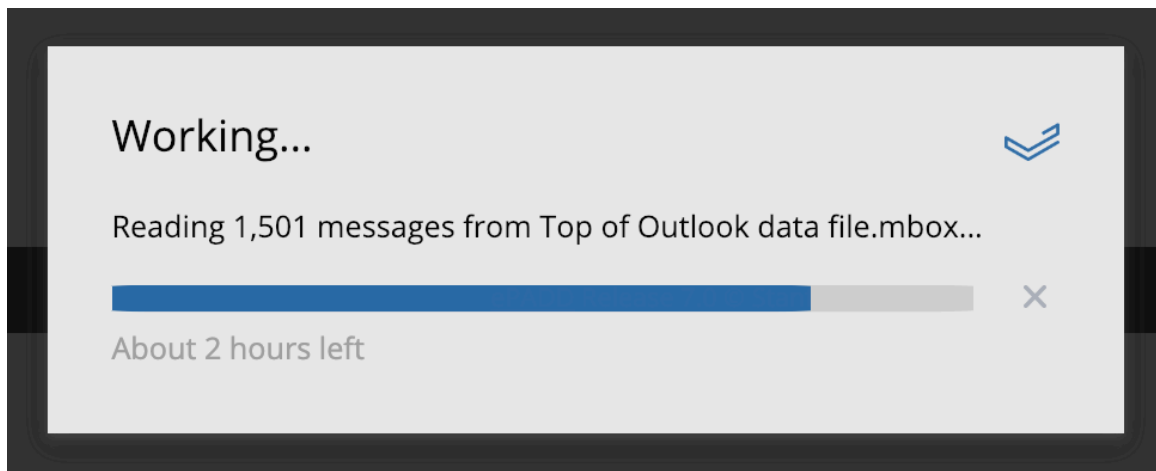
A **CONTINUE →** button is located at the bottom center of the form.

ePADD works with MBOX files as well as IMAP email accounts

Completing the *Name of email source* enables users to explore email by source after import, either by using the new *Folder View*, or by specifying the *Email Source* in Advanced Search. For ingest of email through IMAP, the email account is used as the source name. Please ensure all relevant information has been filled out before pressing the *Continue* button at the bottom of the screen.

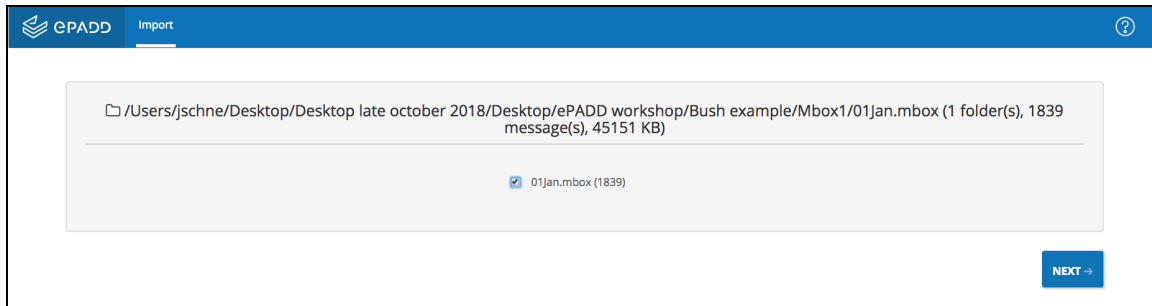
**Note:** Some IMAP-supported services may require you to confirm through email, text message, or some other means that the login attempt is authentic. Depending on the service, this may require the user to temporarily modify security settings to allow ePADD access.

Additionally, if this is your first time loading these email sources, and especially if you have selected to download mail from an IMAP account, it may take some time for ePADD to perform this initial step.



**ePADD will estimate how long it will take to load the selected email files**

Once one or more email sources have been loaded, ePADD will give you the opportunity to select or deselect individual email folders associated with accounts, as well as specify a date range to review.

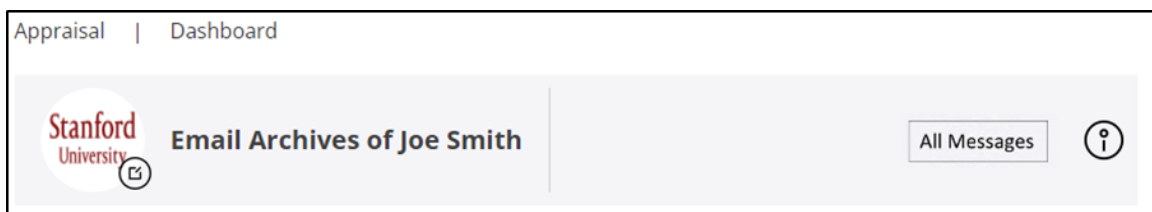


### Confirming Selection of Email Sources

Once you have confirmed the mailboxes you would like to review for transfer, click the *Next* button. Depending on the size of the accounts/folders selected, this next step may take some time as ePADD imports and deduplicates messages and performs a variety of additional steps intended to allow the user rich access to the email archive.

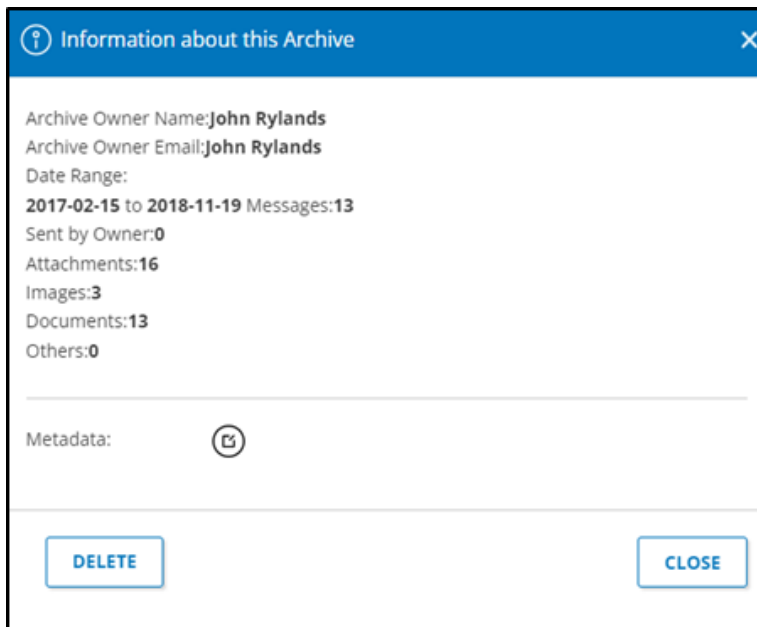
**Note:** No further steps are required to export the email archive to an archival repository at this point, if you so choose. To export at this time, proceed to **Section 3.4 Exporting Email**.

If you receive an error during the import process and need to start again, you can delete a collection from within the Appraisal module. Click on the information button - ⓘ - which is located to the right of the email archive's title on the ePADD dashboard:



And then click 'Delete', which is located in the bottom left of the 'Information about this Archive' dialog box:





Alternatively, users can also delete the relevant directory manually by removing the epadd-appraisal folder from the user directory. This folder can be found:

On Windows: C:\Users\\epadd-<module>\

On Mac: /Users/<username>/epadd-<module>\

If you delete the directory manually (not from within ePADD as described below), then make sure ePADD is not running; otherwise, you get a *folder in use* error. You can stop ePADD by going in your browser to localhost:9100.

This method - deleting the directory manually - can be used at any point if you need or want to start again.

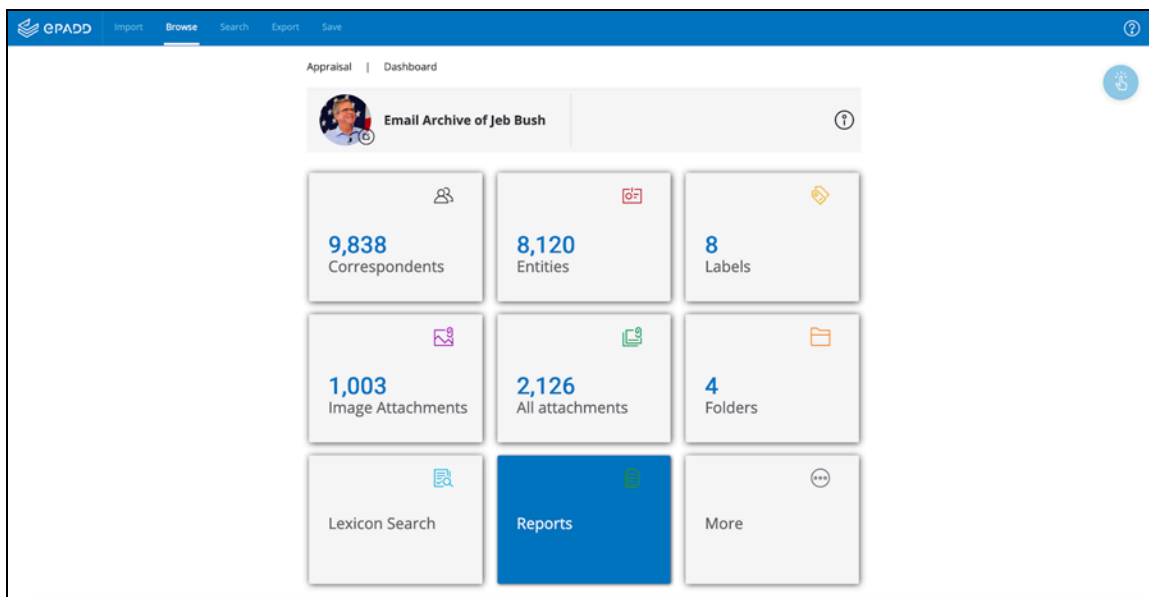
## 3.2 Reviewing Email

The Appraisal Module provides the user with a diverse set of tools for reviewing and assessing email prior to transfer to an archival repository.

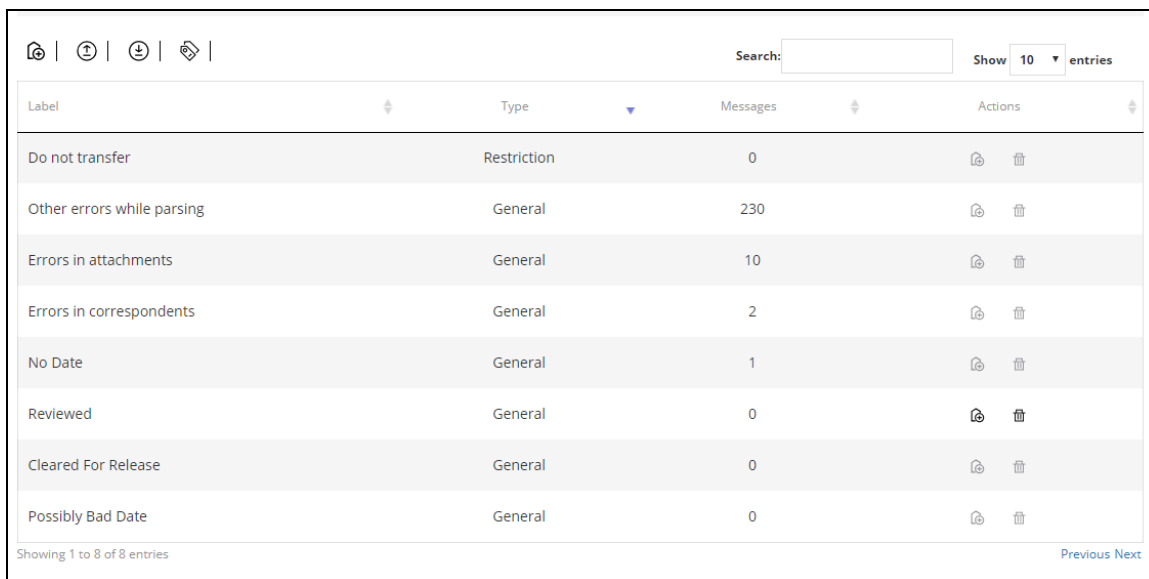
As a first step, the user should review the **Reports** option from the Browse menu.

This screen will present information about the email, including duplicate messages deduplicated by ePADD, and any potential errors identified by ePADD, such as missing

headers and dates. Messages containing potential errors are listed on this screen by error type.



The error itself is assigned to the message as a label. To view the set of messages with a particular label, select the Labels option from the Browse screen, then select the label with the associated error type.



Label	Type	Messages	Actions
Do not transfer	Restriction	0	
Other errors while parsing	General	230	
Errors in attachments	General	10	
Errors in correspondents	General	2	
No Date	General	1	
Reviewed	General	0	
Cleared For Release	General	0	
Possibly Bad Date	General	0	

Errors may have been generated during creation (in case of older email), transfer, or migration. Ascertaining where the error occurred may require technical expertise or assistance.

With the exception of reviewing the report and potentially investigating possible errors, there is no set order to perform the following steps. In fact, different email archives will benefit from different approaches.

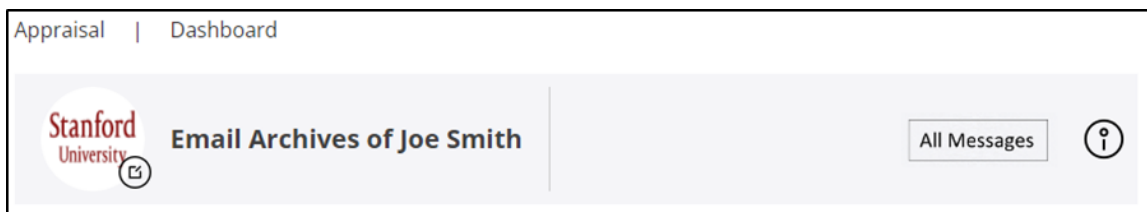
The various tools ePADD provides to assist in email review are described below.

### 3.2.1 Browsing Email Messages

After loading email into ePADD, the program opens the **Browse** screen as the default view. The user can also navigate to the **Browse** screen from the Appraisal Module Menu. From this screen, the user can browse All Messages (which allows users to browse all messages in the collection, one-by-one); by Correspondent; by Person or Other entities; by account folder structure; by Lexicon categories; or by whether messages include Image Attachments, Other Attachments; or contain sensitive information (identified through regular expressions).

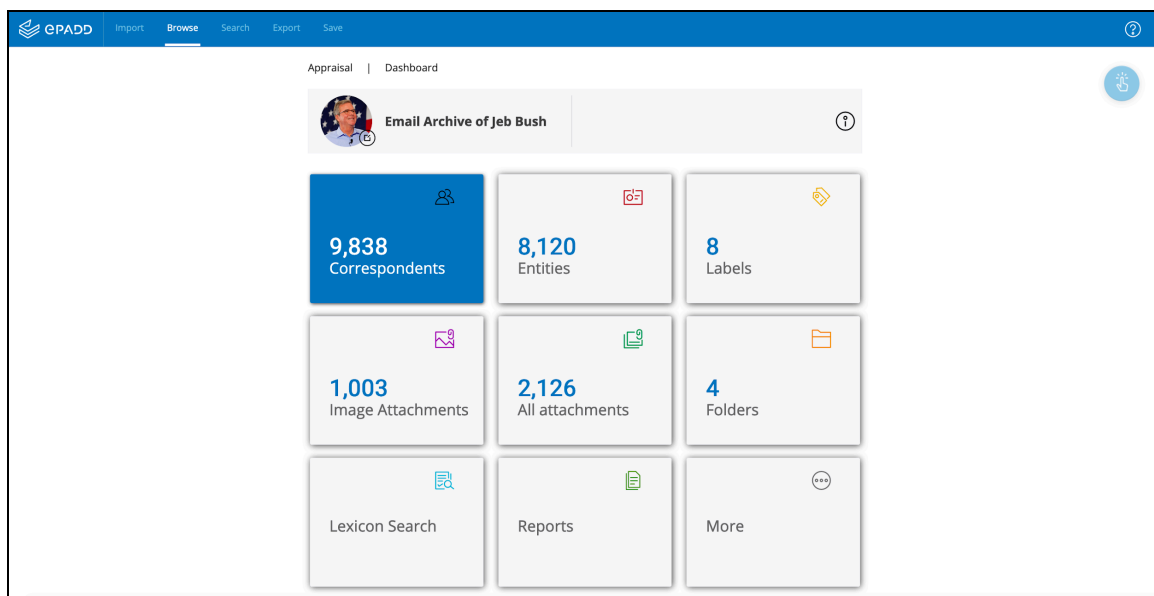
### 3.2.2 Browsing All Messages

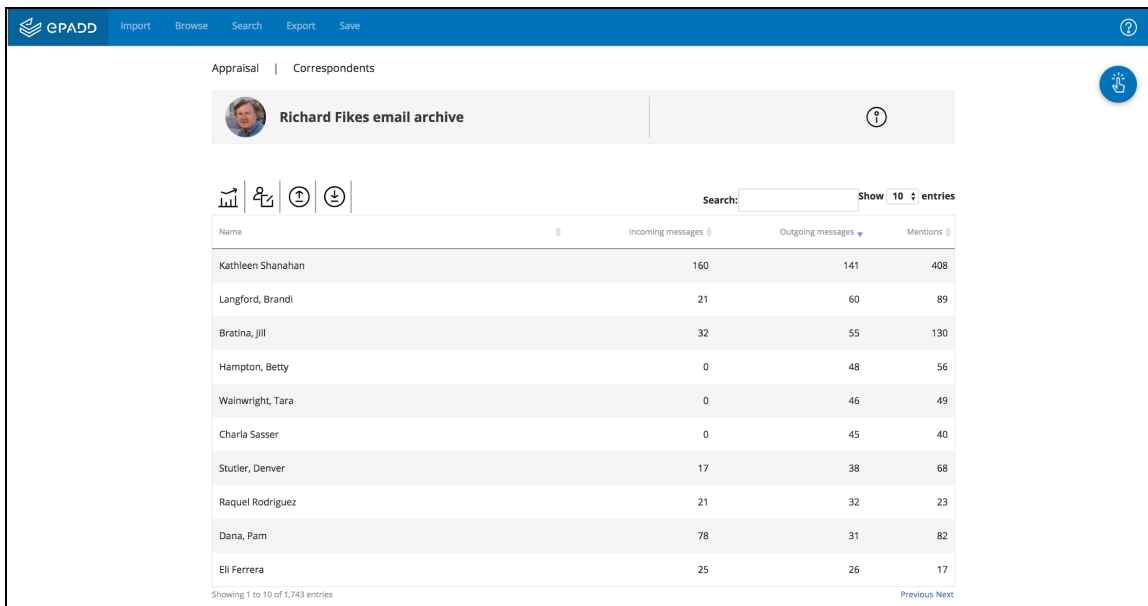
Users can browse all messages in a collection by clicking on 'All Messages', which is located in the banner at the top of the ePADD dashboard:



### 3.2.3 Editing Correspondents

ePADD automatically merges identities for a single correspondent by intelligently analyzing headers. This step helps clarify relationships between email correspondents to allow for higher-level analysis of the email archives.





Appraisal | Correspondents

Richard Fikes email archive

Search:  Show 10 entries


Name	Incoming messages	Outgoing messages	Mentions
Kathleen Shanahan	160	141	408
Langford, Brandi	21	60	89
Bratina, Jill	32	55	130
Hampton, Betty	0	48	56
Wainwright, Tara	0	46	49
Charla Sasser	0	45	40
Stutler, Denver	17	38	68
Raquel Rodriguez	21	32	23
Dana, Pam	78	31	82
Eli Ferrera	25	26	17

Showing 1 to 10 of 1,743 entries Previous Next

Users can also graph, edit, and export, and re-import the address book using the buttons available from the **Browse Correspondents** screen.

### 3.2.3.1 Editing Correspondents

ePADD allows the user to confirm or correct the identities of correspondents that ePADD has resolved through its analysis in order to improve the functioning of the actions that depend upon this behavior.

To do so, navigate to the **Edit Correspondents** screen by selecting the Edit Correspondent button: . This screen allows the user to view and edit the email address(es) and name(s) associated with each correspondent. The default view of this screen lists all correspondents by volume of messages exchanged, but the correspondents can also be listed alphabetically using the dropdown selection at the top of the screen. If there is a single archive owner, they should always be the first individual listed.

**Note: As a first step, we recommend downloading the correspondent file before making any edits, as some changes are irreversible.**

```
-- Archive owner
Robert Creeley
Robert W Creeley
Bob Creeley
Creeley, Bob
robert creeley
Creeley, Robert
creeley
Creeley
creeley@stanford.edu
creeley@acsu.buffalo.edu
creeley@buffalo.edu
robert_creeley@brown.edu

--
Charles Bernstein
bernstei
bernstei@acsu.buffalo.edu
bernstei@bway.net
bernstei@ubvms.cc.buffalo.edu

--
Susan Howe VonSchlegell
Susan Howe
Susan Howe Von Schlegell
showe@acsu.buffalo.edu
snhowe@aol.com
```


**ePADD allows the user to confirm or correct the identities of correspondents that ePADD has resolved using the Edit Correspondents screen**

If names or addresses are incorrectly associated with the wrong individual, you can manually cut and paste them underneath a different entry.

ePADD recognizes header information identifying messages as being sent from a mailing list where that information is available. These messages are differentiated from other correspondents in the Edit Correspondents screen under the heading '-- [ML]' Additional mailing list addresses can be manually identified and added under this heading using the Edit Correspondents interface. Users can also define the default display name for a correspondent when editing correspondents. ePADD interprets the first name listed as the default display name. If you would prefer a different name as the default display, simply add it to the top of the list. **Note: Re-ingesting email will overwrite any user changes. Please be sure to keep track of which addresses have been marked as mailing lists if planning to reingest email.**

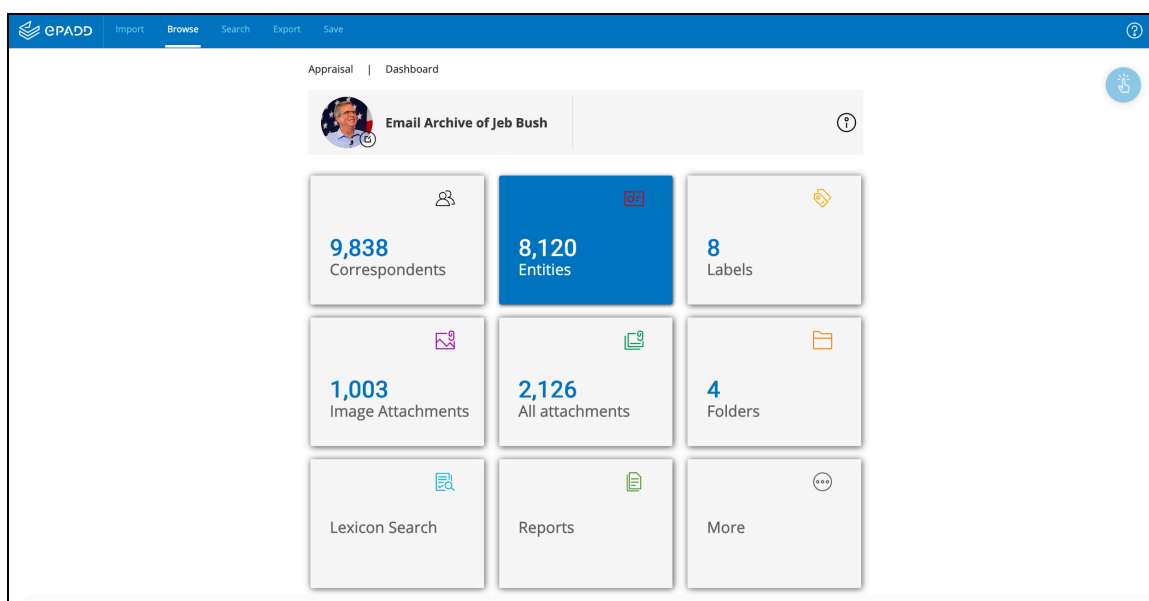
When you have completed your work editing correspondents, press *SAVE*.

You can also edit the address book offline, using the export/import functionality available within ePADD.

Select the graph button  to view a graph of top correspondents. Drag and drop a bounding box over the X axis to zoom in on a time period.

### 3.2.4 Performing Entity Analysis

ePADD identifies, extracts, and manages entities using a custom natural language processing toolkit. The extracted entities include persons, fine-grained entities such as corporations and government agencies, as well as other entity types such as diseases, awards, and events. Extracted entities can be reviewed by navigating to **Entities**, accessible under the **Browse** menu option from the navigation bar.



#### 3.2.4.1 Reviewing Fine-Grained Types

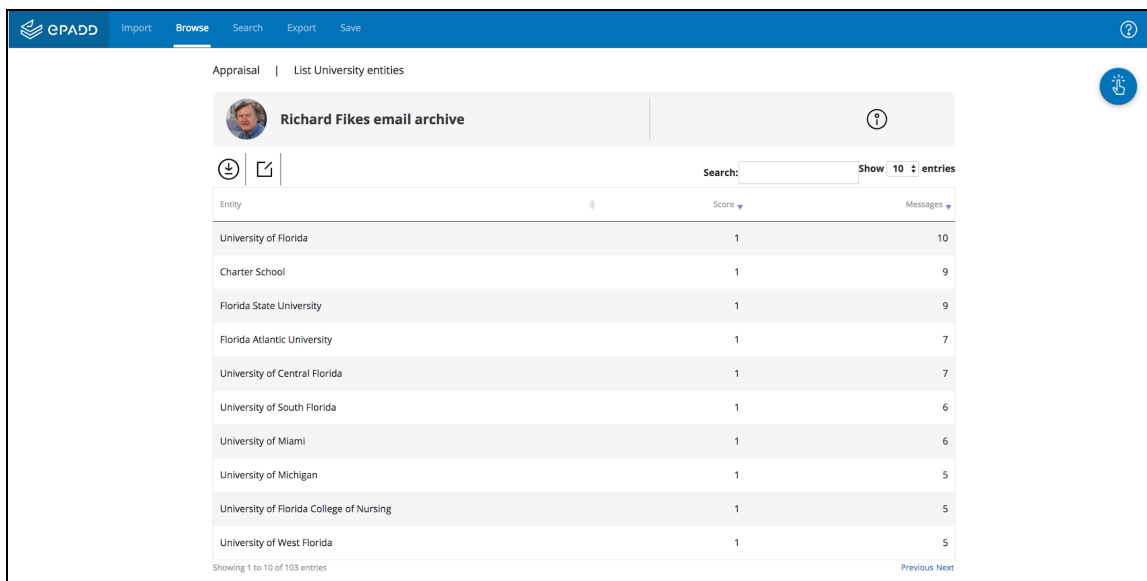
To review fine-grained types such as universities and governmental agencies, or other entity types such as diseases and awards, select **Entities** from the Browse menu. You can optionally download a CSV containing all entities and associated metadata (# of messages, score, date range, and entity type) from this screen.

Entity Type	# entities
Person	670
Place	164
Organisation	41
University	36
Company	35
Periodical Literature	23
Government Agency	16
Road	8
River	7
Legislature	6

Showing 1 to 10 of 25 entries Previous Next

**Fine-grained entity types, accessible through the *Entities* option on the browse screen.**

Select an entity type to view all of the entities recognized as belonging to that type.



