

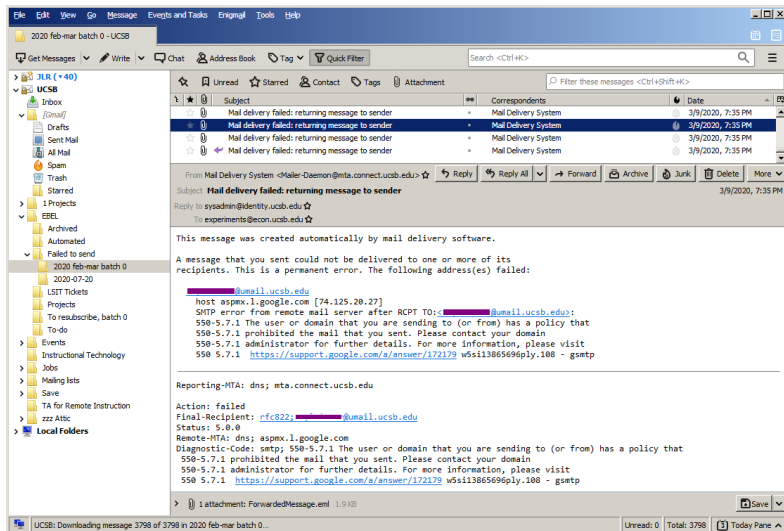
# How to take action on returned emails in ORSEE