Appraisal | List University entities

**Richard Fikes email archive**

Search:  Show 10 entries


Entity	Score	Messages
University of Florida	1	10
Charter School	1	9
Florida State University	1	9
Florida Atlantic University	1	7
University of Central Florida	1	7
University of South Florida	1	6
University of Miami	1	6
University of Michigan	1	5
University of Florida College of Nursing	1	5
University of West Florida	1	5

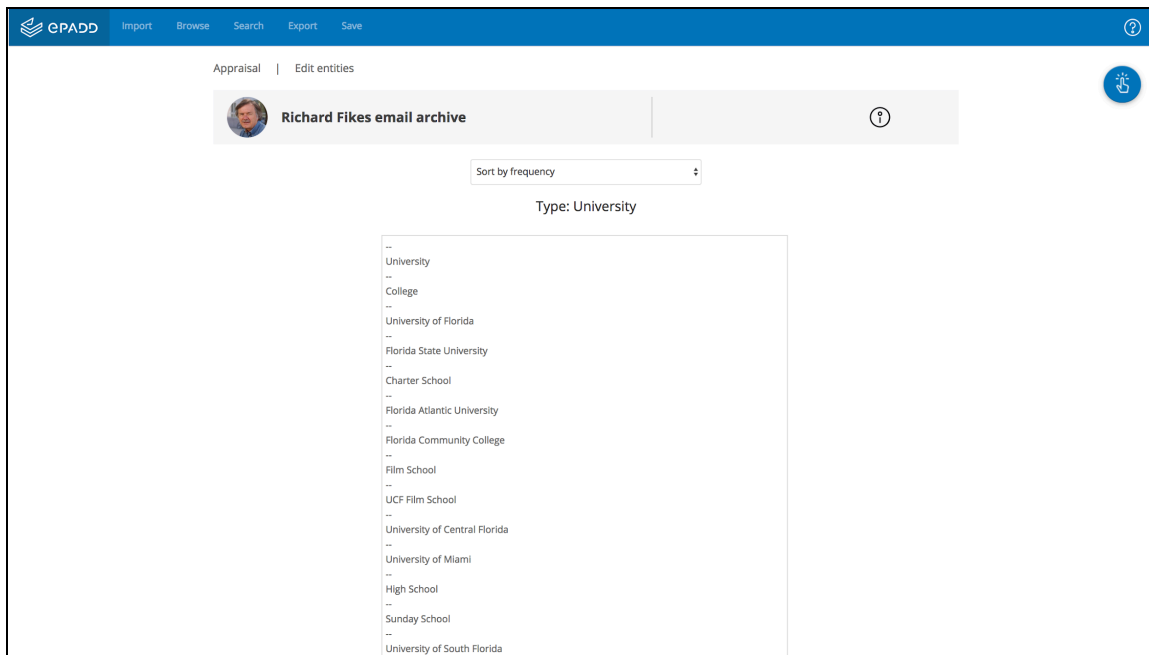
Showing 1 to 10 of 103 entries Previous Next

Select an entity to view the set of all messages including that entity. Users can also download all entities of a particular type and associated metadata (# of messages, score, inclusive message dates) from this screen; or also choose to edit entities associated with a particular entity type.



### 3.2.4.2 Editing Entities

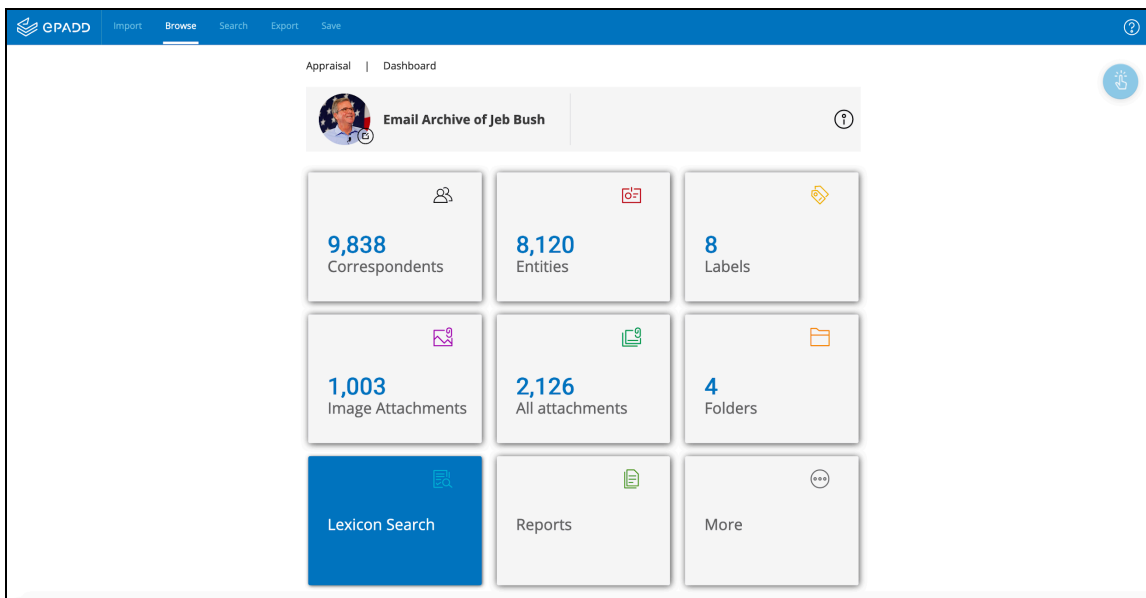
Users can edit or merge entities in a given category from the entity browse screen, by selecting the 'Edit entities' option: 



The user can merge entities by grouping them together using find, cut, and paste commands. Unmerge entities by separating them using find, cut, and paste commands. The first entity name listed within each group of entity names is the one ePADD will display in all search and browsing results and visualizations. Manually change this display name by moving a new name to the top of this list. Alternatively, you can supply a new entity display name to the top of the list. This supplied entity name does not need to appear in the email archive. The user can view the individual entities that have been merged with a given entity by hovering over that entity from the Entity Types screen.

The user can optionally create and modify a single entity kill list to suppress text strings that ePADD has identified as entities from appearing as such under any entity category. To do so, create a text file titled 'kill.txt' in the ePADD-settings folder. Each line of the document should contain a single named entity. Save the file and restart ePADD. The entities you listed should be suppressed.

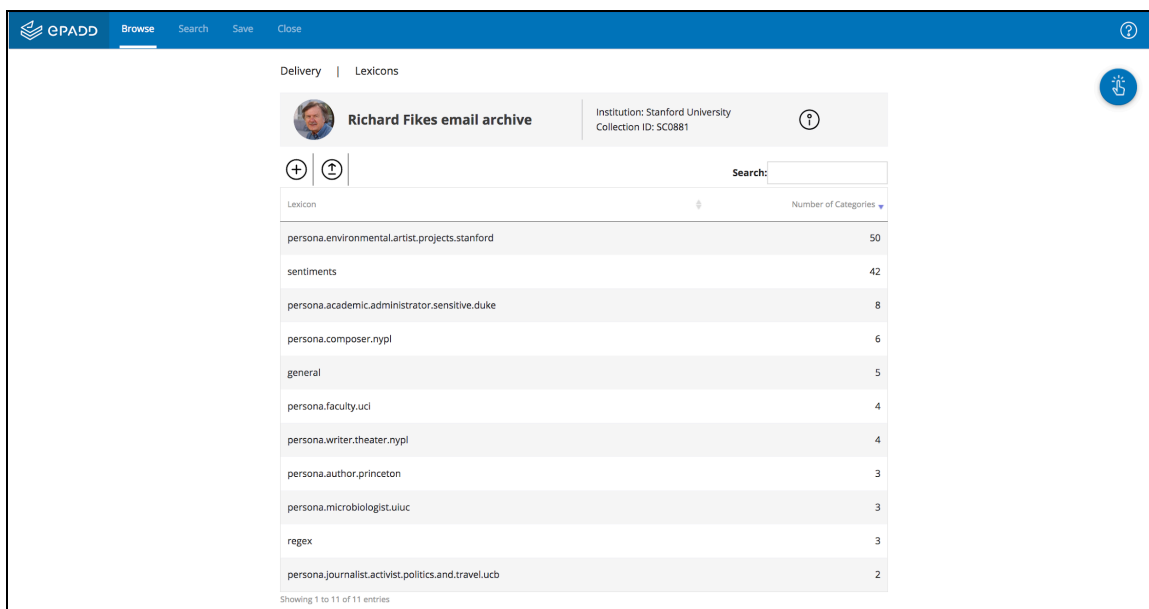
### 3.2.5 Performing Lexicon Analysis



ePADD employs lexicon analysis to search email messages for terms associated with personal or restricted information, which might indicate the need for further review. ePADD ships with several default lexicons. The 'Sensitive' lexicon can be used to assist in the identification of email messages with the potential for confidential content. In release 1.1 ePADD introduced a 'Sentiment' lexicon, to aid the user in performing sentiment analysis on the corpus. Beginning with release 2.0, ePADD includes a variety of additional lexicons developed by a Lexicon Working Group feedback. Additional information about this group, and about the lexicons shared, is accessible [here](#).

The user can make persistent changes to any lexicons, or start afresh by building a new lexicon.

The **Lexicon Browse** screen is accessible under the Browse Menu screen from the Appraisal Module navigation bar.



Delivery | Lexicons

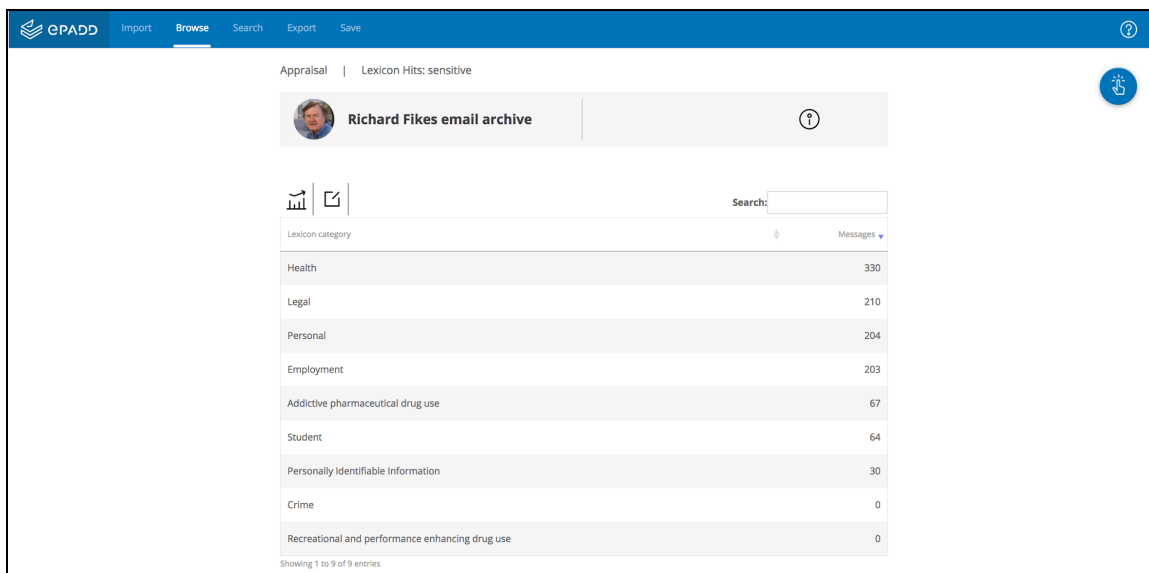
**Richard Fikes email archive** Institution: Stanford University  
Collection ID: SC0881

Search:

Lexicon	Number of Categories
persona.environmental.artist.projects.stanford	50
sentiments	42
persona.academic.administrator.sensitive.duke	8
persona.composer.nypl	6
general	5
persona.faculty.ucl	4
persona.writer.theater.nypl	4
persona.author.princeton	3
persona.microbiologist.luluc	3
regex	3
persona.journalist.activist.politics.and.travel.ucb	2

Showing 1 to 11 of 11 entries

Users can create a new lexicon, import a lexicon from outside ePADD, or view a current lexicon from the Lexicon Browse screen. Click on an existing lexicon to view the included categories of terms and number of hits for each category.



Appraisal | Lexicon Hits: sensitive

**Richard Fikes email archive**

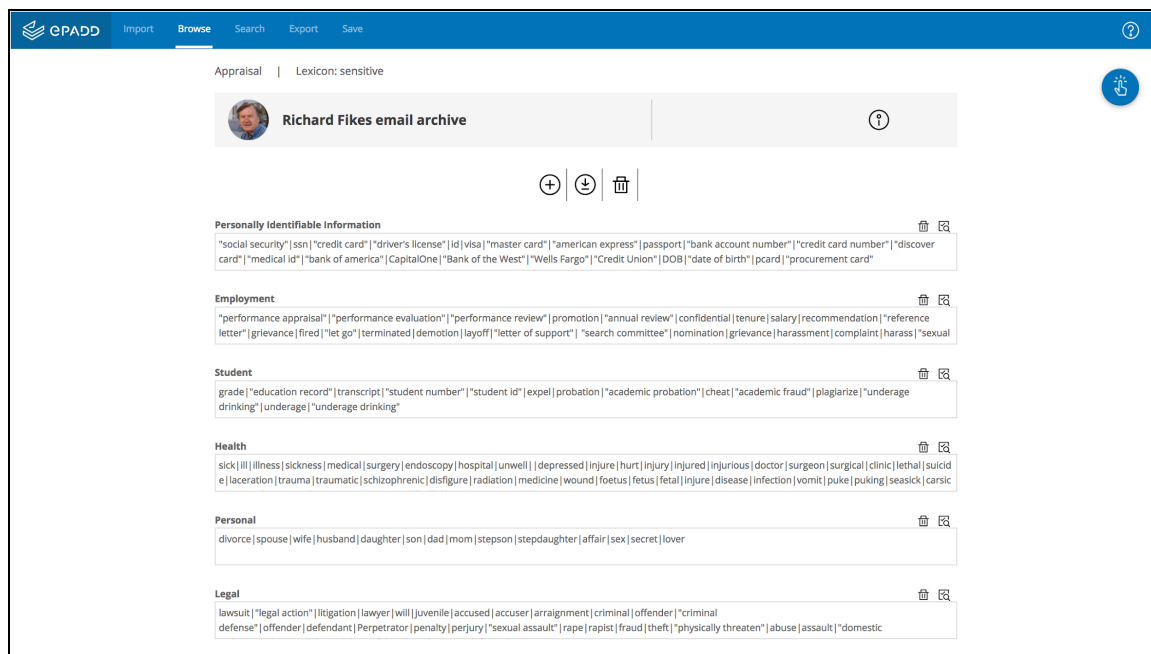
Search:

Lexicon category	Messages
Health	330
Legal	210
Personal	204
Employment	203
Addictive pharmaceutical drug use	67
Student	64
Personally identifiable information	30
Crime	0
Recreational and performance enhancing drug use	0

Showing 1 to 9 of 9 entries

From a particular lexicon page, you can choose to view a graph of the results, or edit the existing lexicon. Or, you can select a category to view all messages that contain a term included in that category.

### 3.2.5.1 Editing a Default Lexicon



The edit lexicon screen allows users to add categories, delete categories, download the lexicon for offline editing or sharing, or delete the lexicon entirely.

Users can also test categories to view the number of hits for each term in the category. This can be helpful in discovering whether a particular term is too broad or narrow to be helpful.

**Please note:** New entries in a category should be separated with the | (pipe) character. Multi-word phrases should be enclosed in double-quotes. Note that words and phrases with hyphens, such as father-in-law, should be placed in quotes.

When you have finished making changes, select the *Save* button.

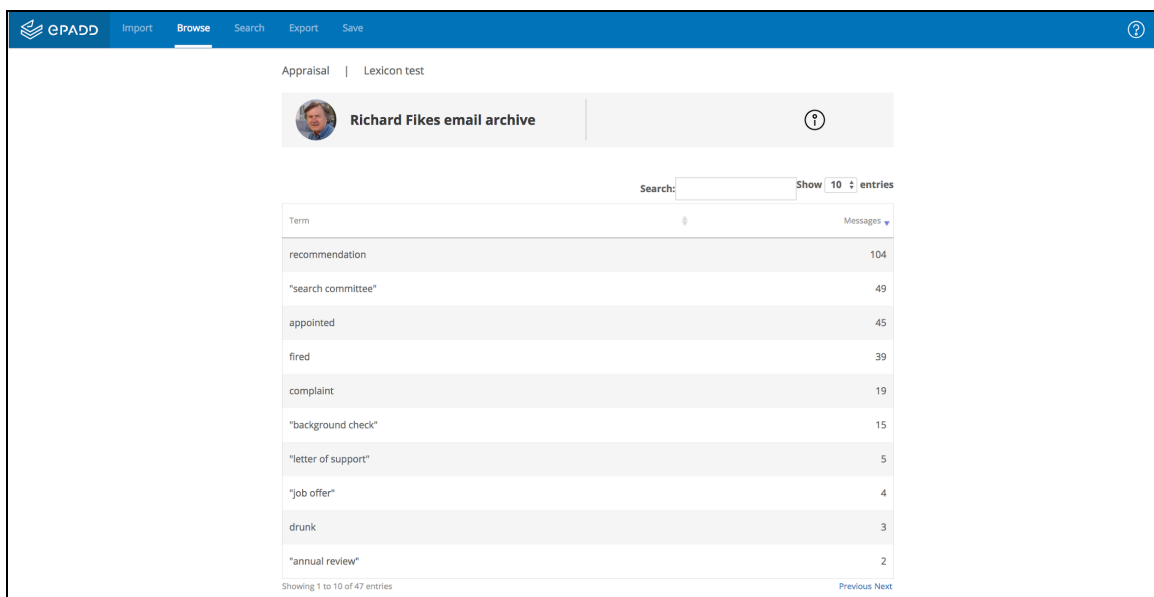
Users can export lexicons using the Export Button, to install them for use with other collections or share them with another institution. In this way, these lexicons can be reused across collections and ePADD instances. Default lexicons may be updated in future releases.

**Expert Tip:** The lexicon can also be used to categorize email messages based on topic.

The user **must** use the ePADD interface to add, remove, or update lexicons. This is because of how the bag checksum is calculated.

### 3.2.5.2 Reviewing Lexicon Analysis Results

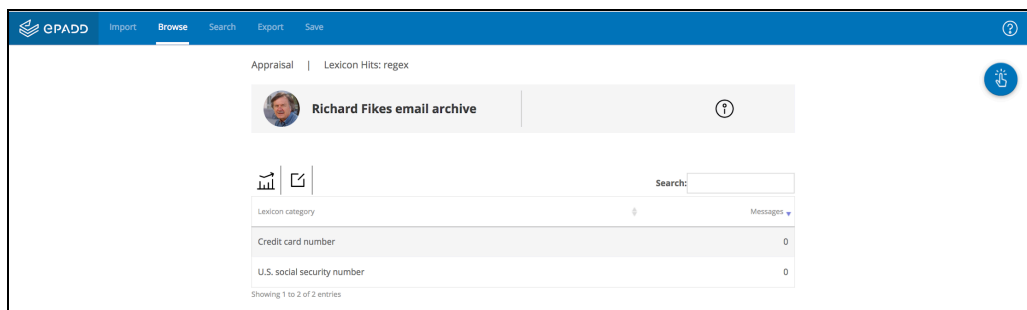
ePADD allows a user to test the results of any category in order to ascertain whether a particular term is too general or too specific to be helpful.



Test terms contained in a lexicon category by selecting the test function  from the Edit Lexicon screen

Lexicon analysis results for a whole lexicon may be reviewed via Advanced Search. A user can also view lexicon analysis results directly by clicking category results from the Lexicon Table screen.

### 3.2.6 Reviewing Regular Expressions



To further aid in identifying potentially confidential materials, ePADD searches the archive for sensitive messages by searching for regular expressions such as social security numbers, and credit card numbers. Regular expressions are a customizable lexicon under the Lexicon Search browse category, selected from the lexicon dropdown menu. Note that since each lexicon category contains just one regular expression, results for each category display under Lexicon Search results. The user can find the form of many common regular expressions online; <https://regexlib.com/> may be a helpful resource in this regard.

### 3.2.7 Reviewing Attachments

ePADD allows the user to browse and review email attachments. ePADD uses the Apache Tika toolkit to recognize a wide range of document formats. A complete list of formats recognized by Apache Tika can be found [here](#).

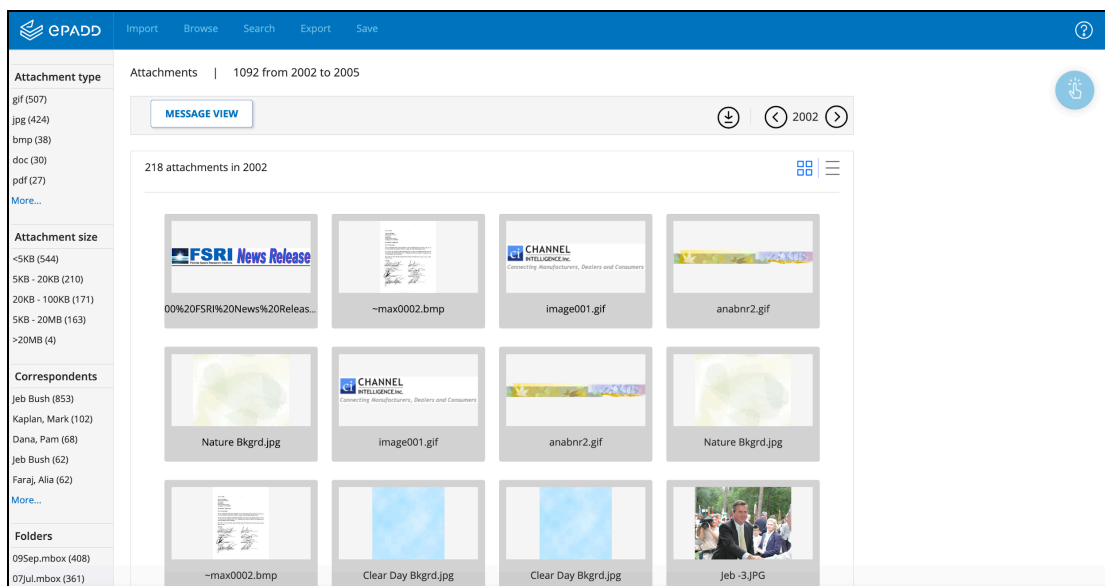
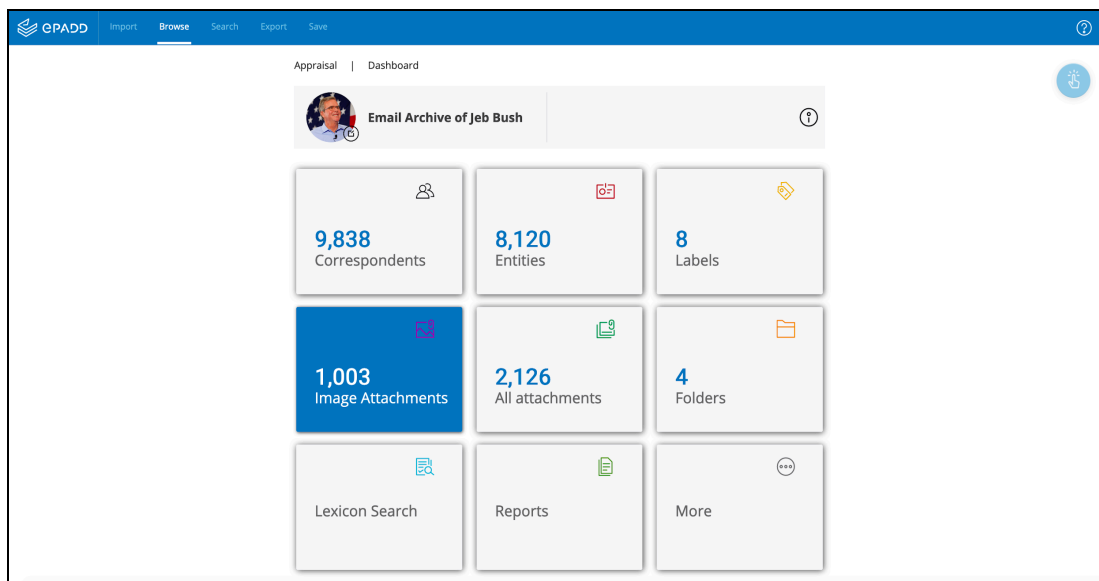
#### 3.2.7.1 Reviewing Image Attachments

Select **Image Attachments** from the Appraisal Module menu to navigate to the Image Attachments screen. Image attachments are displayed chronologically by year and are de-duplicated. The user can navigate between years using the left and right arrows at the top right of the screen. The user can switch between a grid and list view using the icons in the top right corner. Selecting the Message View button will open the set of all messages associated with the currently displayed set of attachments. Selecting an image attachment will give the user the option to directly access the related message. The user can also export the current set of attachments as a .zip file by selecting the download icon.

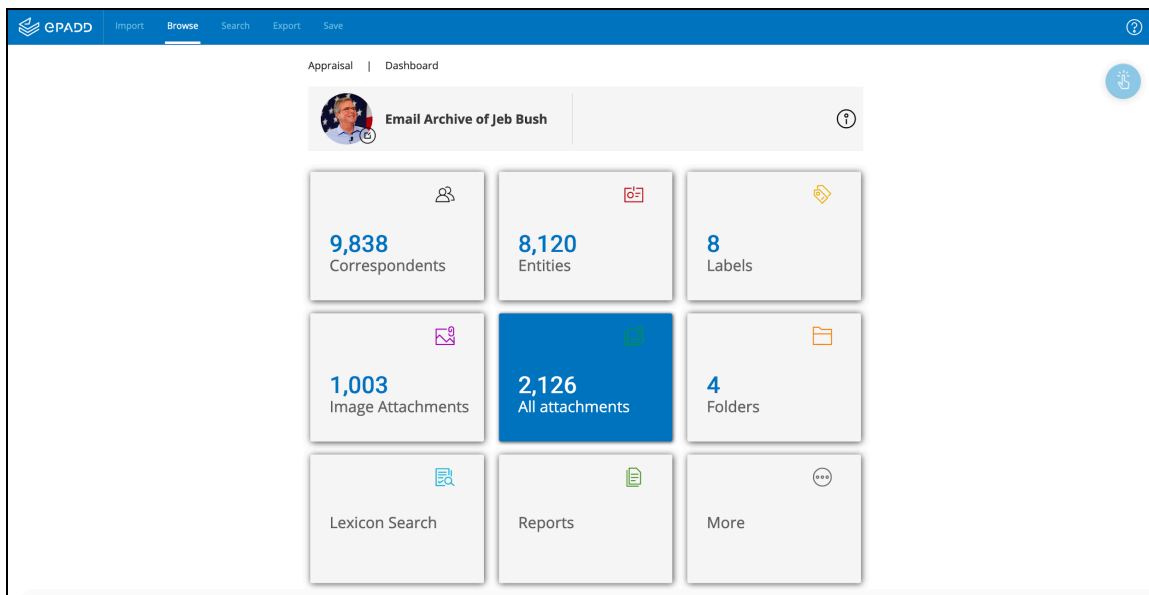
Facets on the left can be used to further refine the set of images displayed by certain criteria including attachment type, attachment size, correspondent, and folder. Note that facets are tied to the messages associated with the currently displayed attachments. If the user selects '.pdf' from the attachment type facet, the resulting set of image attachments will include all

attachments associated with messages that contain a .pdf attachment. This distinction means that the user will see attachments with other file types.

**Pro-tip: You might use the file size and file type facets to exclude common non-controversial logos etc.**



### 3.2.7.2 Reviewing All Attachments



Select **All Attachments** from the Appraisal Module menu at the top of the screen to navigate to the All Attachments screen. This screen will present all attachments associated with the email archive, which can be viewed in a grid or list view, or downloaded and viewed outside of the ePADD program.

As with the Image Attachments view, attachments are displayed chronologically by year and are de-duplicated. The user can refine the set of attachments using the facets. The user can navigate between years using the left and right arrows at the top right of the screen. The user can switch between a grid and list view using the icons in the top right corner. Selecting the Message View button will open the set of all messages associated with the currently displayed set of attachments. Selecting an attachment will give the user the option to directly access the related message. Note that ePADD does not provide native support for viewing non-image attachments.



EPADD Import Browse Search Export Save

Attachments | 2126 from 2002 to 2005

Attachment type: doc (700), gif (507), jpg (424), pdf (232), xls (40), More...

Attachment size: 20KB - 100KB (789), <5KB (596), 5KB - 20MB (428), 5KB - 20KB (289), >20MB (24)

Correspondents: Jeb Bush (1762), Kaplan, Mark (311), Finn, Deirdre (188), Dana, Pam (161), Faraj, Alla (156), More...

Folders: 09Sep.mbox (733), 07Jul.mbox (678)

MESSAGE VIEW

1411 attachments in 2005

EPADD Import Browse Search Export Save

Attachments | 2126 from 2002 to 2005

Attachment type: doc (700), gif (507), jpg (424), pdf (232), xls (40), More...

Attachment size: 20KB - 100KB (789), <5KB (596), 5KB - 20MB (428), 5KB - 20KB (289), >20MB (24)

Correspondents: Jeb Bush (1762), Kaplan, Mark (311), Finn, Deirdre (188), Dana, Pam (161), Faraj, Alla (156), More...

Folders: 09Sep.mbox (733), 07Jul.mbox (678)

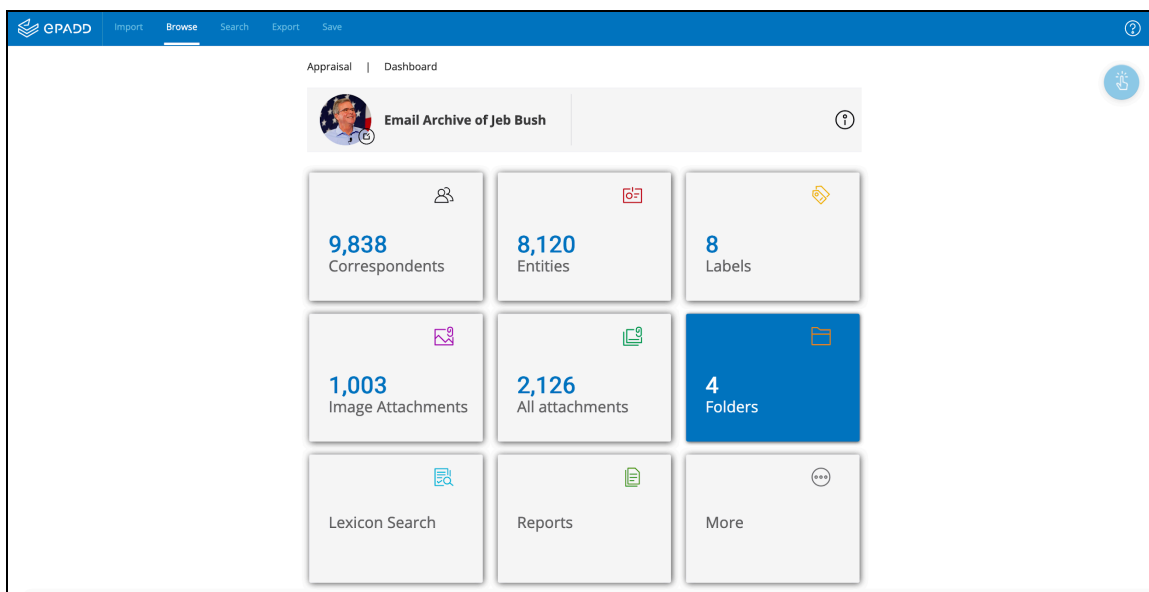
MESSAGE VIEW

1411 attachments in 2005

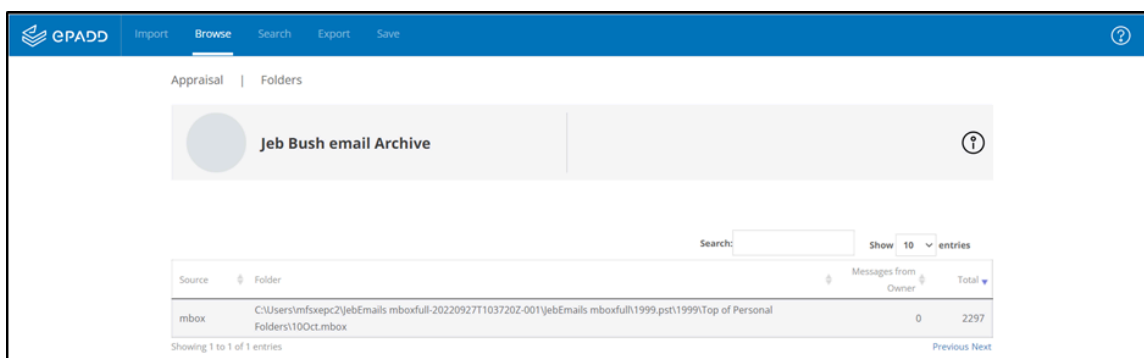
Search:  Show 10 entries

Subject	Date	Size	Attachment name
US SENATE PASSES CAFTA 54-45 LATE LAST NIGHT	Jul 1, 2005	2 KB	image001.jpg
RE: Senators Martinez and Nelson support DR-CAFTA	Jul 1, 2005	2 KB	image001.jpg
RE: Senators Martinez and Nelson support DR-CAFTA	Jul 1, 2005	10 KB	image002.jpg
Fwd: Poll: Florida Voters Say Bush Shouldn't Ask for Terri Schiavo Query	Jul 1, 2005	15 KB	77228af.jpg
Fwd: Swiffer, Tide, Olay, Pringles, Crest - new in July 2005 P&G brandSAVER	Jul 1, 2005	11 KB	ATT128874.txt

### 3.2.8 Browsing Email Folders



The user can navigate email messages by folder structure using the Browse Folders interface, accessible from the Browse screen.



**Browse Folders interface**

If using Gmail, to ensure messages appear in the appropriate folder, please be sure to deselect the non-unique 'All Mail' folder during ingest for email ingested via IMAP.

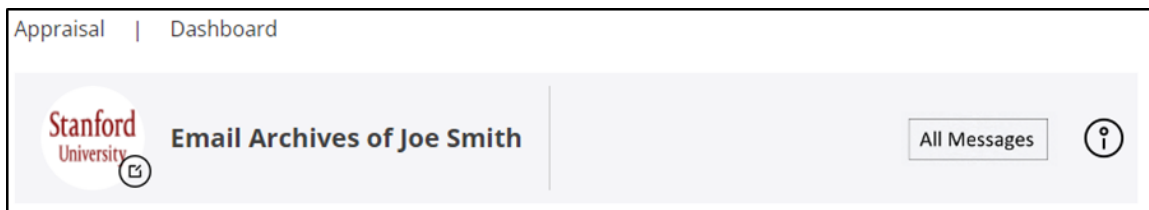
### 3.3 Appraising Email

Once you have confirmed the identity of correspondents, edited the lexicon to your satisfaction, and reviewed entities and attachments, the next step is using the information you have learned to appraise individual email messages. ePADD provides the user with a

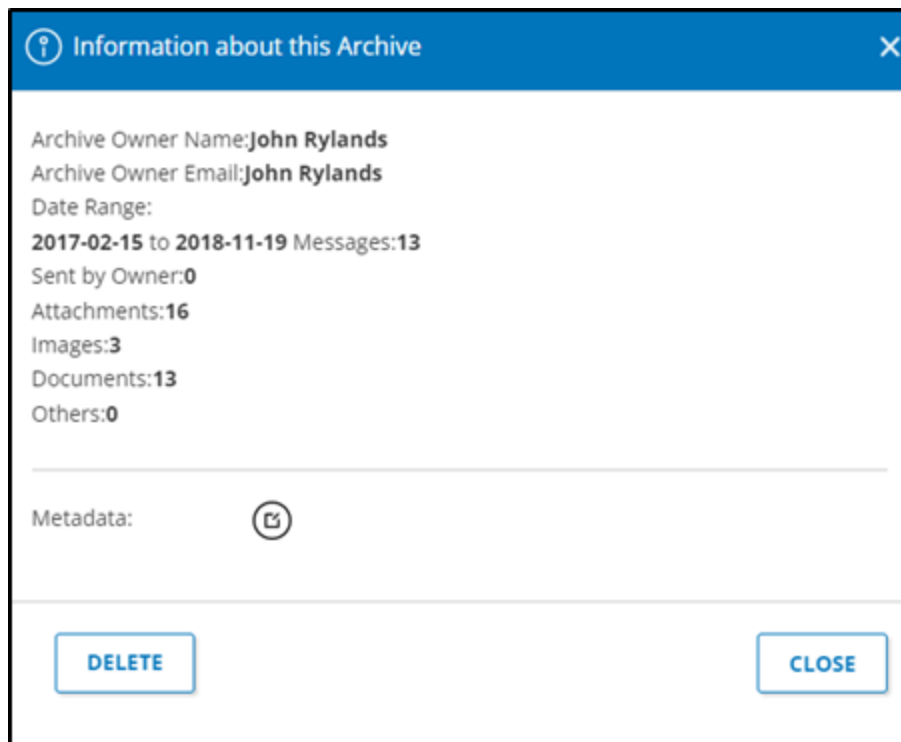
faceted search interface from which to annotate individual email messages and make appraisal decisions.

### 3.3.1 Reviewing and Creating Collection Metadata

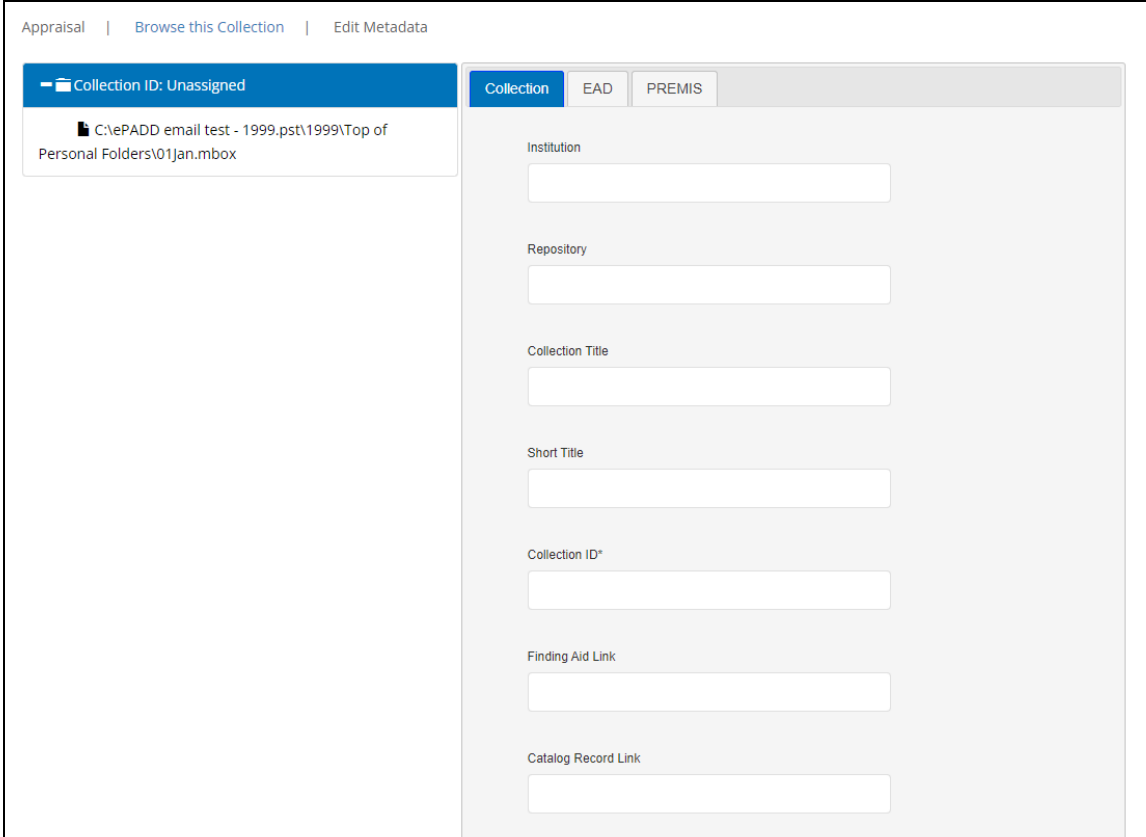
ePADD allows users to add manually an extensive range of metadata associated with a particular email archive. First, click on the information button - ⓘ - which is located to the right of the email archive's title on the ePADD dashboard:



This will open a dialog box entitled 'Information about this Archive'. Here, click on the edit button - Ⓞ - found next to the heading 'Metadata':



This presents you with a variety of metadata options:



Appraisal | [Browse this Collection](#) | Edit Metadata

Collection ID: Unassigned

C:\ePADD\_email\_test - 1999.pst\1999\Top of Personal Folders\01Jan.mbox

Collection EAD PREMIS

Institution

Repository

Collection Title

Short Title

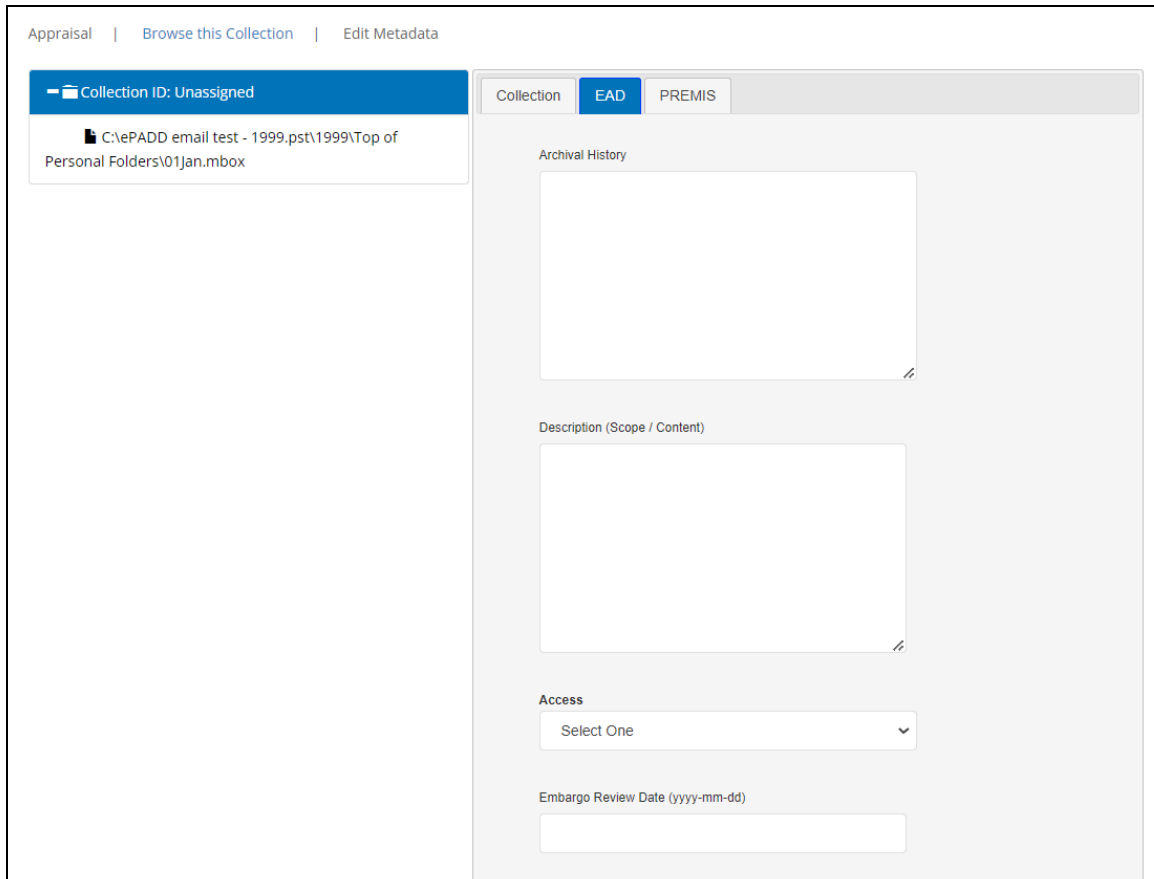
Collection ID\*

Finding Aid Link

Catalog Record Link

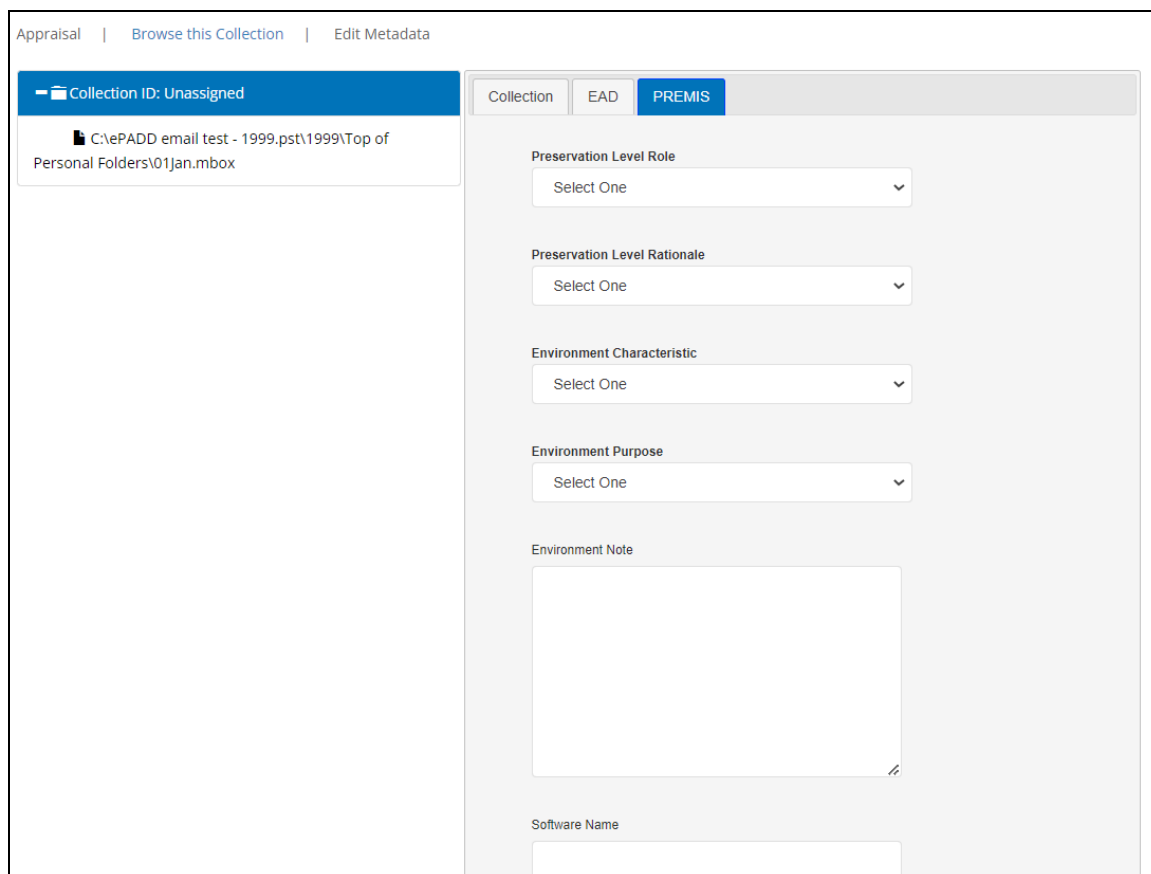
On the tabs you can switch between Collection, EAD (Encoded Archival Description) and PREMIS. In the Collection metadata you can add some basic information about the collection, such as Collection Title, short description, and scope and content, as well provide links to online catalogue descriptions.

You can do the same with metadata elements associated with EAD by selecting the EAD tab:



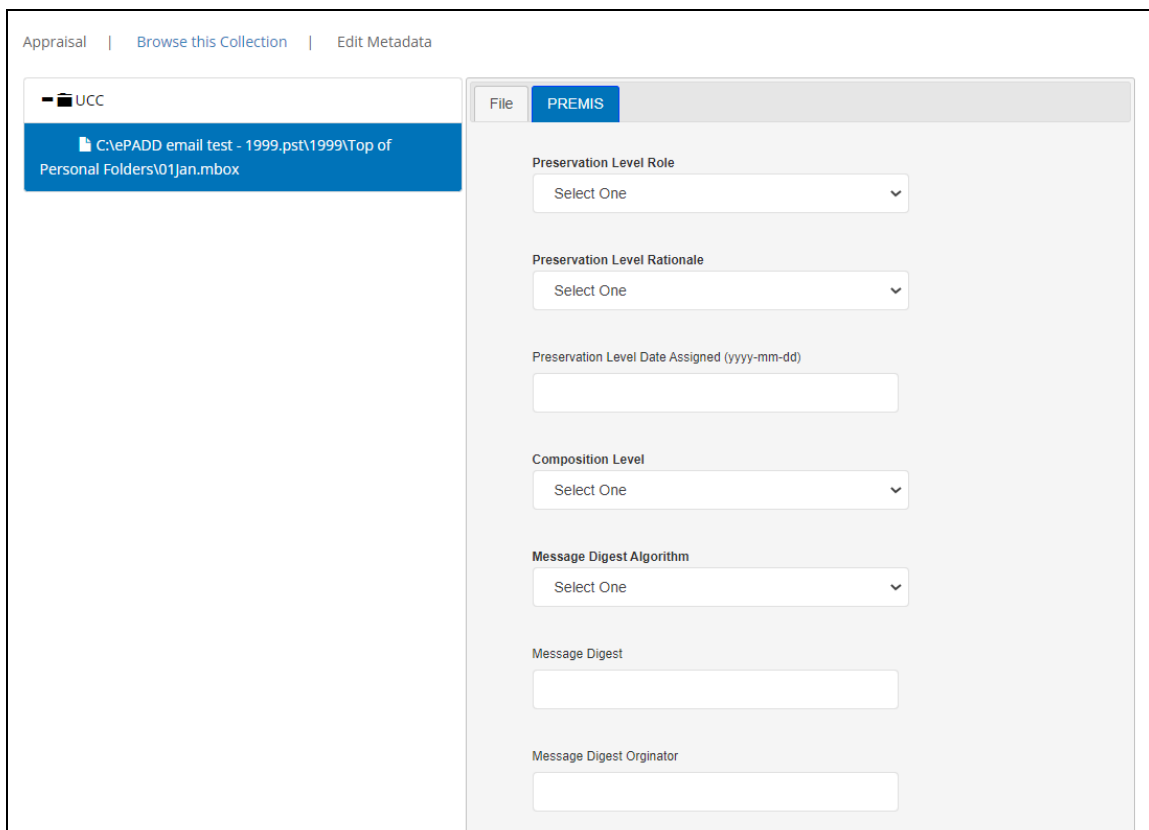
The screenshot displays the metadata editor interface. At the top, there are navigation links: "Appraisal", "Browse this Collection", and "Edit Metadata". Below these, a blue header bar shows "Collection ID: Unassigned". The main content area is divided into two panels. The left panel shows a file path: "C:\ePADD email test - 1999.pst\1999\Top of Personal Folders\01Jan.mbox". The right panel has three tabs: "Collection", "EAD" (which is selected and highlighted in blue), and "PREMIS". Under the "EAD" tab, there are three sections: "Archival History" with an empty text area, "Description (Scope / Content)" with an empty text area, "Access" with a dropdown menu currently set to "Select One", and "Embargo Review Date (yyyy-mm-dd)" with an empty text input field.

And with PREMIS:



The screenshot displays the EPADD interface for editing metadata. At the top, there are navigation links: "Appraisal", "Browse this Collection", and "Edit Metadata". Below this, a blue header bar shows "Collection ID: Unassigned". On the left, a file list contains one entry: "C:\ePADD email test - 1999.pst\1999\Top of Personal Folders\01Jan.mbox". The main area has three tabs: "Collection", "EAD", and "PREMIS", with "PREMIS" selected. The "PREMIS" tab contains several dropdown menus: "Preservation Level Role" (Select One), "Preservation Level Rationale" (Select One), "Environment Characteristic" (Select One), and "Environment Purpose" (Select One). Below these is a text area for "Environment Note" and a "Software Name" field at the bottom.

You can add or edit PREMIS metadata for an individual file, not just the whole collection, by selecting one of the files listed to the left of the metadata fields. This will present you with two tabs, 'File', where you can add notes about a particular file, and 'PREMIS', where you can add metadata relevant to that particular file:

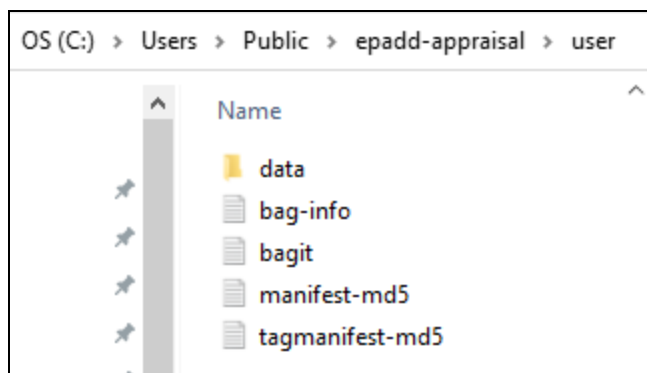


PREMIS also has an XML schema that has been developed for preservation metadata. The xml file generated by ePADD is found in the folder 'user' in the directory:

On Windows: C:\Users\\epadd-<module>\

On Mac: /Users/<username>/epadd-<module>/

The file epaddPremis.xml is located in In the folder 'data':



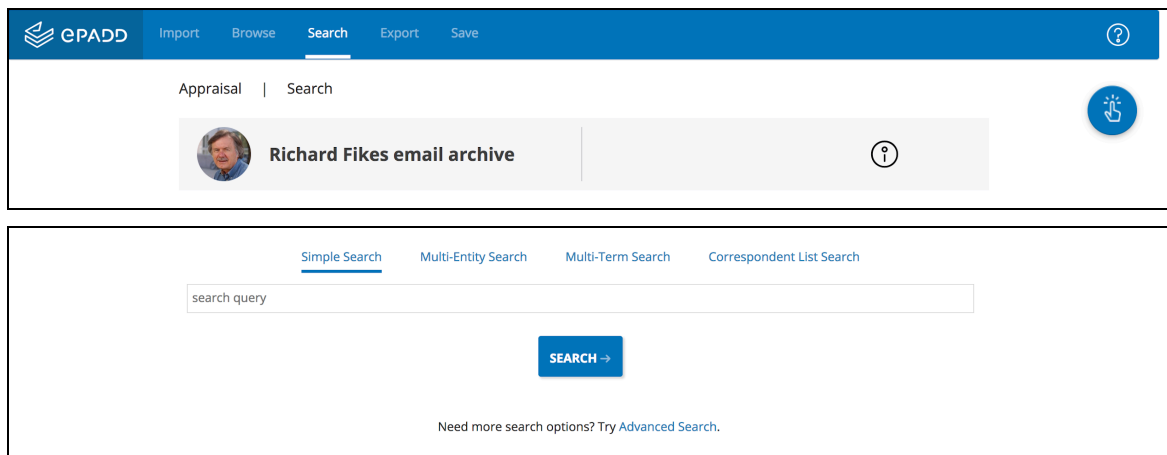
Here you can see an example of the xml file, which contains the manually added PREMIS metadata as well as some metadata automatically added by ePADD, such as date and time of ingest, number of attachments in the collection:

```

<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<premis:premis xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xlink="http://www.w3.org/1999/
https://www.loc.gov/standards/premis/premis.xsd" version="3.0">
  <premis:object xsi:type="premis:intellectualEntity">
    <premis:objectIdentifier>
      <premis:objectIdentifierType>local</premis:objectIdentifierType>
      <premis:objectIdentifierValue></premis:objectIdentifierValue>
    </premis:objectIdentifier>
    <premis:preservationLevel>
      <premis:preservationLevelValue>bit level</premis:preservationLevelValue>
      <premis:preservationLevelRole authority="preservationLevelRole" authorityURI="http://id.loc.g
"http://id.loc.gov/vocabulary/preservation/preservationLevelRole/req"></premis:preservationLe
      <premis:preservationLevelRationale></premis:preservationLevelRationale>
      <premis:preservationLevelDateAssigned>2022-06-20</premis:preservationLevelDateAssigned>
    </premis:preservationLevel>
    <premis:significantProperties>
      <premis:significantPropertiesType>image/jpg</premis:significantPropertiesType>
      <premis:significantPropertiesValue>1</premis:significantPropertiesValue>
    </premis:significantProperties>
    <premis:significantProperties>
      <premis:significantPropertiesType>application/zip</premis:significantPropertiesType>
      <premis:significantPropertiesValue>2</premis:significantPropertiesValue>
    </premis:significantProperties>
    <premis:significantProperties>
      <premis:significantPropertiesType>application/msexcel</premis:significantPropertiesType>
      <premis:significantPropertiesValue>1</premis:significantPropertiesValue>
    </premis:significantProperties>
  </premis:object>

```

### 3.3.2 Searching Email Messages



To search the email archive, navigate to the Search screen from the Appraisal Module Menu.