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UCSB

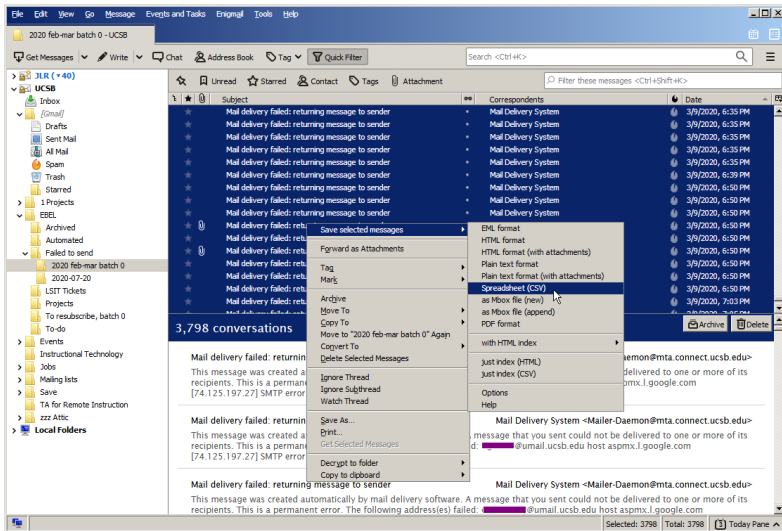
3 August 2020

# An example of a failed email that was returned



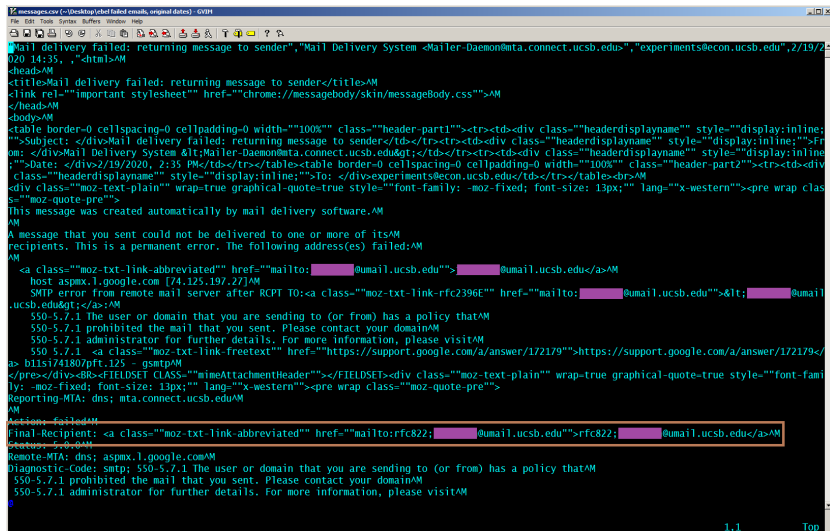
# Export emails as a single CSV file

## ► Mozilla Thunderbird using ImportExportTools Add-on



# Open CSV file in gVim

- ▶ The line in the brown box is one-to-one with the set of emails
- ▶ We will extract the email address from this line in each returned email



```
messages.csv (-: Desktop\atlet failed email, original dates) - gVim
File Edit Tools Syntax Buffers Window Help
[Icons]
Mail delivery failed: returning message to sender,"Mail Delivery System <Mailer-Daemon@mta.connect.ucsb.edu>","experiments@econ.ucsb.edu",2/19/20
020 14:35, "<html>AM
<head>AM
<title>Mail delivery failed: returning message to sender</title>AM
<link rel="important stylesheet" href="chrome://messagebody/skin/messageBody.css">AM
</head>AM
<body>AM
<table border=0 cellpadding=0 cellspacing=0 width="100%" class="header-part1"><tr><td><div class="headerdisplayname" style="display:inline;
">Subject: </div>Mail delivery failed: returning message to sender</td></tr><tr><td><div class="headerdisplayname" style="display:inline;">Fr
om: </div>Mail Delivery System &lt;Mailer-Daemon@mta.connect.ucsb.edu&gt;</td></tr><tr><td><div class="headerdisplayname" style="display:inline
;">Date: </div>2/19/2020, 2:35 PM</td></tr></table><table border=0 cellpadding=0 cellspacing=0 width="100%" class="header-part2"><tr><td><div
class="headerdisplayname" style="display:inline;">To: </div>experiments@econ.ucsb.edu</td></tr></table><br>AM
<div class="moz-text-plain" wrap=true graphical-quote=true style="font-family: -moz-fixed; font-size: 13px;" lang="x-western"><pre wrap clas
s="moz-quote-pre">
This message was created automatically by mail delivery software.AM
AM
A message that you sent could not be delivered to one or more of itsAM
recipients. This is a permanent error. The following address(es) failed:AM
AM
<a class="moz-txt-link-abbreviated" href="mailto:[redacted]@umail.ucsb.edu">[redacted]@umail.ucsb.edu</a>AM
host aspmx1.google.com [74.125.197.27]AM
SMTP error from remote mail server after RCPT TO:<a class="moz-txt-link-abbreviated" href="mailto:[redacted]@umail.ucsb.edu">[redacted]@umail
ucsb.edu&gt;</a>AM
550-5.7.1 The user or domain that you are sending to (or from) has a policy thatAM
550-5.7.1 prohibited the mail that you sent. Please contact your domainAM
550-5.7.1 administrator for further details. For more information, please visitAM
550-5.7.1 <a class="moz-txt-link-freetext" href="https://support.google.com/a/answer/172179">https://support.google.com/a/answer/172179</
a> b151i74180?ft=125 - gsmtptAM
</pre></div><div><div class="mimeAttachmentHeader"></div><div class="moz-text-plain" wrap=true graphical-quote=true style="font-fami
ly: -moz-fixed; font-size: 13px;" lang="x-western"><pre wrap class="moz-quote-pre">
Reporting-MTA: dns; mta.connect.ucsb.eduAM
AM
Action: failedAM
Final-Recipient: <a class="moz-txt-link-abbreviated" href="mailto:rfc822; [redacted]@umail.ucsb.edu">rfc822; [redacted]@umail.ucsb.edu</a>AM
Status: 5.0.0AM
Remote-MTA: dns; aspmx1.google.comAM
Diagnostic-Code: smtp; 550-5.7.1 The user or domain that you are sending to (or from) has a policy thatAM
550-5.7.1 prohibited the mail that you sent. Please contact your domainAM
550-5.7.1 administrator for further details. For more information, please visitAM
1,1 Top
```

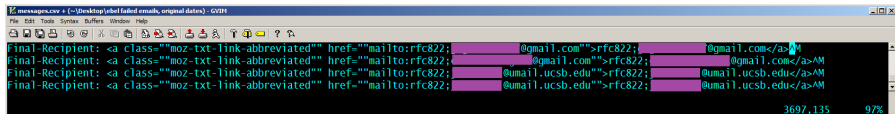
# Regular expressions in gVim

- ▶ Type a colon (:) to begin a command
- ▶ Type command `%g!/Final-Recipient:/d`
- ▶ Press return to execute
- ▶ Explanation:
  - ▶ Globally (`%`), if not (`!`) match `Final-Recipient:`, delete (`d`)

```
550-5.7.1 The user or domain that you are sending to (or from) has a policy that
550-5.7.1 prohibited the mail that you sent. Please contact your domain
550-5.7.1 administrator for further details. For more information, please visit
550 5.7.1 <a class="moz-txt-link-freetext" href="https://support.google.com/a/answer/172179">https://support.google.com/a/answer/172179</a>
a> b115i741807pft.125 - gsmtpp
</pre></div><div class="mimeAttachmentHeader"></FIELDSET><div class="moz-text-plain" wrap=true graphical-quote=true style="font-family: -moz-fixed; font-size: 13px;" lang="x-western"><pre wrap class="moz-quote-pre">
Reporting-MTA: dns; mta.connect.ucsb.edu
AM
Action: failed
Final-Recipient: <a class="moz-txt-link-abbreviated" href="mailto:rfc822; @umail.ucsb.edu">rfc822; @umail.ucsb.edu</a>
Status: 5.0.0
Remote-MTA: dns; aspmx1.google.com
Diagnostic-Code: smtp; 550-5.7.1 The user or domain that you are sending to (or from) has a policy that
550-5.7.1 prohibited the mail that you sent. Please contact your domain
550-5.7.1 administrator for further details. For more information, please visit
%g!/Final-Recipient:/d
```