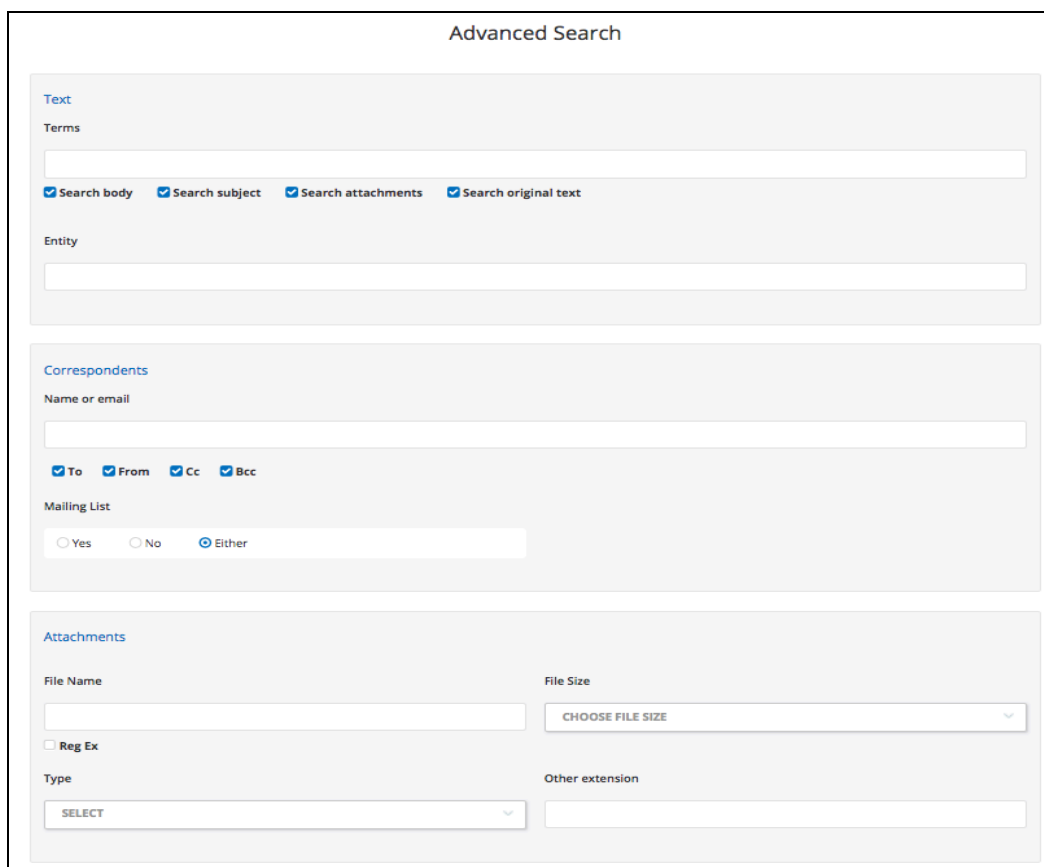


Besides lexicons, accessible via the Browse page, ePADD supports five types of search: simple search, advanced search, multi-entity search, multi-term search, and correspondent list search.

To use the simple search feature, simply type in your query into the simple search box available on the initial search screen. This will search across message headers (correspondents and subjects) and message text, as well as the text of all document attachments.

Once you have entered your term(s) and made your selection, click the *Search* button. The search string will appear highlighted on the message browse screen.

Advanced Search enables the user to generate complex searches of email text, correspondents, attachments, and any actions previously taken on the messages, as well as a variety of other parameters.



The screenshot displays the 'Advanced Search' interface, which is organized into three main sections: Text, Correspondents, and Attachments.

- Text Section:** Features a 'Terms' input field, four checked checkboxes for 'Search body', 'Search subject', 'Search attachments', and 'Search original text', and an 'Entity' input field.
- Correspondents Section:** Includes a 'Name or email' input field, four checked checkboxes for 'To', 'From', 'Cc', and 'Bcc', and a 'Mailing List' section with radio buttons for 'Yes', 'No', and 'Either' (which is selected).
- Attachments Section:** Contains a 'File Name' input field, a 'File Size' dropdown menu with 'CHOOSE FILE SIZE' selected, a 'Reg Ex' checkbox (unchecked), a 'Type' dropdown menu with 'SELECT' selected, and an 'Other extension' input field.

**Actions**

<p><b>Annotation</b></p> <input style="width: 90%;" type="text"/> <p><input type="checkbox"/> Any annotation</p>	<p><b>Labels</b></p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> <span>SELECT A LABEL</span> <span>▼</span> </div> <p><input type="checkbox"/> More than one restriction label</p>
--	--

**Miscellaneous**


<p><b>Time Range</b></p> <div style="display: flex; align-items: center; gap: 10px;"> <input style="width: 80%;" type="text" value="YYYY - MM - DD"/> <span>To</span> <input style="width: 80%;" type="text" value="YYYY - MM - DD"/> </div>	<p><b>Message Sender</b></p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> <span><input type="radio"/> Owner</span> <span><input checked="" type="radio"/> Any one</span> </div>
<p><b>Email Source</b></p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> <span>SELECT</span> <span>▼</span> </div>	<p><b>Message Folder</b></p> <input style="width: 90%;" type="text"/>
<p><b>Lexicons</b></p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> <span>SELECT</span> <span>▼</span> </div>	<p><b>Lexicon: Category</b></p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> <span>SELECT</span> <span>▼</span> </div>
<p><b>Entity type</b></p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> <span>SELECT</span> <span>▼</span> </div>	<p><b>Message ID</b></p> <input style="width: 90%;" type="text"/>

**Sort results by**

SELECT
▼

SEARCH →

Clear Form

Search Tips can be accessed by selecting the help button  in the top right corner of the *Advanced Search* screen.

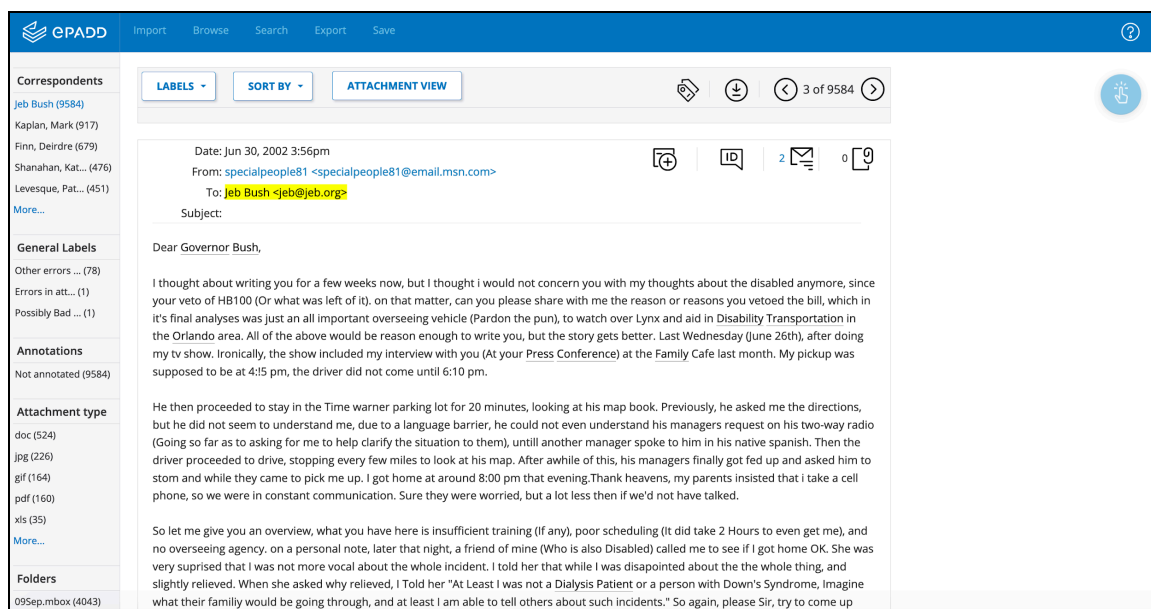
ePADD also allows a user to search the email archive for entities contained in a given block of provided text, using *Multi-entity Search*. Any matching terms will be highlighted on the results page, and hyperlinked to corresponding messages.

Likewise, ePADD enables a user to search an email archive for multiple terms using *Multi-term Search*. Type or paste one term per line. Any matching terms will be highlighted on the results page, and hyperlinked to corresponding messages.

Finally, ePADD enables a user to search for a list of email addresses using Correspondent List Search. Type or paste one term per line to search for and apply labels to a set of email addresses.


### 3.3.2.1 Navigating Search Results

Upon submitting a search query, ePADD opens a new browser window displaying the message browse screen.



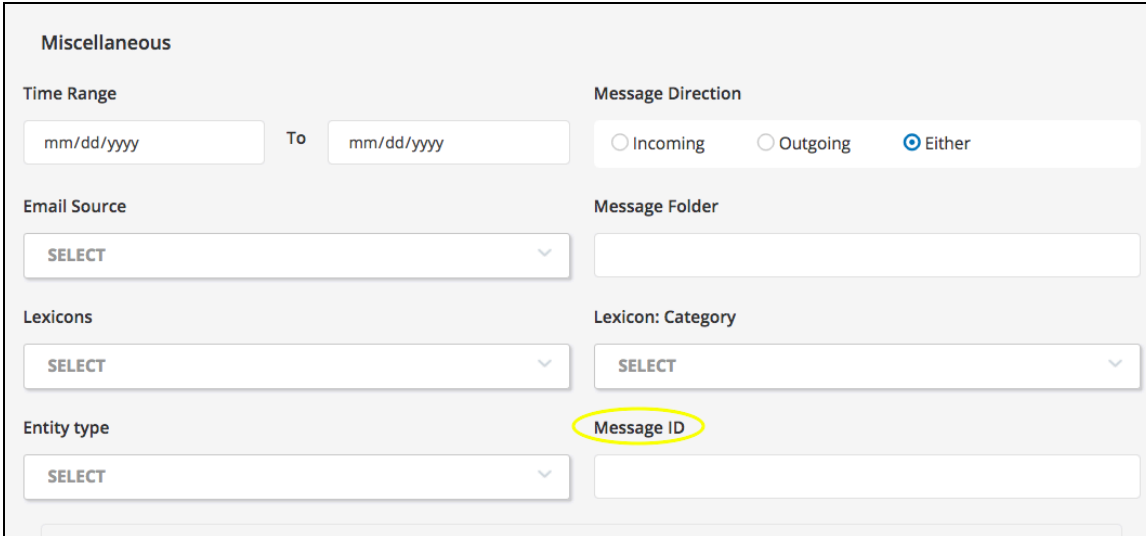
The message browse screen displays the full text of email messages as well as a faceted browser which allows the user to further limit the search results. The total number of messages resulting from your search appears above the email message display. The current message appears as a fraction of that display. For instance, if you are appraising message 1 out of 400 results, the display would read 1/400. The forwards and back arrows to the left and right of that number allow you to navigate between search results.

Search results can be limited by correspondent, email direction (incoming or outgoing), lexicon category (if relevant), attachment type (if relevant), annotations or the originating mail folder. To limit the results by a particular facet, simply click the term from the left-hand panel.

All messages have been assigned a unique ID, accessible from this page. Select the ID button  to copy the ID to your clipboard:

ID: c0f436440c2a4ad1061cd08df1d689609e801682a3ec864839288209c1b625d5


If you ever wish to return to a particular message, you can search for a message ID (or semicolon delimited set of message IDs) using the Advanced Search interface in the Miscellaneous search category.



The screenshot shows the 'Miscellaneous' search interface. It includes several search criteria sections: 'Time Range' with 'From' and 'To' date pickers; 'Message Direction' with radio buttons for 'Incoming', 'Outgoing', and 'Either' (selected); 'Email Source' with a 'SELECT' dropdown; 'Message Folder' with an empty text input; 'Lexicons' with a 'SELECT' dropdown; 'Lexicon: Category' with a 'SELECT' dropdown; and 'Entity type' with a 'SELECT' dropdown. The 'Message ID' label is circled in yellow, and there is a corresponding empty text input field next to it.

### 3.3.3 Annotating Email Messages

ePADD allows the user to annotate email messages from the message browse screen. These annotations are persistent across ePADD sessions, and can be used to provide supplemental information to assist the archivist in processing the collection, including elaborating on access restrictions or to provide additional information for the benefit of researchers.

To annotate an email message, click the annotation button in the bar above the message headers: . Users can select to apply the annotation to a single message or all messages currently being reviewed. Likewise the user can either append the annotation to current annotations, or overwrite all existing annotations with the new annotation. **Warning: Overwriting annotations cannot be undone!**

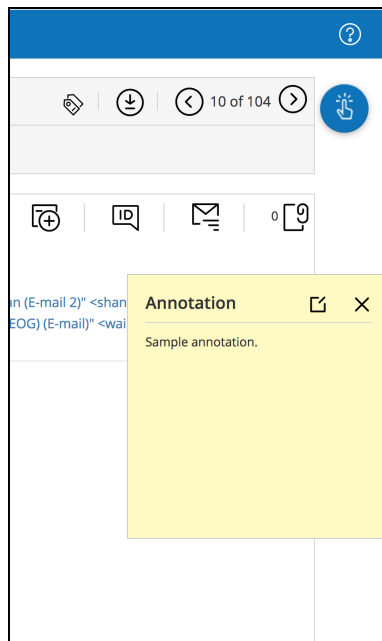
### Edit Annotation ✕

Sample annotation.

Overwrite  Append

**APPLY TO THIS MESSAGE** **APPLY TO ALL MESSAGES**

Once you have added an annotation, a new facet, Annotations, will appear in results on the message browse screen. Additionally, when you navigate to that message or those messages in the future, the annotation will be visible.



### 3.3.4 Labeling Email Messages

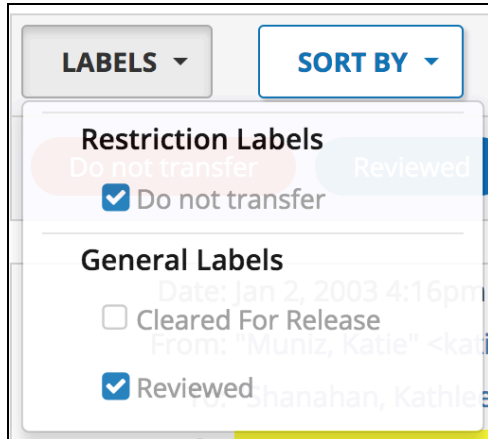


ePADD allows the user to label email messages that should not be exported for transfer to an archival repository, as well as messages that should be transferred with restrictions.

To label a message, navigate to the message or set of messages, then select a label or set of labels from the Labels dropdown.

There are three default labels within ePADD: Do Not Transfer is a default, not editable restriction label that indicates the message should not be transferred to the next module(s). Cleared for Release is a default, not editable restriction label that indicates the message that was previously labeled with at least one restriction is now cleared for release and should be transferred to the next module(s).

Reviewed is a default, editable label that indicates the message being browsed has been reviewed, and can be used to help track one's progress in reviewing the email archive.

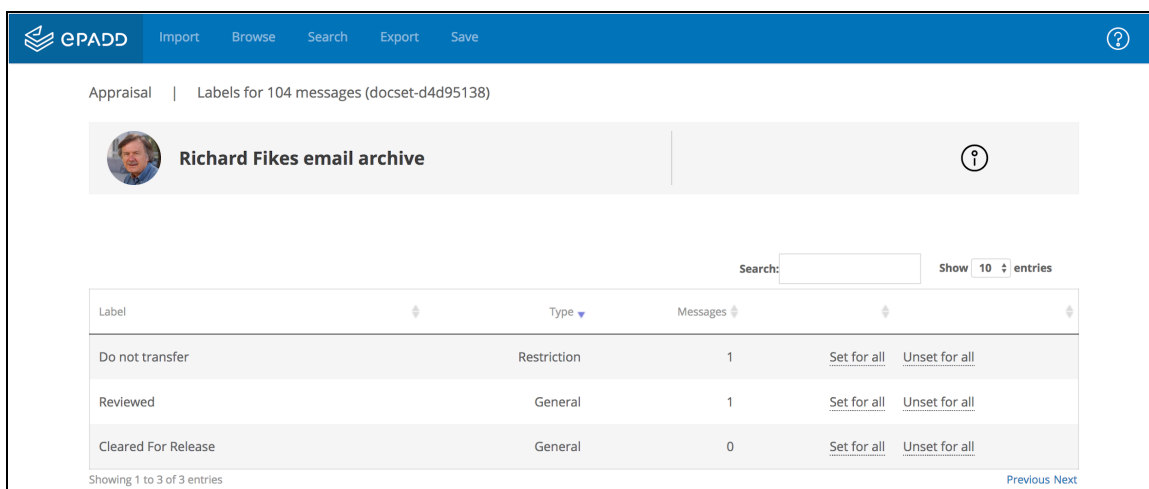
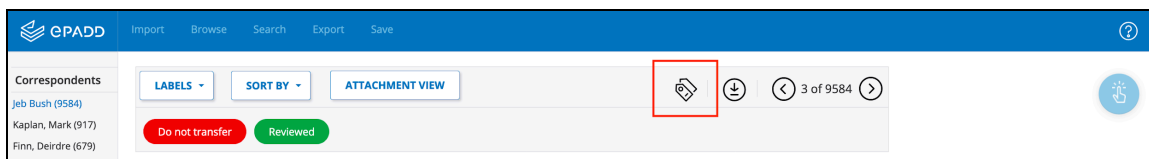


After you have assigned labels, they appear in the message browse screen.

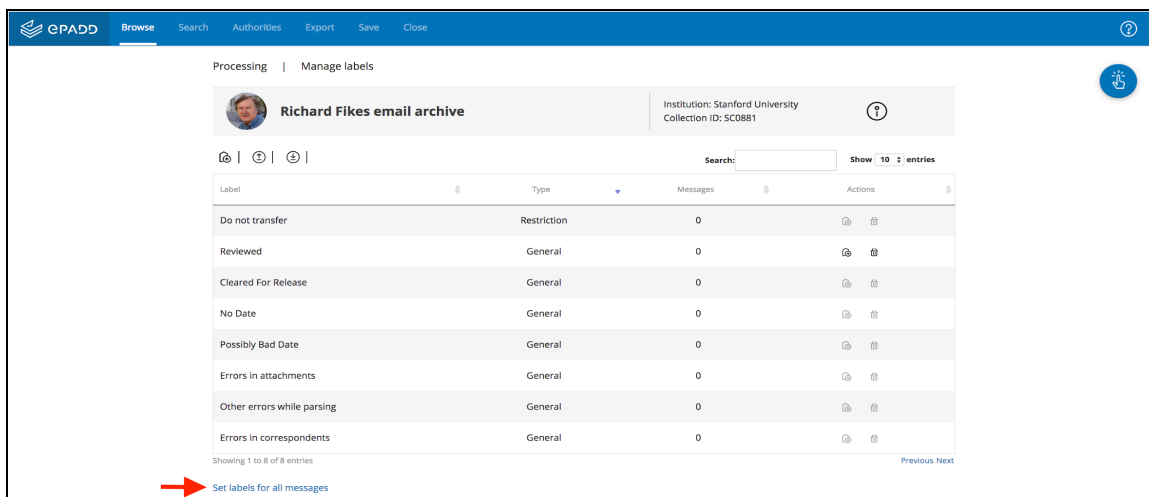


### 3.3.4.1 Assigning bulk labels

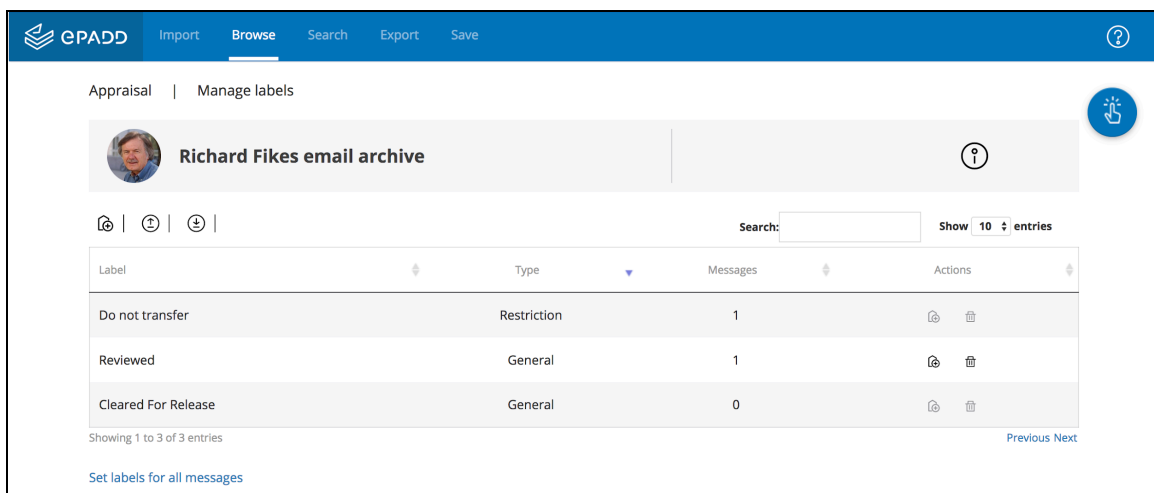
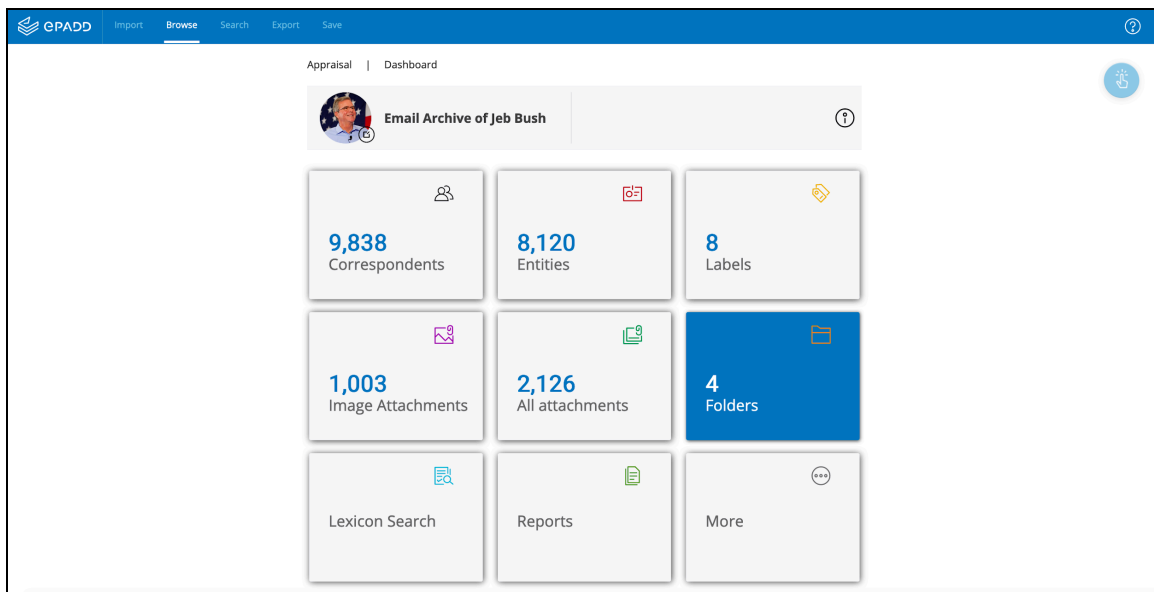
To apply a label to more than one message, you can select the label management button above the message pane:



You can also assign default labels for all messages by using the 'Set labels for all messages' function.



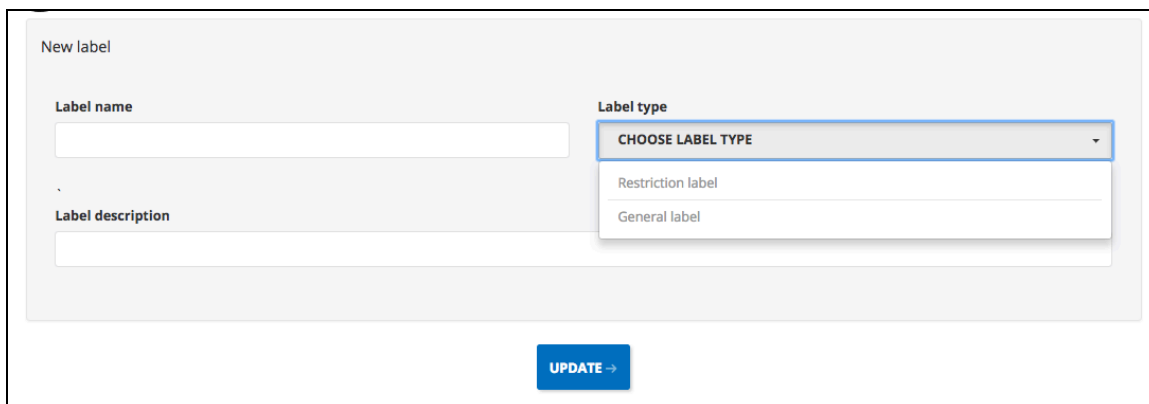
### 3.3.4.2 Creating a new label



**Users can create new labels, import labels (overwriting all current label assignments) or export all labels via the Labels interface.**



Below are several screenshots illustrating how to create a new restriction label.



New label

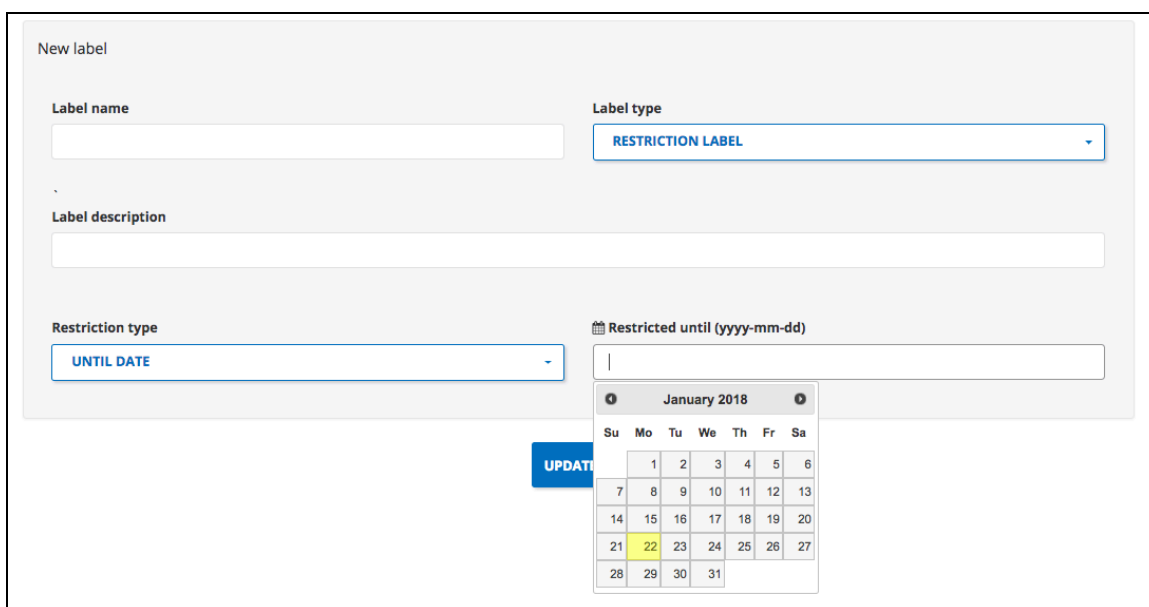
Label name

Label type **CHOOSE LABEL TYPE**

- Restriction label
- General label

Label description

**UPDATE** →



New label

Label name

Label type **RESTRICTION LABEL**

Label description

Restriction type **UNTIL DATE**

Restricted until (yyyy-mm-dd)

**UPDATE**

January 2018						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Messages that are restricted until a particular date, or restricted for a given time period from the date of message creation, are considered machine-actionable, as ePADD is able to recognize when the restriction period has expired via an advanced search function.

**Labels**

SELECT A LABEL ▼

Restriction Labels

Do not transfer

Restricted for 10 years

General Labels

Reviewed

Cleared For Release

Expired restrictions (except 'Cleared for release')

All restrictions expired

Messages marked with restriction labels will not automatically export to Discovery and Delivery. In order to export these messages, the user needs to manually assign them the label 'Cleared for Release.' Note that ePADD does not delete any messages that have restriction labels applied to them, they are simply not exported to subsequent modules.

Because ePADD enables users to assign multiple restriction labels to a given message or set of messages, you may find it helpful to review the set of messages that contains more than one restriction. You can perform this search query under Advanced Search.

**Actions**

Annotation

Labels  ▼

Any annotation

More than one restriction label

**Viewing all messages with more than one restriction via advanced search.**

**Warning:** Since importing labels overwrites all current label assignments, this task should only be undertaken prior to accessioning / processing a collection.

**Known issue:** The introduction of message error labels in v7 has complicated the label upload mechanism. For the time being, please refrain from using the Upload Label Description feature on the Manage Labels screen. You can manually add or delete labels as needed as a workaround.

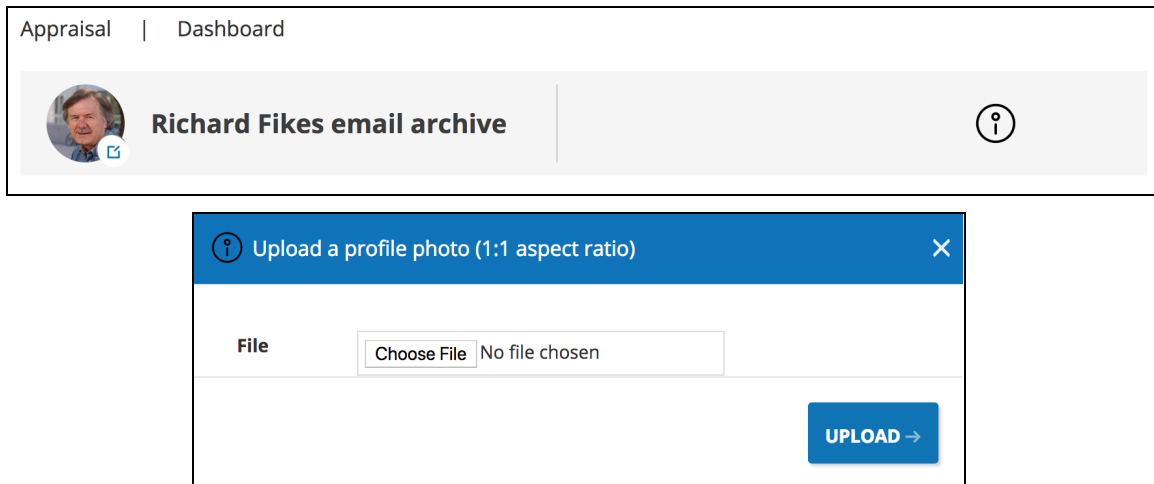
### 3.3.4.3 Assigning bulk labels by correspondent

ePADD also gives the user the ability to assign labels to all messages from a list of correspondents, using the *Correspondents List Search* option.

### 3.3.5 Assigning Images to the Collection

ePADD allows the user to assign up to three images to any given collection to improve the end-user experience: a profile image in Appraisal, and profile, landing page, and banner images in Processing. Images must be resized to the dimensions indicated to display correctly.

Images are set in the location they appear. You can set the profile image from the browse page using the edit option within the greyed out profile image.



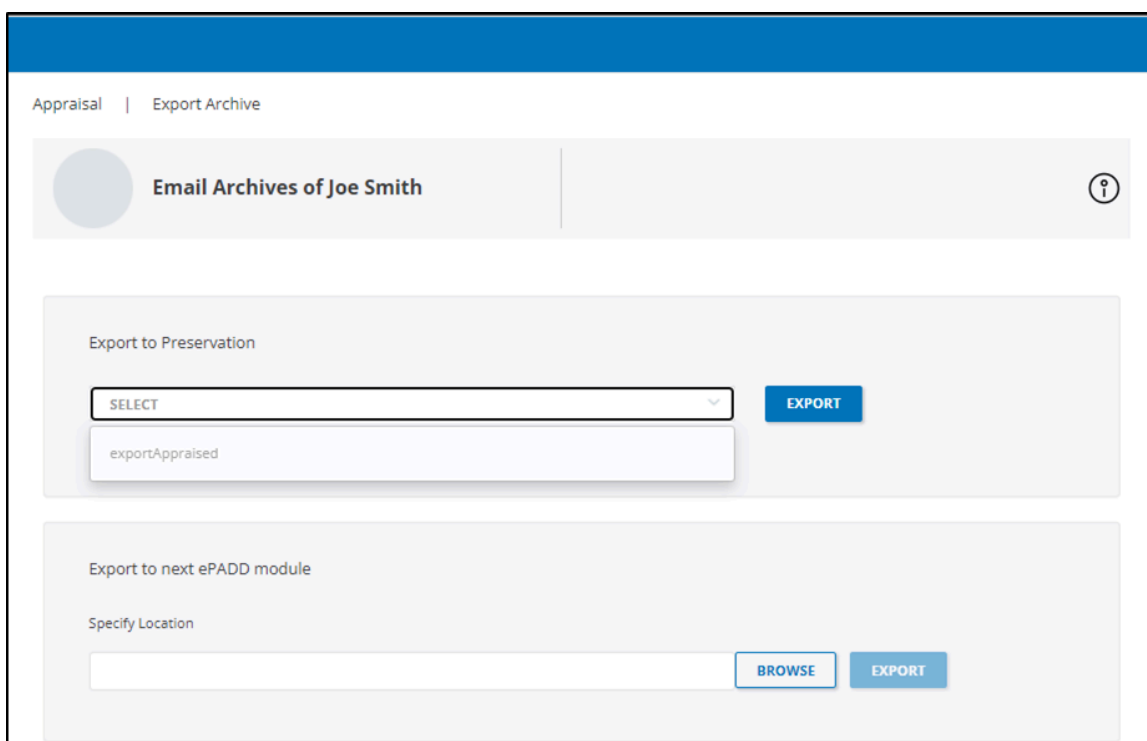
Within Processing, you can add the landing image from the Collection Browse page, and the banner image from the Collection Details page, using a similar interface.

### 3.4 Exporting Email for Preservation

ePADD can be used to create and export a preservation package or ‘preservation ready bag’, complete with all email headers, that can be transferred to a digital preservation repository. To create the preservation package click ‘Export’ on the ePADD dashboard:



In ‘Export to Preservation’, select ‘exportAppraised’ and click ‘Export’:



When MBOX files are imported into the Appraisal module, ePADD creates what we refer to as a Canonical-Acquisitioned file. ‘Canonical’ is the single file format designated by ePADD as a common standard based format for transfer and long-term preservation purposes. The designated ePADD ‘Canonical’ format is MBOX. ‘Acquisitioned’, in this context, refers to the unmodified form of email as originally received by ePADD and not yet subject to any appraisal or processing. The folder:

On Windows: C:\Users\<>username>\epadd-appraisal\user\data\exportableAssets

On Mac: User/<username>/epadd-appraisal/user/data/exportableAssets




contains the folders:

- AppraisalCanonicalAcquisitioned
- AppraisalNormalizedAcquisitioned

Clicking on 'Export' creates a folder - 'AppraisalNormalizedAppraised' - containing the appraised MBOX file(s), which is found via the following file path:

On Windows: C:\Users\<>username>\epadd-appraisal\user\data\exportableAssets\  
AppraisalNormalizedAppraised

On Mac: User/<username>/epadd-appraisal/user/data/exportableAssets/  
AppraisalNormalizedAppraised

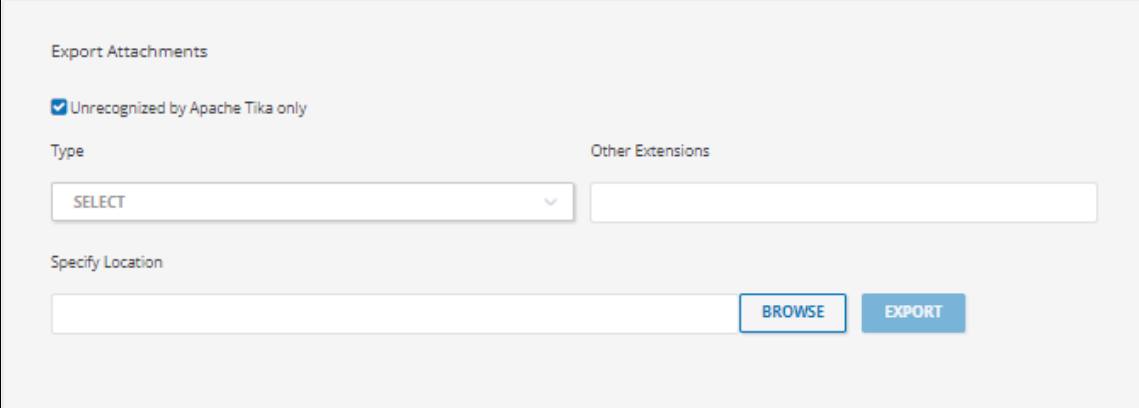
Name	Date modified	Type	Size
 AppraisalCanonicalAcquisitioned	11/07/2022 14:44	File folder	
 AppraisalNormalizedAcquisitioned	11/07/2022 14:44	File folder	
 AppraisalNormalizedAppraised	13/07/2022 11:26	File folder	

The folder 'AppraisalNormalizedAppraised' contains appraised emails in their respective MBOX files and will include any attached labels or annotations.

### 3.5 Exporting Message Attachments

Select **Export** from the Appraisal Module menu at the top of the screen to navigate to the Export Screen.

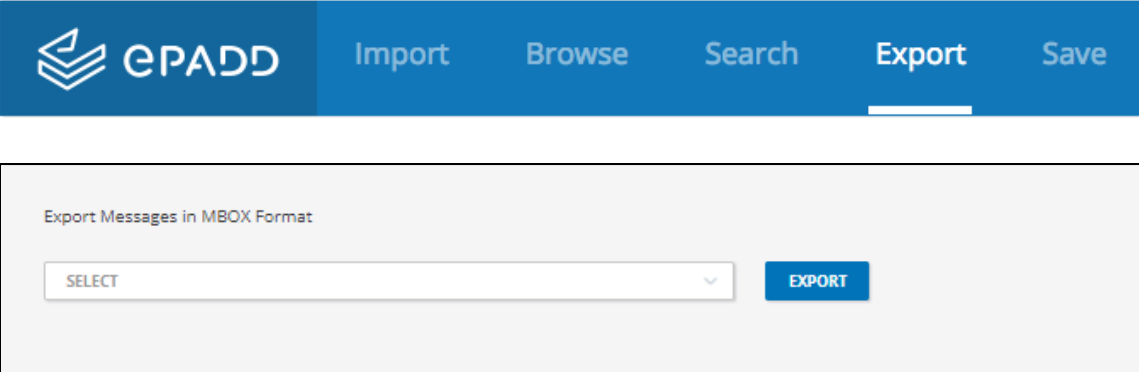




You can choose to export attachments according to various criteria, including particular formats. The user can also indicate whether they would like to export only those attachments which have not been recognized by Apache Tika (and are therefore not indexed with ePADD), for further review. Note that messages are only flagged in this way if they have also been appraised or processed by ePADD 4.0 or later.

### 3.6 Exporting Messages to MBOX

Select **Export** from the Appraisal Module menu at the top of the screen to navigate to the Export Screen.

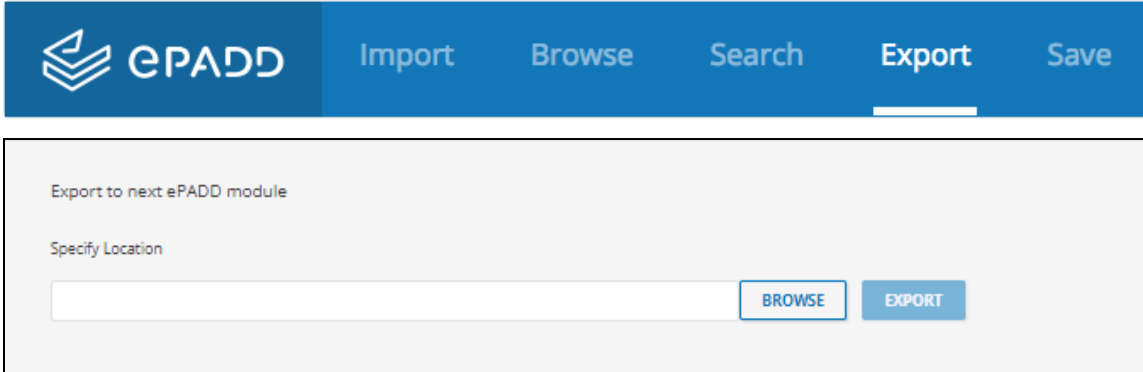


The user can select to export all messages, all non-restricted messages, or just restricted messages. Please note that email exported to MBOX would need to be re-imported into ePADD (and reindexed) in order to benefit from ePADD's functionality in the future.

### 3.7 Exporting Email to the Processing Module

Once you have reviewed the email archive using the tools described above, the final step is to export the appraised email archive (along with whatever supplemental information or annotations you have added) so it can be transferred to an archival repository, and/or processed in another ePADD module.

Select Export from the Appraisal Module menu at the top of the screen to navigate to the Export Screen.

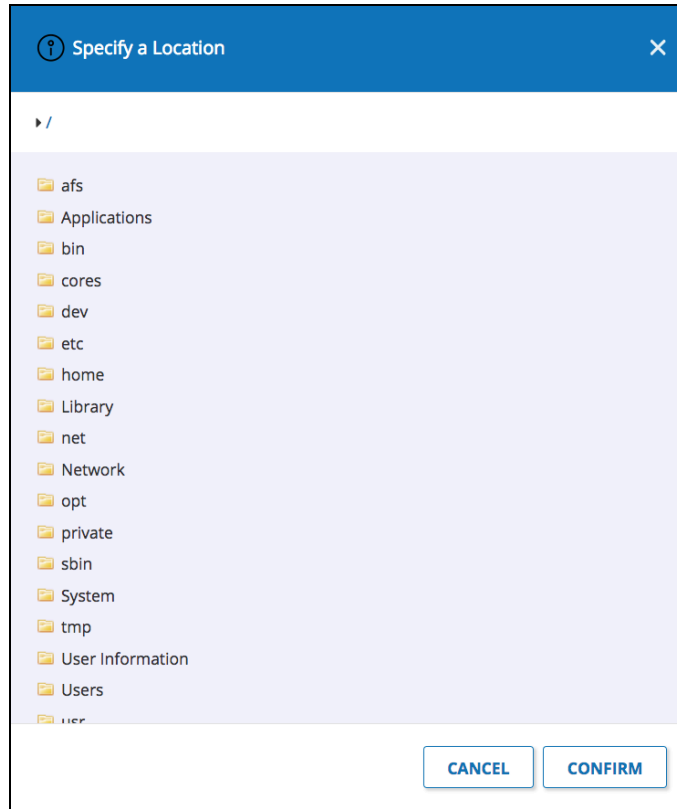


Export to next ePADD module

Specify Location

BROWSE EXPORT

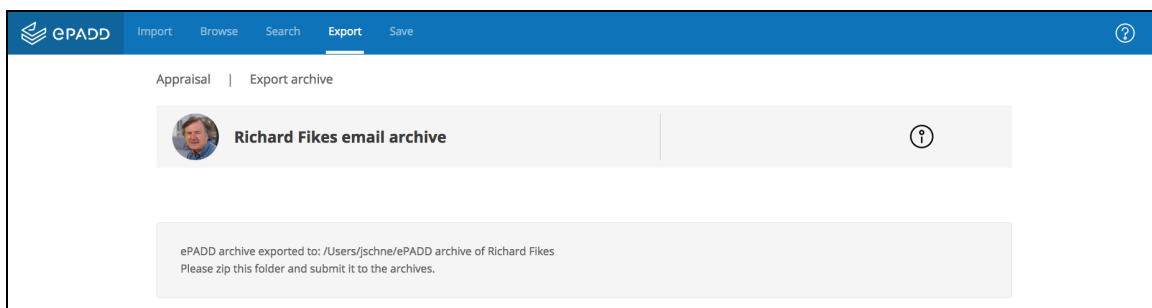
To export the archive to the Processing Module, first select Browse under *Export to Next ePADD Module*.



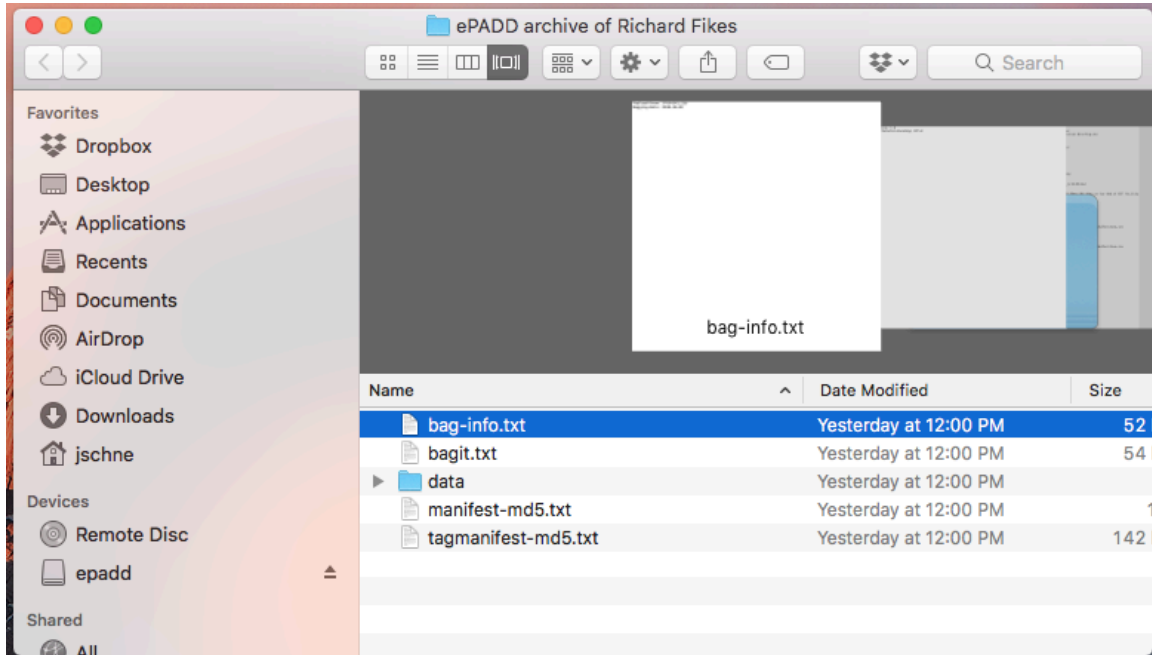
Selecting a folder location to export the appraised email archive

Select the location for ePADD to export the email archive. Please ensure you have enough disk space to save the complete email archive export or the export will fail.

This step may take some time as ePADD assembles the exported email archive and accompanying documentation.







#### An exported email archive

**Note to Donor:** Once you have confirmed with the archival repository that the transfer is successful, you may wish to delete the ePADD working directories from your workstation. You can do so manually by deleting the following folders under your user directory: 'epadd-appraisal' and 'epadd-settings.'

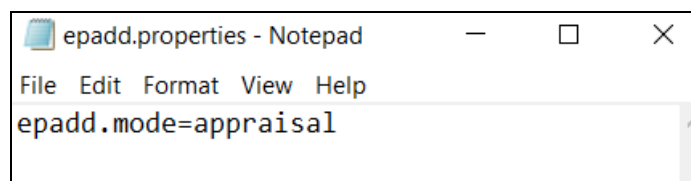
During the ePADD installation process, a file named *epadd.properties* is created. The file is located in the user's home directory, e.g.

On Windows: c:\users\\

On Mac: /Users/<username>/

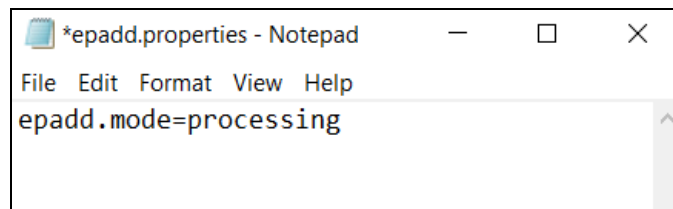
By default, this file contains the following text:

```
epadd.mode=appraisal
```



'appraisal' indicates which module or mode ePADD is in; if, for example, you were to restart ePADD it will open in the Appraisal module. To run a different ePADD module, replace 'appraisal' with 'processing', 'discovery' or 'delivery', as in these examples:

- epadd.mode=processing
- epadd.mode=discovery
- epadd.mode=delivery



If it is already running, you must restart ePADD. If no module is specified in the properties files, ePADD will start in its default mode, which is the Appraisal module.

Note that when changing the mode to 'discovery', you also need to start ePADD using the file epadd-discovery-standalone.jar as described elsewhere in this guide (please see section [5.2 Mounting the Discovery Module under a Web Server](#)). Although ePADD will start in discovery mode using epadd.exe or epadd-standalone.jar, it will not completely work as intended.

## 4 Processing Module



Email archives must initially be ingested to ePADD from the Appraisal module. To work with a collection within the Processing module, it is best practice to first close ePADD, and change the default module using the epadd.properties file (see section [2.2: Installing ePADD](#) in this guide for more details on configuring ePADD). After confirming successful import of files into Processing, you can optionally delete files in Appraisal by deleting the 'epadd-appraisal' folder in your user directory.

If you are planning to run multiple modules on a single workstation, you may also navigate between modules by manually navigating to localhost:9099/epadd/switch-module using

the web browser address bar. Again, please note that it is always best practice to close the archive using the 'Close' header menu option, and to fully quit ePADD, before beginning work in another module.

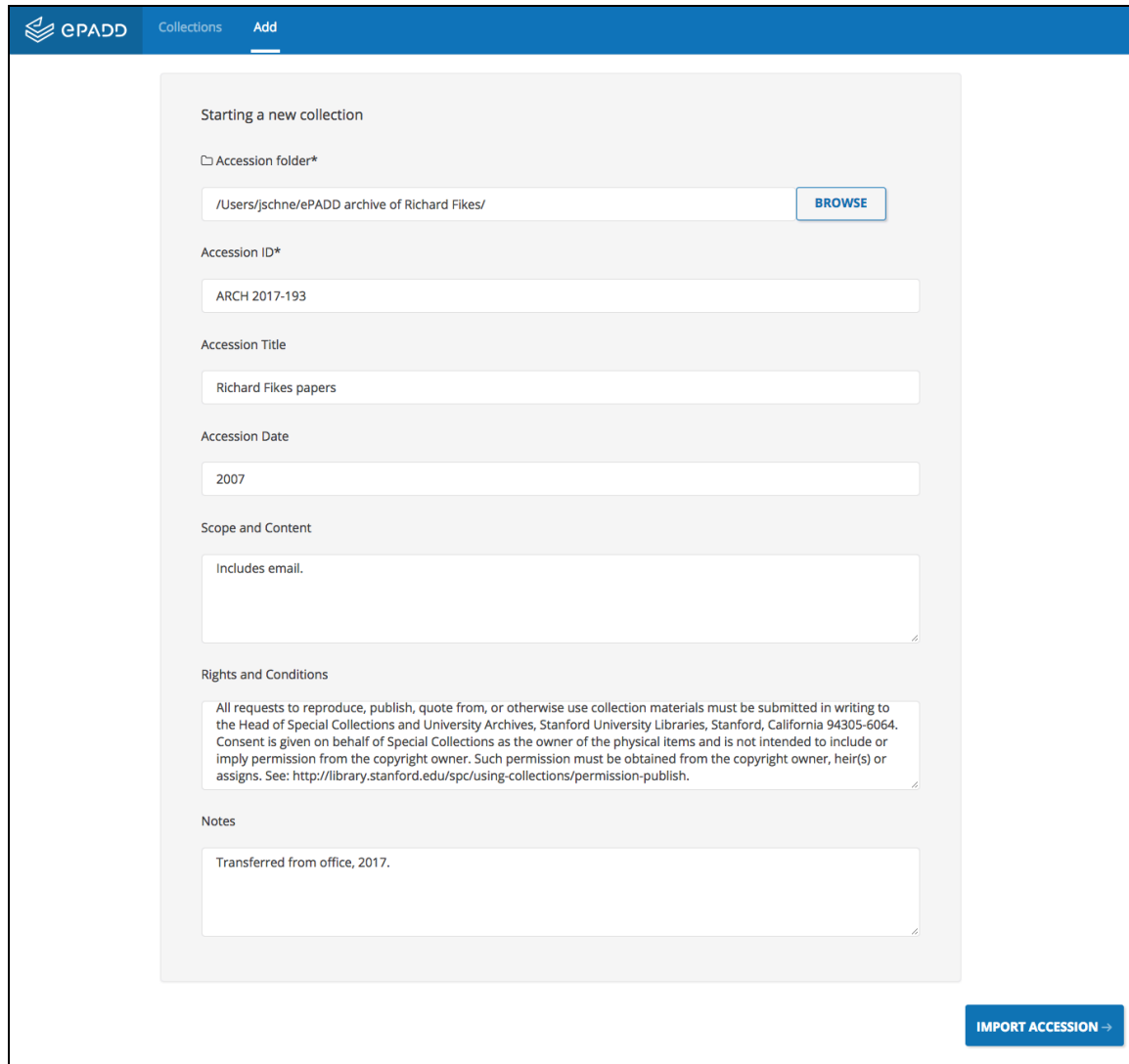
**Please note that if you wish to export an unprocessed MBOX file for preservation, this should be your first step upon starting up the Processing Module. Select Export from the navigation bar, then use the Export messages in MBOX format option.**

#### **4.1 Importing an Email Archive from the Appraisal Module into the Processing Module and Assigning Accession Metadata**

Please note that it is always best practice to fully quit ePADD before beginning work in another module. To work with a collection within the Processing module, it is recommended to first close ePADD, and change the default module using the epadd.properties file (see section [2.2: Installing ePADD](#) of this guide for more details on configuring ePADD).

ePADD uses the concept of accessions and collections. All email exported from Appraisal is considered an accession. To create a new collection within ePADD Processing, select 'Add' from the navigation bar, then use the 'Browse' button to navigate to the folder exported from the Appraisal Module. Assign accession metadata, then import the email archive identified by clicking the 'Import Accession' button.

Users can continue to review and create collection metadata in the Processing Module. Please refer to section 3.3.1 for more information on this process.



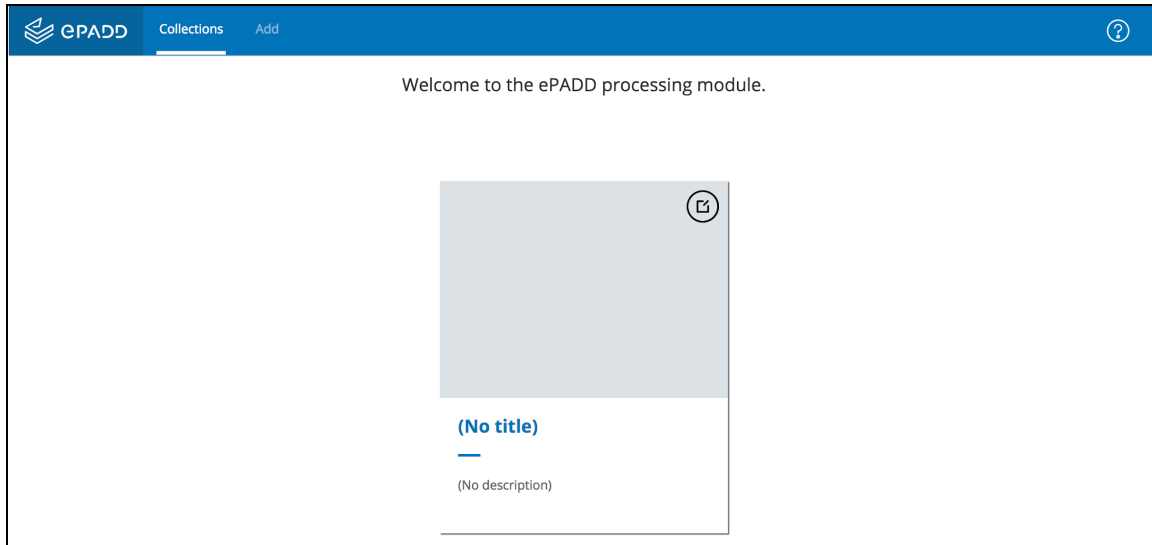
The screenshot shows the 'Add' page in the EPADD system. The page title is 'Starting a new collection'. It contains several form fields: 'Accession folder\*' with a text input containing '/Users/jschne/ePADD archive of Richard Fikes/' and a 'BROWSE' button; 'Accession ID\*' with a text input containing 'ARCH 2017-193'; 'Accession Title' with a text input containing 'Richard Fikes papers'; 'Accession Date' with a text input containing '2007'; 'Scope and Content' with a text area containing 'Includes email.'; 'Rights and Conditions' with a text area containing a detailed disclaimer about reproduction and permission; and 'Notes' with a text area containing 'Transferred from office, 2017.'. At the bottom right, there is a blue button labeled 'IMPORT ACCESSION →'.


Once you have added an accession to a new collection, you have the ability to add collection metadata.

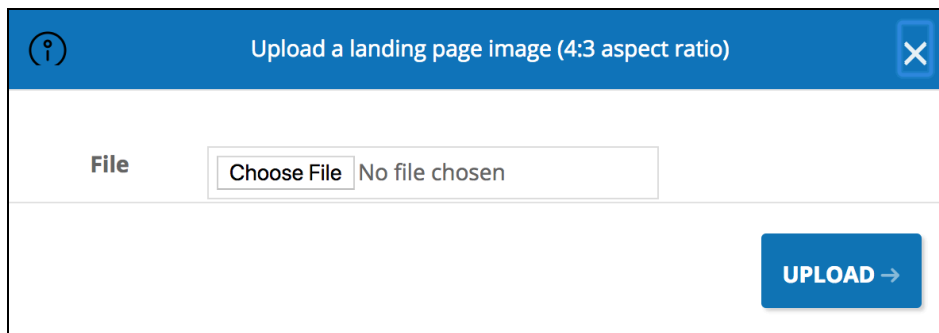
Add an additional accession to an existing collection by selecting the Add Accession button, from the Collection page, below Collection Details. You can also edit accession metadata at any time from the Collection page.

## 4.2 Assigning Collection Metadata

After the accession has been imported, you will be brought to the Browse screen. Close the archive using the close button in the navigation bar to return to the Collections page.

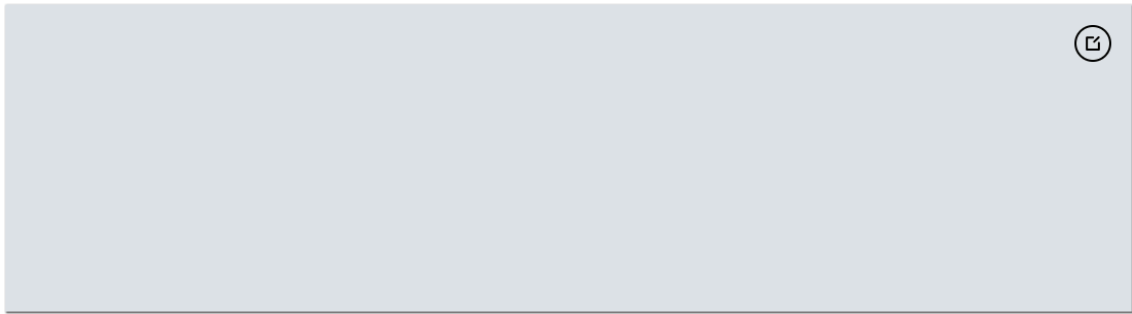



There you will find your accession. Optionally, you can select the edit button  to add a landing page image. This image can also be set or changed later.



To edit the collection details, click on the image/title.

Processing | About this collection



**Summary** 

Institution  
**Unassigned**


Repository  
**Unassigned**

Collection ID  
**Unassigned**


**1 accession**

Date Range  
**1970-01-15 to 2003-03-29**  
Messages: **1,836**  
Incoming: **1,296**  
Outgoing: **542**

Attachments: **277**  
Images: **46**  
Documents: **203**  
Others: **28**

null  **ENTER →**

(About this archive - unassigned)

**Accession ID: ARCH 2017-193** 

**Title:** Richard Fikes papers

**Date:** 2007

**Scope and contents**  
Includes email.


**Rights and conditions**  
All requests to reproduce, publish, quote from, or otherwise use collection materials must be submitted in writing to the Head of Special Collections and University Archives, Stanford University Libraries, Stanford, California 94305-6064. Consent is given on behalf of Special Collections as the owner of the physical items and is not intended to include or imply permission from the copyright owner. Such permission must be obtained from the copyright owner, heir(s) or assigns. See: <http://library.stanford.edu/spc/using-collections/permission-publish>.

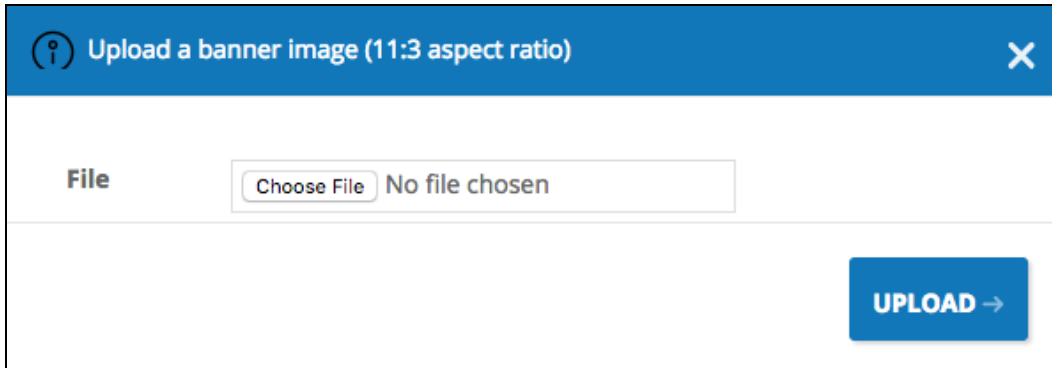
**Notes**  
Transferred from office, 2017.

[Add accession](#)


**ENTER →**

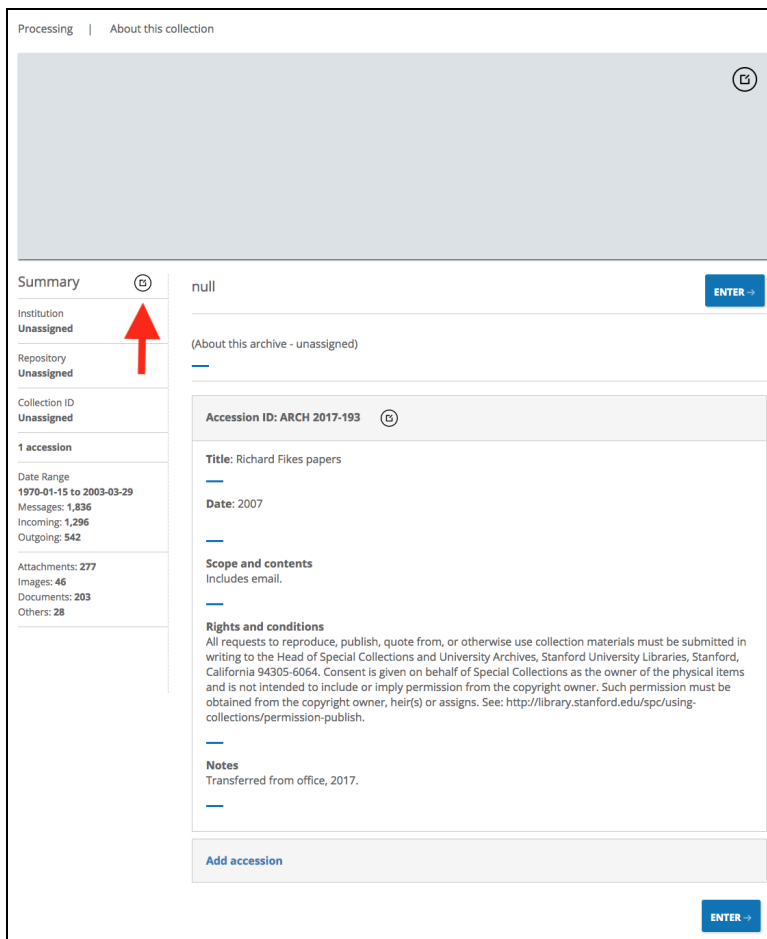
When we are done, this page will match what users will experience in the Discovery and Delivery modules.

Currently, it is lacking a banner image and any collection metadata! Optionally, select the edit button  to add a banner image. This image can also be set or changed later.



A blue header bar contains a question mark icon, the text "Upload a banner image (11:3 aspect ratio)", and a close "X" icon. Below the header, the word "File" is on the left. A central input area contains a "Choose File" button and the text "No file chosen". In the bottom right corner, there is a blue "UPLOAD" button with a right-pointing arrow.

To add collection metadata, select the edit button next to the Summary .



The page has a header with "Processing" and "About this collection". A large grey banner area at the top right has an edit icon. Below this is a "Summary" section with an edit icon and a red arrow pointing to it. The summary fields are: Institution (Unassigned), Repository (Unassigned), Collection ID (Unassigned), 1 accession, Date Range (1970-01-15 to 2003-03-29), Messages (1,836), Incoming (1,296), Outgoing (542), Attachments (277), Images (46), Documents (203), Others (28). To the right of the summary is a text input field containing "null" and an "ENTER" button. Below this is a section for "Accession ID: ARCH 2017-193" with an edit icon. The main content area includes fields for Title (Richard Fikes papers), Date (2007), Scope and contents (Includes email), Rights and conditions (All requests to reproduce, publish, quote from, or otherwise use collection materials must be submitted in writing to the Head of Special Collections and University Archives, Stanford University Libraries, Stanford, California 94305-6064. Consent is given on behalf of Special Collections as the owner of the physical items and is not intended to include or imply permission from the copyright owner. Such permission must be obtained from the copyright owner, heir(s) or assigns. See: http://library.stanford.edu/spc/using-collections/permission-publish.), and Notes (Transferred from office, 2017.). At the bottom right is an "Add accession" button and another "ENTER" button.

## Collection: ePADD archive of Richard Fikes

Institution

Stanford University

Repository

Stanford University Archives

Collection Title

Richard Fikes papers

Short Title

Richard Fikes

Collection ID

SC0881

Finding Aid Link

<http://www.oac.cdlib.org/findaid/ark:/13030/kt7t>

Catalog Record Link

<https://searchworks.stanford.edu/view/7734650>

Contact Email Address

jschne@stanford.edu

Short Description

Richard Earl Fikes is Professor (Research) Emerit

About

Richard Earl Fikes, Professor (Research) Emeritus in Stanford's Computer Science Department, earned his B.A. and M.A. at the University of Texas at Austin and his Ph.D. in Computer Science from Carnegie Mellon University in 1968. Before joining the Stanford faculty, his posts included Senior Mathematician at SRI (Stanford Research Institute), 1969-1976, research staff at Xerox Palo Alto Research Center, 1976 to 1983, and research scientist

## Rights and Conditions

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## Notes

Processed with ePADD, 2017.

## Scope and Content

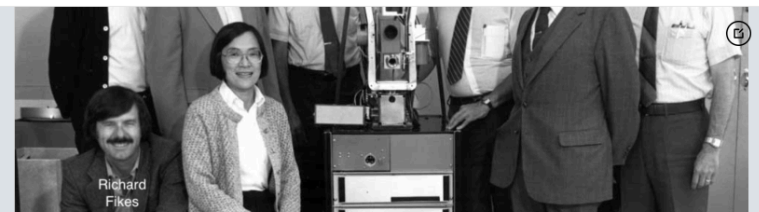
Includes professional and personal correspondence between Fikes and colleagues in the international community of computer science practitioners and scholars.

[SAVE →](#)



When you have finished adding information, click Save.

Processing
About this collection



Richard Fikes

**Summary** Ⓒ

Institution  
**Stanford University**

Repository  
**Stanford University Archives**

Collection ID  
**SC0881**

1 accession

Date Range  
**1970-01-15 to 2003-03-29**

Messages: 1,836  
Incoming: 1,296  
Outgoing: 542

Attachments: 277  
Images: 46  
Documents: 203  
Others: 28

Contact email  
**jschne@stanford.edu**

**EDIT PHOTOS**

**Richard Fikes papers** ENTER →

---

Richard Earl Fikes, Professor (Research) Emeritus in Stanford's Computer Science Department, earned his B.A. and M.A. at the University of Texas at Austin and his Ph.D. in Computer Science from Carnegie Mellon University in 1968. Before joining the Stanford faculty, his posts included Senior Mathematician at SRI (Stanford Research Institute), 1969-1976, research staff at Xerox Palo Alto Research Center, 1976 to 1983, and research scientist with Price Waterhouse Technology Centre. Fikes served as the Associate Director, Heuristic Programming Project, Knowledge Systems Laboratory, Stanford University in 1991, and as Professor (Research) in the Computer Science Department from 1991 to 2006. Fikes is best known as co-developer of the STRIPS (Stanford Research Institute Problem Solver) automatic planning system, KIF (Knowledge Interchange Format), the Ontolingua ontology representation language and Web-based ontology development environment, the OKBC (Open Knowledge Base Connectivity) API for knowledge servers, and IntelliCorp's KEE (Knowledge Engineering Environment) system.

---

**Scope and Content**  
Includes professional and personal correspondence between Fikes and colleagues in the international community of computer science practitioners and scholars.

---

**Rights and Conditions**  
All requests to reproduce, publish, quote from, or otherwise use collection materials must be submitted in writing to the Head of Special Collections and University Archives, Stanford University Libraries, Stanford, California 94305-6064. Consent is given on behalf of Special Collections as the owner of the physical items and is not intended to include or imply permission from the copyright owner. Such permission must be obtained from the copyright owner, heir(s) or assigns. See: <http://library.stanford.edu/spc/using-collections/permission-publish>

---

**Notes**  
Processed with ePADD, 2017.

---

**Accession ID: ARCH 2017-193** Ⓒ

---

**Title:** Richard Fikes papers

---

**Date:** 2007

---

**Scope and contents**  
Includes email.

---

**Rights and conditions**  
All requests to reproduce, publish, quote from, or otherwise use collection materials must be submitted in writing to the Head of Special Collections and University Archives, Stanford University Libraries, Stanford, California 94305-6064. Consent is given on behalf of Special Collections as the owner of the physical items and is not intended to include or imply permission from the copyright owner. Such permission must be obtained from the copyright owner, heir(s) or assigns. See: <http://library.stanford.edu/spc/using-collections/permission-publish>.

---

**Notes**  
Transferred from office, 2017.

Note that if files have been normalized via an Archivematica integration, the number of renamed and normalized files will appear under Collection Details.

## 4.3 Appraisal Revisited

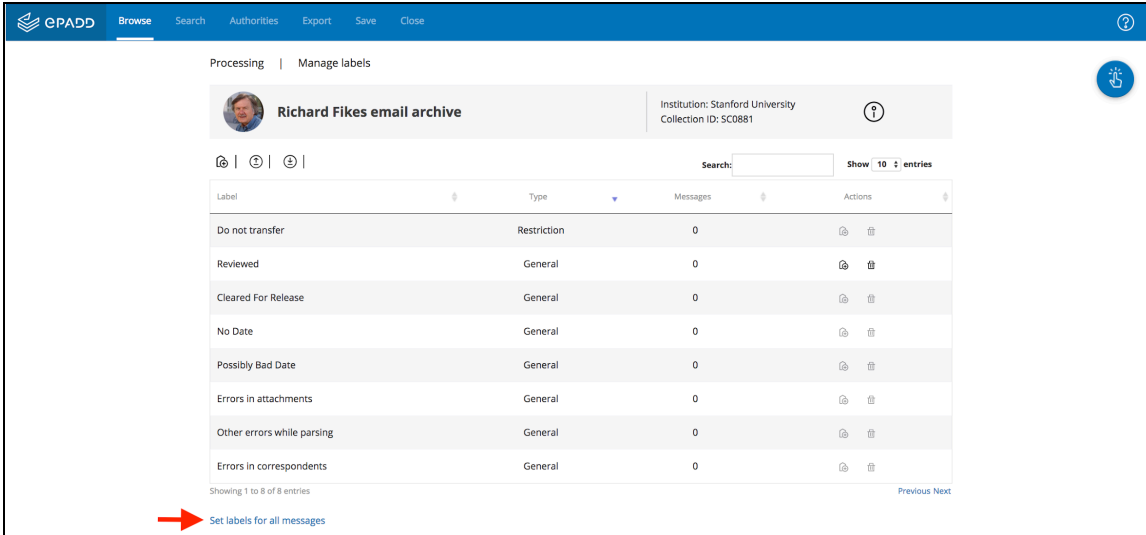
The **Processing Module** includes all of the review and appraisal functionality of the **Appraisal Module**, as well as additional functionality associated with archival processing. Please refer to **Section 3: Appraisal Module** for information on Reviewing Email (Browsing Email Messages; Editing Correspondents; Performing Entity Analysis, Performing Lexicon Analysis; and Reviewing Attachments) as well as Appraising Email (Searching Email Messages; Annotating Email Messages; and Restricting Email Messages).

There is no set order to perform the steps above. In fact, different email archives will benefit from different approaches. **However, we do recommend that you begin by verifying the bag checksum. This option can be accessed under the More from the Browse menu.**

The various unique functionalities provided by the Processing Module to assist with archival processing are described below.

## 4.4 Setting Default Labels

If you wish to reset any labels that were added in Appraisal, or set new default labels, navigate to Labels from the Browse screen and select Set labels for all messages.



The screenshot shows the 'Manage labels' interface in the EPADD application. The header includes the EPADD logo, navigation tabs (Browse, Search, Authorities, Export, Save, Close), and a user profile icon. The main content area is titled 'Processing | Manage labels' and features a profile picture and name 'Richard Fikes email archive' on the left, and 'Institution: Stanford University' and 'Collection ID: SC0881' on the right. Below this is a search bar and a 'Show 10 entries' dropdown. A table lists various labels with columns for Label, Type, Messages, and Actions. At the bottom left, a red arrow points to a link labeled 'Set labels for all messages'.

Label	Type	Messages	Actions
Do not transfer	Restriction	0	
Reviewed	General	0	
Cleared For Release	General	0	
No Date	General	0	
Possibly Bad Date	General	0	
Errors in attachments	General	0	
Other errors while parsing	General	0	
Errors in correspondents	General	0	

Showing 1 to 8 of 8 entries Previous Next

[Set labels for all messages](#)

The Processing Module contains an additional restriction label not present in the Appraisal Module - 'Transfer to Delivery Only.' When a processed email collection is exported from the Processing Module to the Discovery and Delivery Modules, messages with this label applied will only export to the Delivery Module and not to the Discovery Module.

## 4.5 Performing Authority Control

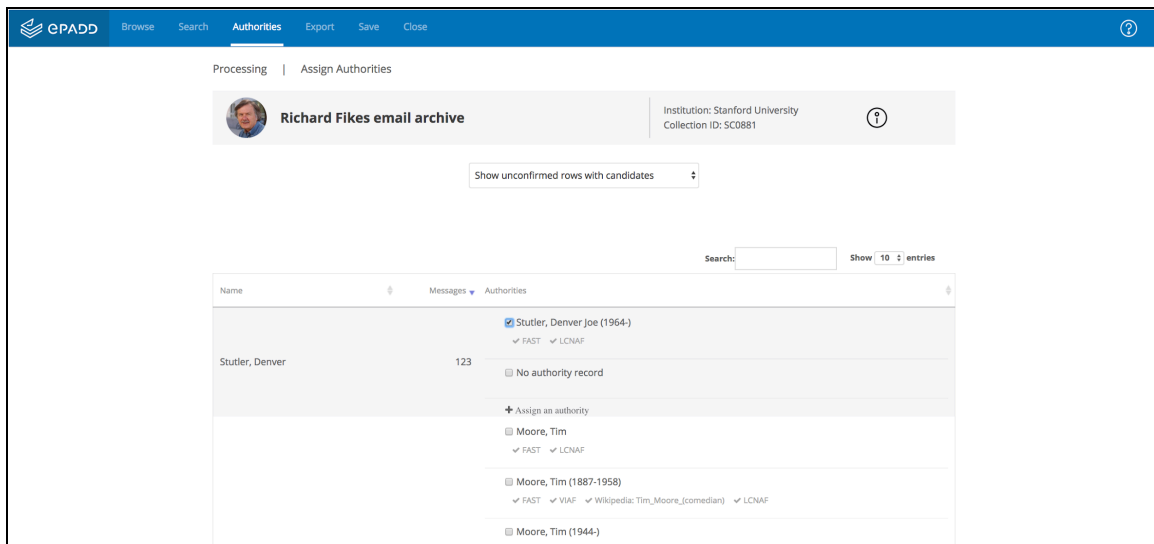
ePADD allows the user to reconcile correspondents and named entities extracted by ePADD with authorized headings (including OCLC FAST headings).

Within the Processing Module, select **Authorities** from the navigation bar to begin this process.

### 4.5.1 Reconciling Correspondents with Authorized Headings

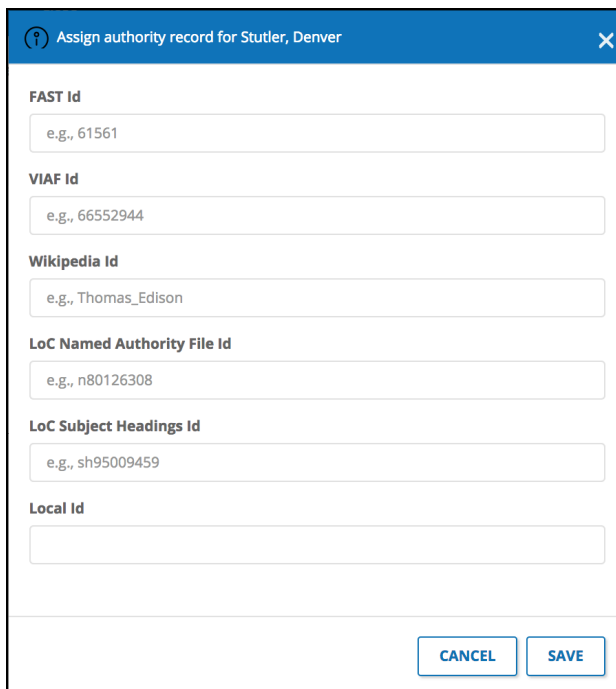
For more information about how ePADD merges correspondents, as well as how to manually override merged correspondents, please see section [3.2.3: Editing Correspondents](#) for further information.

The order of correspondents on the Authorities screen can be relisted alphabetically by person, or by volume of messages exchanged. You can also select how many correspondent entries to view per page using the option box in the top left corner, as well as search for a particular correspondent using the search box at the top of the page.



ePADD searches OCLC FAST for LC Subject Headings, as well as DBPedia, VIAF, and LCNAF. If an image is associated with the related DBPedia record, it can be displayed by hovering over the related DBPedia link.

If you are unsatisfied with ePADD's results, you can add an authorized heading ID or local ID using the + button.



Assign authority record for Stutler, Denver

**FAST Id**  
e.g., 61561

**VIAF Id**  
e.g., 66552944

**Wikipedia Id**  
e.g., Thomas\_Edison

**LoC Named Authority File Id**  
e.g., n80126308

**LoC Subject Headings Id**  
e.g., sh95009459

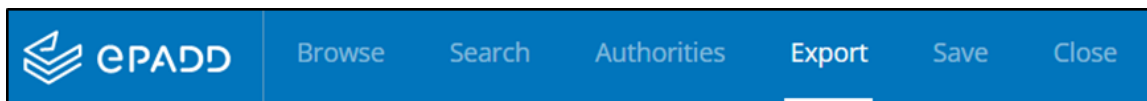
**Local Id**

CANCEL SAVE

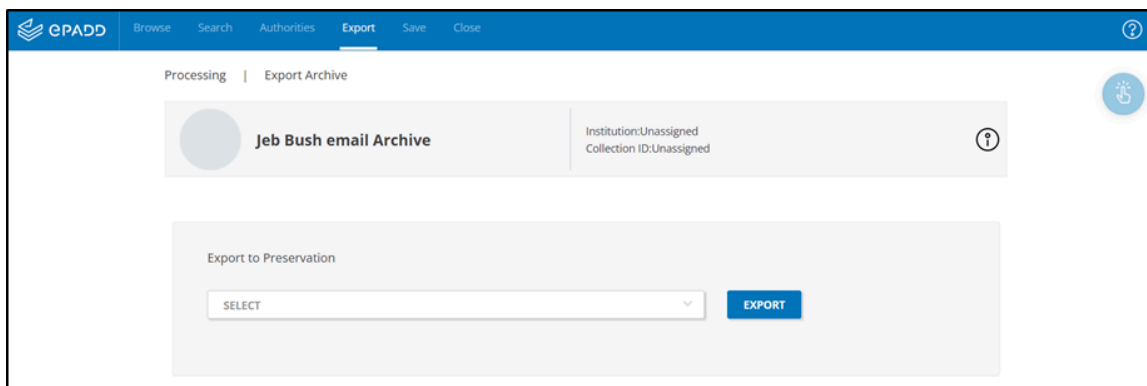
Any actions taken in the Authorities interface are autosaved. Authorized correspondents can be exported as a .CSV file by selecting **Export** from the navigation bar, then using the *Export Correspondents* option. See section [4.11: Exporting Correspondents](#) for more information.

## 4.6 Exporting Email for Preservation

ePADD can be used to create and export a preservation package or 'preservation ready bag', complete with all email headers, that can be transferred to a digital preservation repository. This can be done, following similar steps, from within ePADD's Appraisal and Processing modules (see section [3.4: Exporting Email for Preservation](#) for exporting email from the Appraisal module). To create the preservation package click 'Export' on the ePADD dashboard:



In 'Export to Preservation', select 'exportProcessed' and click 'Export':




Clicking on 'Export' creates a folder – 'ProcessingNormalizedAppraised' – containing the appraised MBOX file(s), which is found via the following file path:

On Windows:

C:\Users\<>username>\epadd-appraisal\user\data\exportableAssets\  
ProcessingNormalizedProcessed

On Mac: User/>username>/epadd-appraisal/user/data/exportableAssets/  
ProcessingNormalizedProcessed

Name	Date modified	Type
 ProcessingNormalizedProcessed	06/10/2022 12:15	File folder

## 4.7 Exporting Message Headers

Message headers can be exported from Processing as a .CSV file to aid in social network analysis using the *Export Headers (CSV)* option. Exported fields include Date, From (resolved name), from (email address), To (resolved name), To (email address), CC (resolved name), CC (email address), BCC (resolved name), BCC (email address).

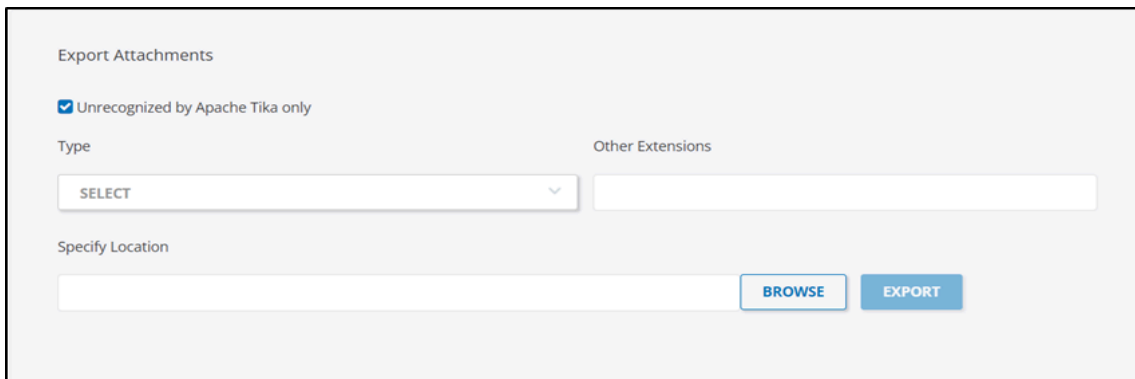
Select **Export** from the Processing Module menu at the top of the screen to navigate to the Export Screen, where you will find the section entitled 'Export Headers (CSV):



## 4.8 Exporting Message Attachments

Users can also choose to export attachments according to various search criteria. The user can indicate whether they would like to export only those attachments which have not been recognized by Apache Tika (and are therefore not indexed with ePADD) for further review. Note that messages are only flagged in this way if they have also been appraised or processed by ePADD 4.0 or later.

Select **Export** from the Processing Module menu at the top of the screen to navigate to the Export Screen, where you will find a section entitled 'Export Attachments':



## 4.9 Exporting to MBOX

Users can export messages to MBOX -- the user can select to export all messages, all non-restricted messages, or just restricted messages. Please note that email exporting to MBOX will need to be re-imported into ePADD (and reindexed) in order to benefit from ePADD's functionality in the future.

Select **Export** from the Processing Module menu at the top of the screen to navigate to the Export Screen, where you will find a section entitled 'Export Messages in MBOX Format':



#### 4.10 Exporting Entities

Users can export recognized entities. The user can select whether they would like to export all entities or just particular entity types. Entities are exported as CSV and include the following fields: Entity name, number of related messages, start and end dates for related messages, entity type, and score (whether there is a direct match with an entity in DBPedia).

Select **Export** from the Processing Module menu at the top of the screen to navigate to the Export Screen, where you will find a section entitled 'Export Entities':



#### 4.11 Exporting Correspondents

Users can export correspondents from the email archive. Users can choose to export only correspondents that have been confirmed via the Authorities interface (which include related unique identifiers), or only unconfirmed correspondents. Unconfirmed correspondents are exported as CSV and include the following fields: Correspondent name, number of sent and received messages, number of mentions, and start and end dates for related messages.

Select **Export** from the Processing Module menu at the top of the screen to navigate to the Export Screen, where you will find a section entitled 'Export correspondents':



Export correspondents

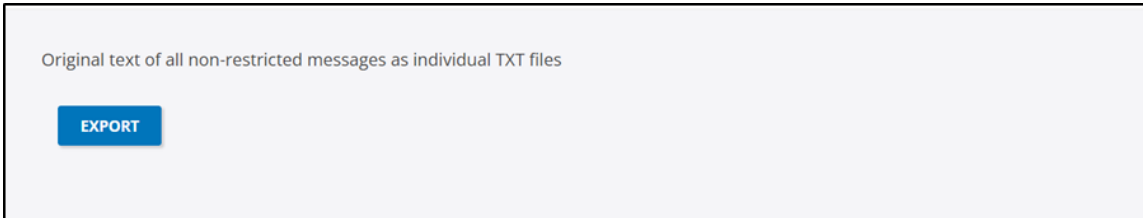
SELECT

EXPORT

#### 4.12 Exporting Original Text of Non-restricted Messages as Individual Text Files

Users can export all message text (subject line and message body) as individual TXT files to support topic modeling and other methods of text analysis.

Select **Export** from the Processing Module menu at the top of the screen to navigate to the Export Screen, where you will find the relevant section:



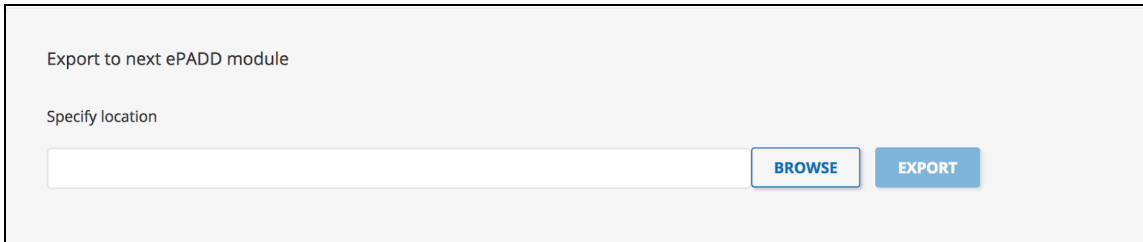
Original text of all non-restricted messages as individual TXT files

EXPORT

#### 4.13 Exporting Email to the Delivery and Discovery Modules

Once you have reviewed the email archive using the tools described above, the final step is to export the processed email archive (along with whatever supplemental information or annotations you have added) for display in the Discovery and/or Delivery Modules.

Select **Export** from the Processing Module menu at the top of the screen to navigate to the Export Screen.



Export to next ePADD module

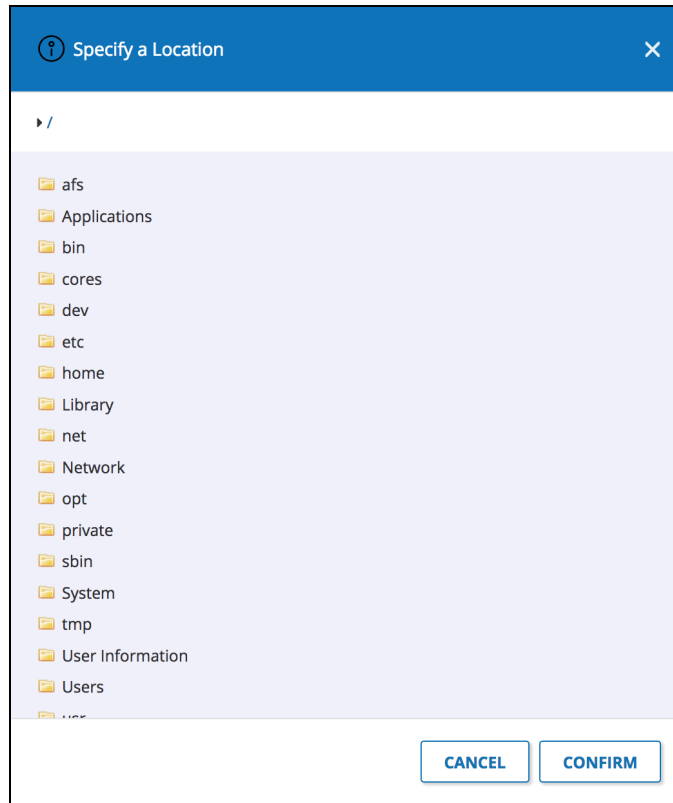
Specify location

BROWSE

EXPORT



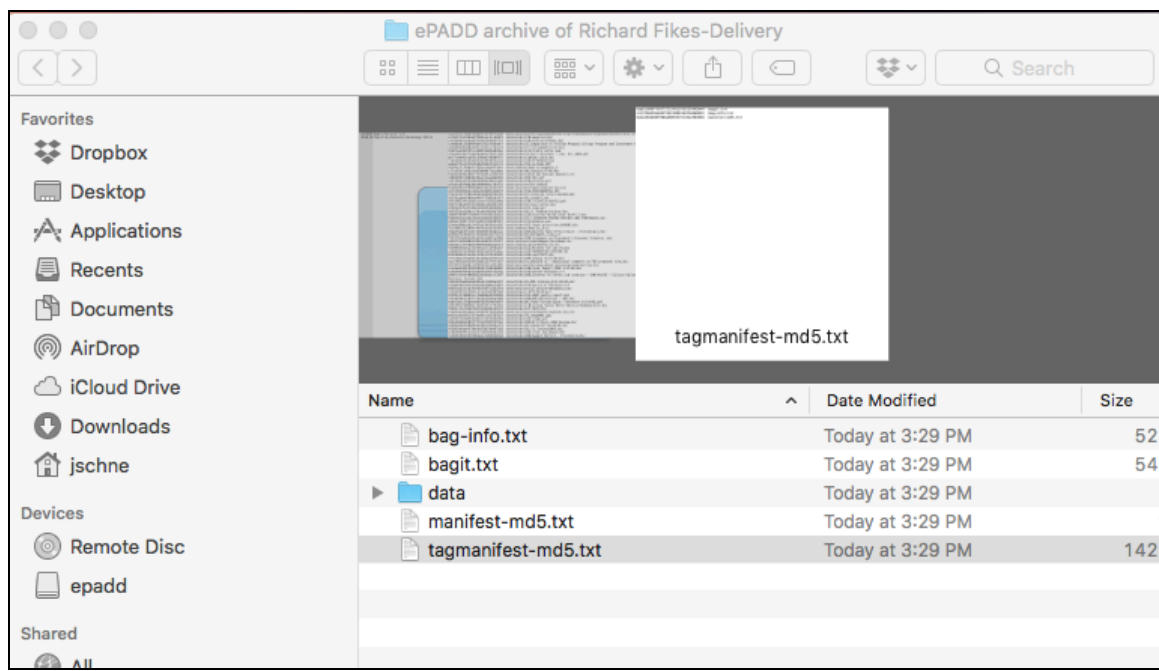
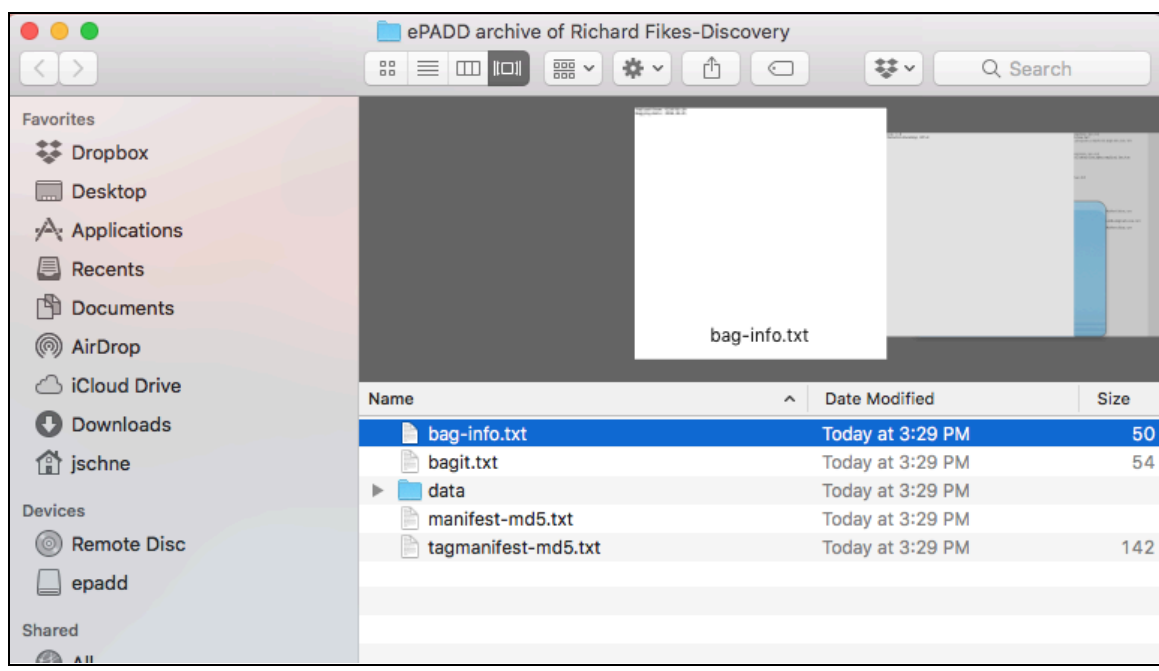
To export the archive to the Discovery and Delivery modules, first use the Browse button to select the location you wish to export under *Export to next ePADD module*, then click the confirm button.



Selecting a folder in which to export the email archive

Please ensure you have enough disk space to save the complete email archive export or the export will fail.

This step may take some time as ePADD assembles the exported email archive and accompanying documentation.



Exporting the processed email archive from the Processing Module creates two folders: one to support Discovery, and one to support Delivery

## 5 Discovery Module

The Discovery Module is designed to run under a web-server, and allow remote users to search redacted header info and extracted entities while limiting full-text access to the materials.

### 5.1 Testing the Discovery Module

To test the Discovery module on your local workstation, copy the folder 'Email archive of <name>-Discovery,' exported through the Processing Module to the 'epadd-discovery' folder in your user directory. (Please see section [2: Getting Started](#) for more information about locating your user directory). If an 'epadd-discovery' folder does not already exist within your user directory, create that folder.

Now run ePADD and navigate to the Discovery module within the settings folder. At this point, you may wish to reset the 'reviewed' status for all messages that may have been marked as 'reviewed' in the Processing Module. To do this, navigate to the Settings Menu, and select the 'Set Default Actions' button.

### 5.2 Mounting the Discovery Module under a Web Server

Please follow the steps below to mount the ePADD Discovery Module under a web server. As the software is still in development, please contact us ([epadd\\_project@stanford.edu](mailto:epadd_project@stanford.edu)) to troubleshoot any issues and/or confirm your successful installation.

- 1) Install the **Java runtime environment** (JRE 8+) on the machine that is going to mount the web server.
- 2) Create a file called epadd.properties. It must be in plain text and stored in the user's home directory (typically `c:\users\<username>\`).

This file should contain the following text:

```
epadd.mode=discovery
```

- 3) Copy the exported Discovery version of the archive folders (which should be titled *ePADD archive of <name>-Discovery*) into `~/epadd-discovery` of the home directory for the account that will be running the ePADD discovery module / web server.

Upon copying the files you should see the following directories, including subdirectories and files:

```
$ ls ~/epadd-discovery
```

*ePADD archive of <name>-Discovery*

**Important: Please ensure that you do not copy the Delivery version of the archive. It MUST be the Discovery version, as the Delivery version has unredacted information!**

4) Download and install the Discovery Module distribution file (**epadd-discovery-standalone.jar**). The web server is bundled with this distribution.

5) Start ePADD with:

```
java -Djava.io.tmpdir=/tmp -Depadd.mode.discovery=1 -Dnobrowseropen= -Xmx4g -jar  
epadd-discovery-standalone.jar
```

Please adjust the -Xmx option to assign as much memory you want, depending on the size of the archive(s).

Please also note that the java.io.tmpdir should be set to a directory where temporary files can be stored by ePADD. (java.io.tmpdir=/tmp will not work on Windows systems).

Please also ensure that the 9099 port is accessible from outside and will remain open.

**Caution: Please ensure that this directory is not periodically cleared by utilities like tmpwatch.**

6) You can now open ePADD application in your internet browser by typing the URL <http://{machine-name}:9099/>

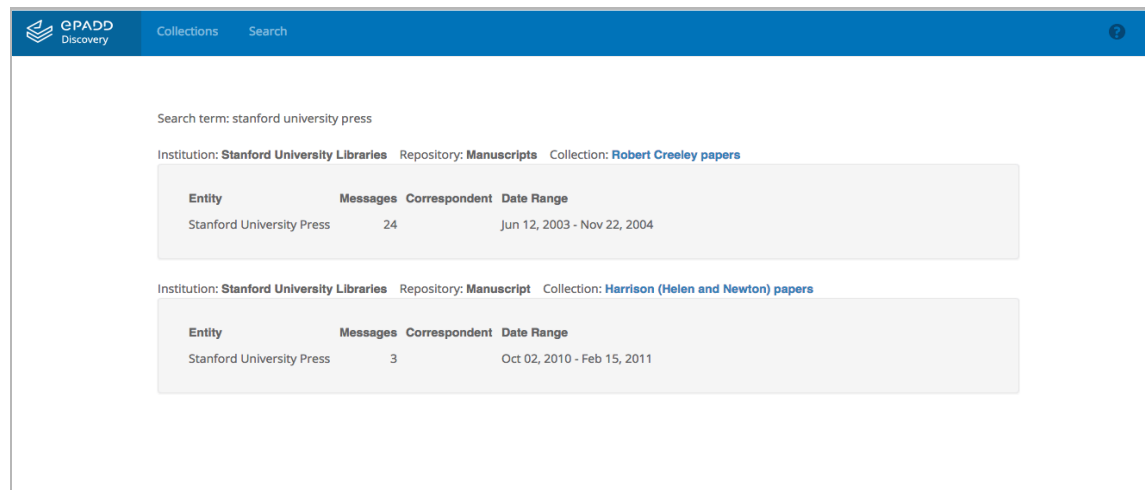
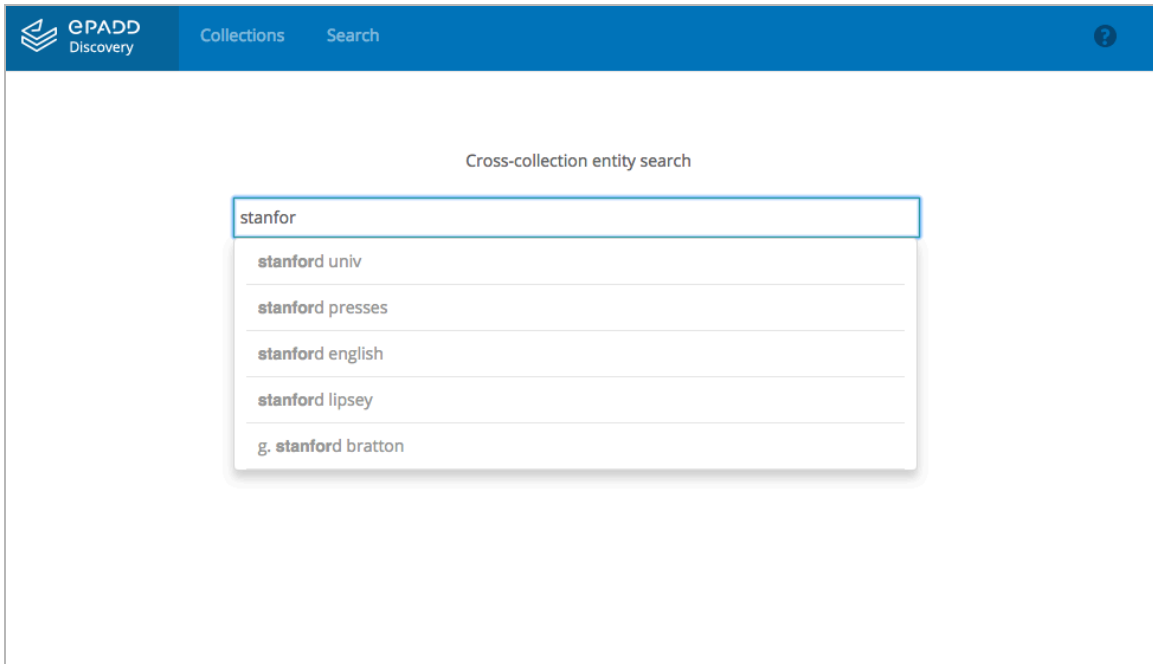
Where {machine-name} is the publicly visible name/IP of the machine where the epadd-discovery module is running.

7) You may wish to reset the 'reviewed' status for all messages that may have been marked as 'reviewed' in the Processing Module. To do this, navigate to the Settings Menu, and select the 'Set Default Actions' button.

**Note: Please contact the ePADD development team ([epadd\\_project@stanford.edu](mailto:epadd_project@stanford.edu)) for help troubleshooting installation of the Discovery Module.**

### 5.3 Searching Entities Across Collections

ePADD supports cross-collection entity search. Navigate to Search from the Discovery navigation bar to access cross-collection entity search.

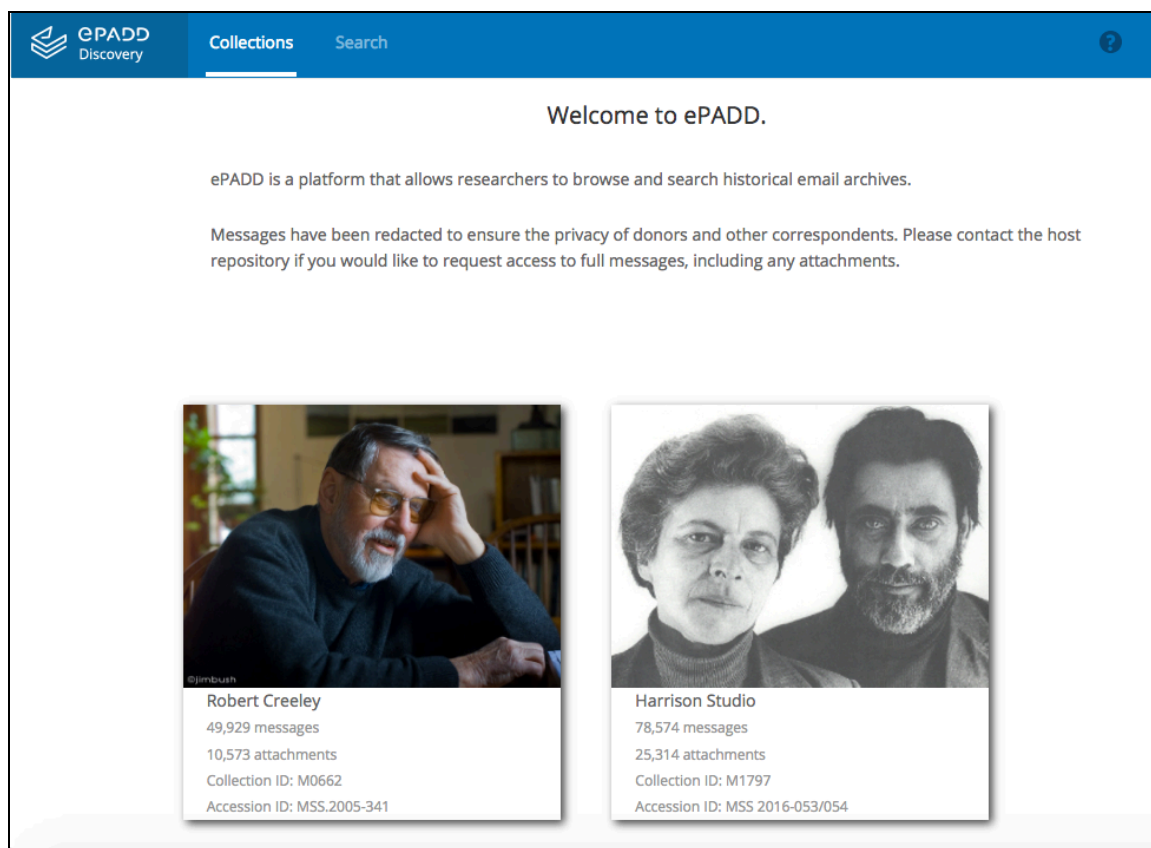


Cross-collection entity search supports autocomplete. The user can navigate from search results to the related collection.

## 5.4 Navigating to a Collection

The Collections menu provides a user with access to the redacted email of any processed collections.

The user selects the collection they wish to access by clicking on the related image.



### Selecting a Collection

The next screen provides basic details of the collection. A user can proceed with viewing the collection by selecting the 'Enter' button.

## Robert Creeley papers



### Collection Details

Institution  
Stanford University

Repository  
Special Collections & University  
Archives

Collection ID  
M0662

Accession ID  
ACCN 2005-182

Date Range  
1995-03-05 to 2005-03-23  
8 messages undated

Messages: 1,680  
Incoming: 868  
Outgoing: 15

Attachments: 245  
Images: 34  
Documents: 84  
Others: 127

Contact email  
specialcollections@stanford.edu

### About Robert Creeley

The Robert Creeley Papers document the life work of a leading American poet of the 20th century, one of the core members of the "Black Mountain School." They also document several important movements in American poetics in the second half of the century. The papers include Creeley's personal and professional correspondence, journals, business records, personal mementos, clippings, artwork, and other documents generated and collected by him from 1950 to 1997.

#### Rights and Conditions

Property rights reside with the repository. Literary rights reside with the creators of the documents or their heirs. To obtain permission to publish or reproduce, please contact the Public Services Librarian of the Dept. of Special Collections.

#### Notes

Additional Creeley materials can be found in M0553 and M0347.

**ENTER** →

[Finding Aid](#)

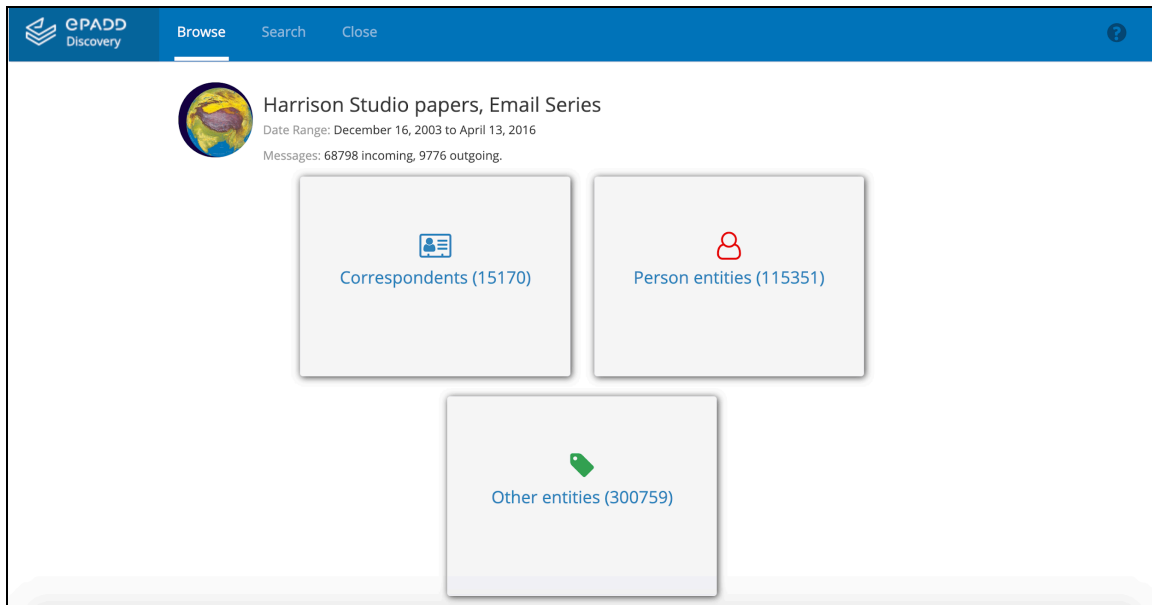
[Catalog Record](#)

Email messages in the ePADD Discovery Module have been redacted to ensure the privacy of donors and other correspondents. Please contact the host repository if you would like to request access to full messages, including any attachments.

[Access a Collection by clicking the 'ENTER' button.](#)

## 5.5 Browsing Email

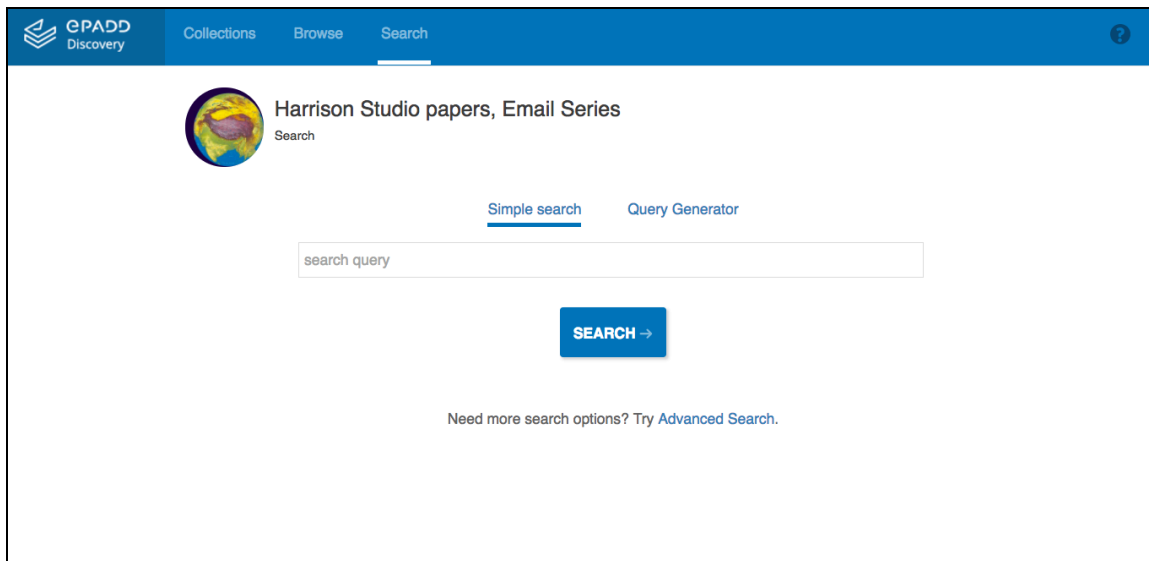
The Browse Menu provides a user with access to several options to browse a redacted email archive, including by Correspondent as well as by extracted entity type (persons, organizations, and locations).



**Browse Menu in the Discovery Module**



## 5.6 Searching Email



To search the email archive, navigate to the Search screen.

Beginning with v2.0, ePADD supports three types of search: simple search, advanced search, and the query generator.

To use the simple search feature, simply type in your query into the simple search box available on the initial search screen. This will search across message headers (correspondents and subjects) and message text, as well as the text of all document attachments.

Once you have entered your term(s) and made your selection, click the *Search* button. The search string will appear highlighted on the message browse screen.

Advanced Search enables the user to generate complex searches of email text, correspondents, attachments, and any actions previously taken on the messages, as well as a variety of other parameters.

### Advanced Search

**Text**

Terms

Search body  
  Search subject  
  Search attachments  
  Search original text

Entity

**Correspondents**

Name or email

To  
  From  
  Cc  
  Bcc

Mailing List  
 Yes  
  No  
  Either

**Attachments**

File Name

File Size

Reg Ex  
 Type

Other extension

**Actions**

Annotation

Reviewed  
 Yes  
  No  
  Either

Restricted  
 Yes  
  No  
  Either

Not transferred  
 Yes  
  No  
  Either

**Miscellaneous**

Time Range  
 To

Message Direction  
 Incoming  
  Outgoing  
  Either

Email Source


Message Folder

Lexicons

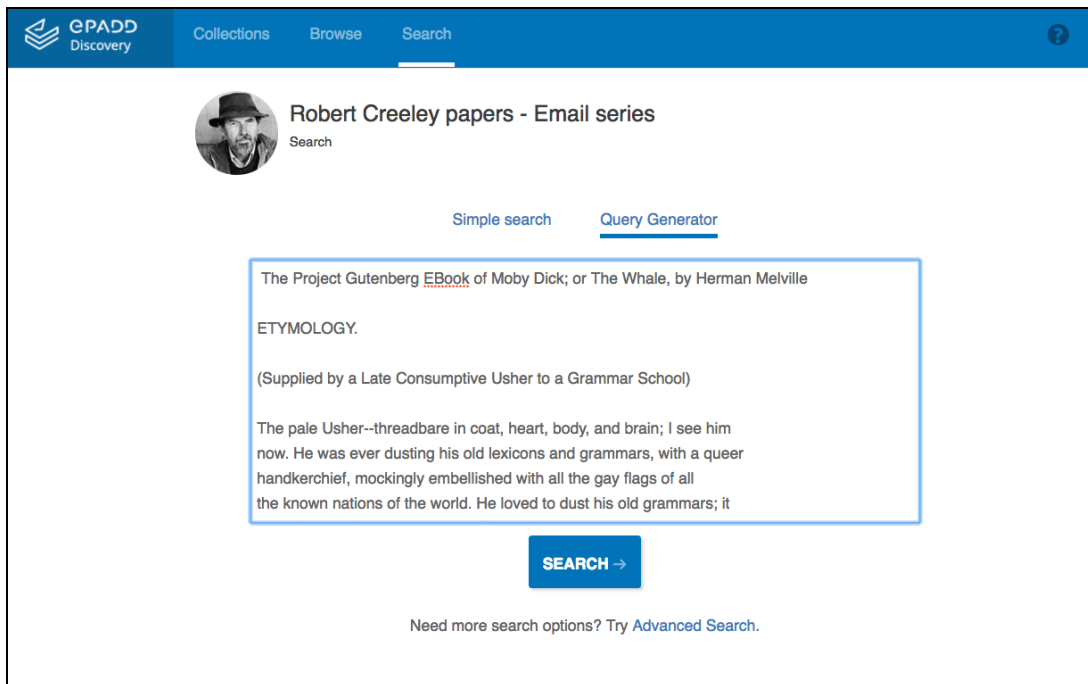
Lexicon: Category

Entity type

Sort results by

Search Tips can be accessed by selecting the  button in the top right corner of the *Advanced Search* screen.

ePADD also allows a user to search the email archive for entities contained in a given block of provided text, using the *Query Generator*. Any matching terms will be highlighted on the results page.



The screenshot shows the ePADD Discovery interface. At the top, there is a navigation bar with the ePADD Discovery logo and three tabs: "Collections", "Browse", and "Search". Below the navigation bar, there is a search area for "Robert Creeley papers - Email series" with a circular profile picture of Robert Creeley and a "Search" button. Below this, there are two tabs: "Simple search" and "Query Generator". The "Query Generator" tab is active, and it contains a text input field with the following text: "The Project Gutenberg EBook of Moby Dick; or The Whale, by Herman Melville". Below the input field, there is a "SEARCH" button with a right-pointing arrow. At the bottom of the search area, there is a link: "Need more search options? Try [Advanced Search](#)."

### Search options within the Discovery Module

```

Date: January 26, 2001 3:39pm
From: snhowe@...
To: creeley@...
Subject: .....

.....
..... Neil .....
..... Neil .....
..... Charles .....
.....
..... Neil .....
.....
..... Juliana Spahr .. Myung Mi
Kim .. Kim ..
.....
..... Dennis .....
..... Charles .....
.....
..... Charles ( .....
..... )
..... Charles ( .....
..... )
..... ? .....
..... ?
..... ?
Susan

```

### Discovery Module search results, displaying only redacted headers and extracted entities



he thinking glasses within. But go on, Ishmael, said I at last; don't you hear? get away from before the door; your patched boots are stopping the way. So on I went. I now by instinct followed the streets that took me waterward, for here, doubtless, were the cheapest, if not the cheeriest inns.

Such dreary streetal blocks of blackness, not houses, on either hand, and here and there a candle moving about in a tomb. At this hour of the night, of the last day of the week, that quarter of the town proved all but deserted. But presently I came to a smoky light proceeding from a low, wide building, the door of which stood invitingly open. It had a careless look, as if it were meant for the uses of the public; so, entering, the first thing I did was to fumble over an ash-box in the porch. Hal thought I, ha, as the flying particles almost choked me, are these ashes from that destroyed city, Gomorrah? But "The Crossed Harpoons," and "The Sword-Fish?" Ah, then must needs be the sign of "The Trap." However, I picked myself up and hearing a loud voice within, pushed on and opened a second, interior door.

It seemed the great Black Parliament sitting in Tochet. A hundred black faces turned round in their rows to peer; and beyond, a black Angel of Doom was beating a book in a pulpit. It was a negro church; and the preacher's text was about the blackness of darkness, and the weeping and wailing and teeth-gnashing there. Ha, Ishmael, muttered I, backing out, Wretched entertainment at the sign of "The Trap!" Moving on, I at last came to a dim sort of light not far from the docks, and heard a forlorn creaking in the air; and looking up, saw a swinging sign over the door with a white painting upon it, faintly representing a tall straight jet of misty spray, and these words underneath: "The Spouter-Inn; Peter Coffin."

Coffin? Spouter? Rather ominous in that particular connexion, thought I. But it is a common name in Nantucket, they say, and I suppose this Peter here is an emigrant from there. As the light looked so dim, and the place, for the time, looked quiet enough, and the dilapidated little wooden house itself looked as if it might have been carted here from the ruins of some burnt district, and as the swinging sign had a poverty-stricken sort of creak to it, I thought that here was the very spot for cheap lodgings, and the best of pea coffee.

It was a queer sort of placid gable-ended old house, one side pallid as it were, and leaning over sadly. It stood on a sharp bleak corner, where that tempestuous wind Euroclydon kept up a worse howling than ever it did about poor Fauf's tossed craft. Euroclydon, nevertheless, is a mighty pleasant zephyr to any one in-doors, with his feet on the hob quietly toasting for bed. "In judging of that tempestuous wind called Euroclydon," says an old writer of whose works I possess the only copy extant: "It maketh a marvellous din on both sides, and of which the right Death is the only glazier."

What a pity they didn't stop up the chimneys and the crannies through million years ago. Poor Lazarus there, chattering his teeth against hot keep out the tempestuous Euroclydon. Euroclydon! don't you say old oriental summer climes of everlasting conservatories; give me the But what thinks Lazarus? Can he warm his blue hands by holding equator; yes, ye god! go down to the fiery pit itself, in order to be Now, that Lazarus should be stranded there on the curbstone before the door of Dives, this is more wonderful than that an iceberg should be moored to one of the Moluccas. Yet Dives himself, he too lives like a Czar in an ice palace made of frozen sighs, and being a president of a temperance society, he only drinks the tepid tears of orphans.

But no more of this blubbering now, we are going a-whaling, and there is plenty of that yet to come. Let us scrape the ice from our frosted feet, and see what sort of a place this "Spouter" may be.

CHAPTER 3. The Spouter-Inn.

Entering that gable-ended Spouter-Inn, you found yourself in a wide, low, straggling entry with old-fashioned wainscots, reminding one of the bulwarks of some condemned old craft. On one side hung a very large oil-painting so thoroughly beam-rotted, and every way defaced, that in the unequal crosslights by which you viewed it, it was only by diligent study and a series of systematic visits to it, and careful inquiry of the neighbors, that you could any way arrive at an understanding of its purpose. Such unaccountable masses of shades and shadows, that at first you almost thought some ambitious young artist, in the time of the New England Regs, had endeavored to delineate chaos bewitched. But by dint of much and earnest contemplation, and oft repeated ponderings, and especially by throwing open the little window towards the back of the entry, you at last come to the conclusion that such an idea, however

### Query generator in action

## 6 Delivery Module



Delivery Module Navigation Bar

The Delivery Module enables archival repositories to provide moderated full-text access to unrestricted email archives within a reading room.

### 6.1 Importing the Email Archive into the Delivery Module

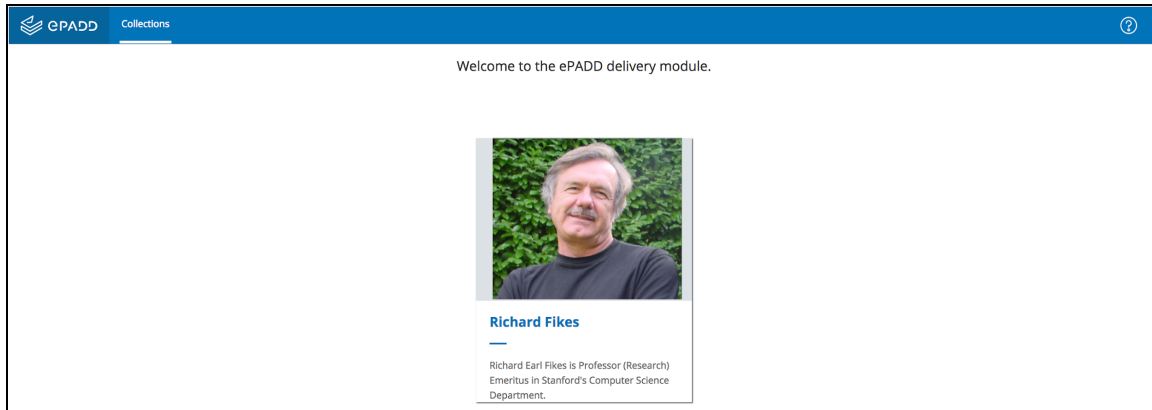
In order for ePADD to recognize the email archive, you must first ensure it is in the proper location within your user directory. (See section [2: Getting Started](#) for more information about locating your user directory). If an 'epadd-delivery' folder does not already exist within your user directory, create that folder, and add the appropriate email archive (which should be a folder titled 'Email Archive of <Archive Owner>-Delivery') to that location.

Now run the ePADD software, and select the Delivery Module from the Settings Menu. At this point, you may wish to reset the 'reviewed' status for all messages that may have been marked as 'reviewed' in the Processing Module.. To do this, navigate to the Settings Menu under Browse and select the 'Set Default Actions' button .

### 6.2 Navigating to a Collection

The Collections menu provides a user with moderated access to the email archive of any processed collections.

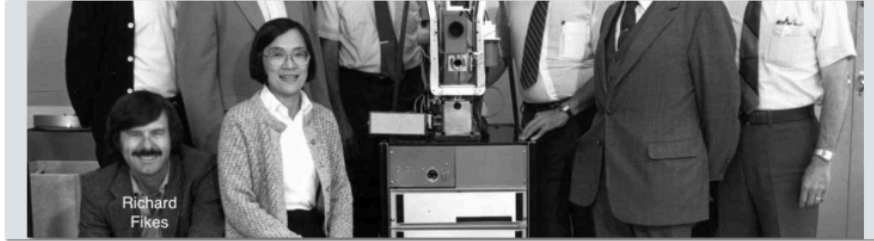
The user selects the collection they wish to access by clicking on the related image.



### Selecting a Collection

The next screen provides basic details of the collection. A user can proceed with viewing the collection by selecting the 'Enter' button.

Delivery | About this collection



### Summary

Institution  
**Stanford University**

Repository  
**Stanford University Archives**

Collection ID  
**SC0881**

**1 accession**

Date Range  
**1970-01-15 to 2003-03-29**  
Messages: **1,836**  
Incoming: **1,296**  
Outgoing: **542**

Attachments: **277**  
Images: **46**  
Documents: **203**  
Others: **28**

Contact email  
**jschne@stanford.edu**

### Richard Fikes papers

**ENTER →**

Richard Earl Fikes, Professor (Research) Emeritus in Stanford's Computer Science Department, earned his B.A. and M.A. at the University of Texas at Austin and his Ph.D. in Computer Science from Carnegie Mellon University in 1968. Before joining the Stanford faculty, his posts included Senior Mathematician at SRI (Stanford Research Institute), 1969-1976, research staff at Xerox Palo Alto Research Center, 1976 to 1983, and research scientist with Price Waterhouse Technology Centre. Fikes served as the Associate Director, Heuristic Programming Project, Knowledge Systems Laboratory, Stanford University in 1991, and as Professor (Research) in the Computer Science Department from 1991 to 2006. Fikes is best known as co-developer of the STRIPS (Stanford Research Institute Problem Solver) automatic planning system, KIF (Knowledge Interchange Format), the Ontolingua ontology representation language and Web-based ontology development environment, the OKBC (Open Knowledge Base Connectivity) API for knowledge servers, and IntelliCorp's KEE (Knowledge Engineering Environment) system.

#### Scope and Content

Includes professional and personal correspondence between Fikes and colleagues in the international community of computer science practitioners and scholars.

#### Rights and Conditions

All requests to reproduce, publish, quote from, or otherwise use collection materials must be submitted in writing to the Head of Special Collections and University Archives, Stanford University Libraries, Stanford, California 94305-6064. Consent is given on behalf of Special Collections as the owner of the physical items and is not intended to include or imply permission from the copyright owner. Such permission must be obtained from the copyright owner, heir(s) or assigns. See: <http://library.stanford.edu/spc/using-collections/permission-publish>

#### Notes

Processed with ePADD, 2017.

**Accession ID: ARCH 2017-193**

**Title:** Richard Fikes papers

**Date:** 2007

#### Scope and contents

Includes email.

#### Rights and conditions

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#### Notes

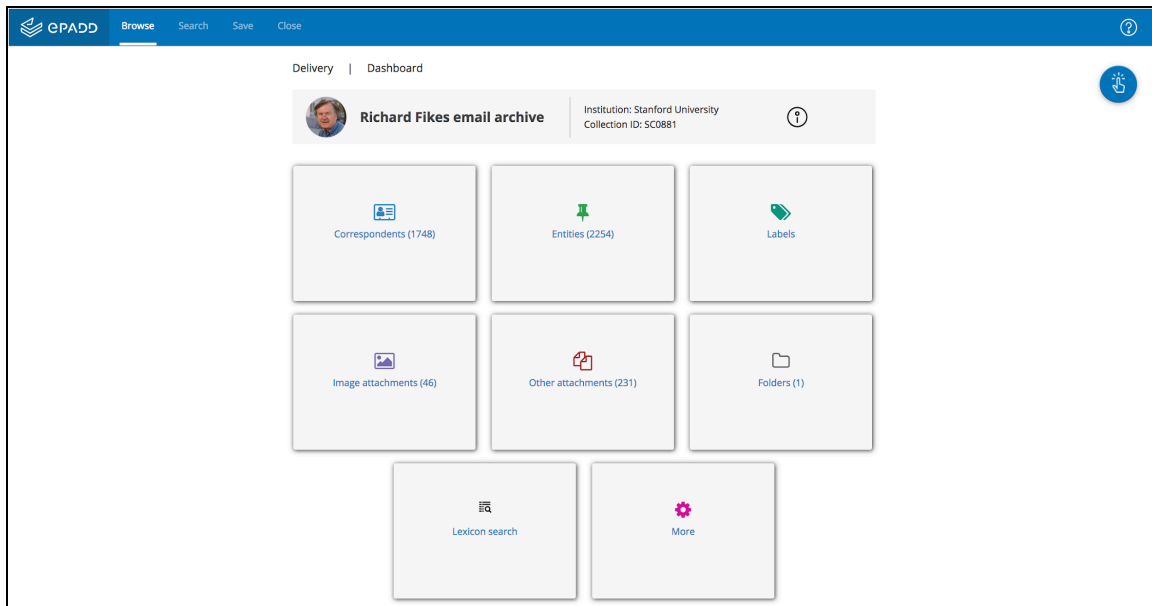
Transferred from office, 2017.

[Finding Aid](#) [Catalog Record](#)

**ENTER →**

## 6.3 Browsing the Email Archive

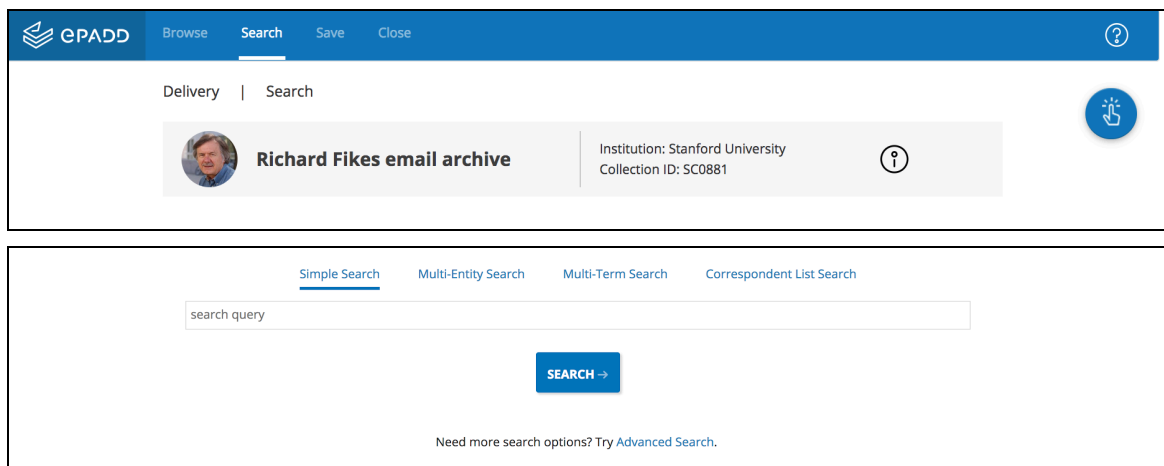
The Browse Menu provides a user with access to several options to browse the email archive, including by Correspondent or by extracted entity type (persons, organizations, and locations). The user can also generate complex tiered searches using a customizable lexicon, as well as browse image attachments, and download documents and other attachments to the workstation for further review.



**Browse Menu in the Delivery Module**



## 6.4 Searching the Email Archive



To search the email archive, navigate to the Search screen.

Besides lexicons, accessible via the Browse page, ePADD supports five types of search: simple search, advanced search, multi-entity search, multi-term search, and correspondent list search.

To use the simple search feature, simply type in your query into the simple search box available on the initial search screen. This will search across message headers (correspondents and subjects) and message text, as well as the text of all document attachments.

Once you have entered your term(s) and made your selection, click the *Search* button. The search string will appear highlighted on the message browse screen.

Advanced Search enables the user to generate complex searches of email text, correspondents, attachments, and any actions previously taken on the messages, as well as a variety of other parameters.

### Advanced Search

**Text**

Terms

  
 Search body  Search subject  Search attachments  Search original text

Entity

**Correspondents**

Name or email

  
 To  From  Cc  Bcc

Mailing List

 Yes  No  Either

**Attachments**

File Name

File Size

Reg Ex

Type

Other extension

**Actions**

Annotation

Any annotation

Labels

SELECT A LABEL
▼

More than one restriction label

**Miscellaneous**

Time Range

To

Message Direction

Incoming
  Outgoing
  Either

Email Source

SELECT
▼

Message Folder

Lexicons

SELECT
▼

Lexicon: Category

SELECT
▼

Entity type

SELECT
▼

Message ID

Accessions


SELECT
▼

Sort results by

SELECT
▼

SEARCH →

Clear Form

Search Tips can be accessed by selecting the help button  in the top right corner of the *Advanced Search* screen.


ePADD also allows a user to search the email archive for entities contained in a given block of provided text, using *Multi-entity Search*. Any matching terms will be highlighted on the results page, and hyperlinked to corresponding messages.

Likewise, ePADD enables a user to search an email archive for multiple terms using *Multi-term Search*. Type or paste one term per line. Any matching terms will be highlighted on the results page, and hyperlinked to corresponding messages.

Finally, ePADD enables a user to search for a list of email addresses using Correspondent List Search. Type or paste one term per line to search for and apply labels to a set of email addresses.

## 6.5 Labeling messages

ePADD allow the user to label messages as 'reviewed' to assist with keeping track of research, to add an unlimited number of custom descriptive labels, as well as to request copies of messages from the email archive. Exported messages retain user annotations.

Users can optionally apply labels to a set of messages via the label management interface. Select the label management button, located to the above right of the message pane in the message browse/search result view: 

## 6.6 Downloading or Requesting Email Messages

Users can directly download a message, or set of messages, as an MBOX file using the download button located to the above right of the message pane in the message browse/search result view.



Depending on the policies of your institution, a reference librarian/archivist can transfer the MBOX file to the patron using any number of methods.

Alternatively, users can also use the label function to label sets of messages for optional review and export by public services staff, according to the policies of the institution.

**Note to Repository Staff:** After a researcher has confirmed that they have completed their work with the Delivery Module, and that the files they ordered have been successfully delivered to them, a repository staff member can remove the email archive working directories from the public workstation by deleting the following folders under the user directory: 'epadd-settings' and 'epadd-delivery.'