# Regular expressions in gVim

► Here is the result



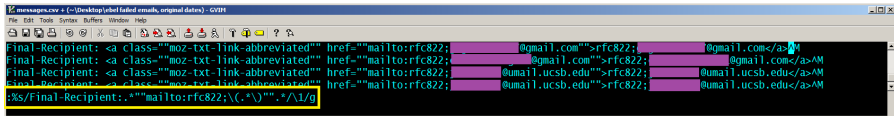
The screenshot shows a gVim window titled "messages.csv + [~/Desktop/label failed emails, original dates] - GVIM". The window contains a CSV file with three rows of email data. Each row has four columns. The first column contains the text "Final-Recipient:". The second column contains an HTML anchor tag: `<a class="moz-txt-link-abbreviated" href="mailto:rfc822;"`. The third column contains a redacted email address: `[REDACTED]@gmail.com">rfc822;`. The fourth column contains another redacted email address: `[REDACTED]@gmail.com</a>AM`. The rows are separated by semicolons. The status bar at the bottom right shows "3697,135" and "97%".

```
Final-Recipient: <a class="moz-txt-link-abbreviated" href="mailto:rfc822;" [REDACTED]@gmail.com">rfc822; [REDACTED]@gmail.com</a>AM
Final-Recipient: <a class="moz-txt-link-abbreviated" href="mailto:rfc822;" [REDACTED]@gmail.com">rfc822; [REDACTED]@gmail.com</a>AM
Final-Recipient: <a class="moz-txt-link-abbreviated" href="mailto:rfc822;" [REDACTED]@umail.ucsb.edu">rfc822; [REDACTED]@umail.ucsb.edu</a>AM
Final-Recipient: <a class="moz-txt-link-abbreviated" href="mailto:rfc822;" [REDACTED]@umail.ucsb.edu">rfc822; [REDACTED]@umail.ucsb.edu</a>AM
```

3697,135 97%

# Regular expressions in gVim

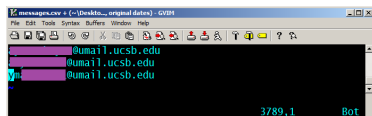
- ▶ Type a colon (:) to begin a command
- ▶ Type command  
`%s/Final-Recipient:.*"mailto:rfc822;\(.*\)".*/\1/g`
- ▶ Press return to execute
- ▶ Explanation:
  - ▶ Search (`%s`) for  
`Final-Recipient:.*"mailto:rfc822;\(.*\)".*`  
and replace it with `\1` globally (`g`)
  - ▶ `.*` matches any number of characters
  - ▶ `\(` and `\)` group characters subsequently recalled as `\1` (the first group)



The screenshot shows a gVim window titled "messages.csv + (-)Desktop\label failed emails, original dates) - gVIM". The editor contains an email message with several "Final-Recipient:" lines. The first two lines have email addresses redacted with purple boxes. The third line shows "@umail.ucsb.edu". Below the email text, a search command is entered in the command line:

```
:%s/Final-Recipient:.*"mailto:rfc822;\(.*\)".*/\1/g
```

# Resultant file of undeliverable email addresses



- ▶ Save and exit gVim with `:x` and return
- ▶ Use Unix-like commands to count the number of lines:  

```
$ cat messages.csv | wc -l
```

  
3789
- ▶ Also find how many lines are unique:  

```
$ sort -u messages.csv | wc -l
```

  
709
- ▶ Okay, many duplicates here.
- ▶ Sort the lines, keep only unique lines, and pipe to a new file:  

```
$ sort -u messages.csv > messages-unique.csv
```
- ▶ Move the resultant file to the same directory as our utility script



# Using the PHP utility script

- ▶ The script reads your CSV file and populates an HTML form
- ▶ The form will post to the ORSEE web address you specify
- ▶ Make sure you login to ORSEE so that the search query works!
- ▶ Use the *maxrows* and *skiprows* variables to select specific rows
- ▶ ORSEE can only accept 1000 form variables at once (assuming default PHP configuration on the ORSEE server), so keep  $\text{maxrows} < 248$
- ▶ An example:
  - ▶ Suppose I have 620 email addresses in my CSV file
  - ▶ Choosing  $\text{maxrows} = 200$  and  $\text{skiprows} = 0$  obtains rows 1–200
  - ▶ Choosing  $\text{maxrows} = 200$  and  $\text{skiprows} = 200$  obtains rows 201–400
  - ▶ Choosing  $\text{maxrows} = 220$  and  $\text{skiprows} = 400$  obtains rows 401–620
  - ▶ These three searches will span my entire list of 620 email addresses

# PHP utility script

Search ORSEE Participants from CSV

Parameter selection

maxrows

10

skiprows

0

target

https://[redacted]/orsee/admin/participants\_show.php

Update parameters for query below

Query constructor

Note: You must first log-in to the ORSEE admin website.

Parameter values

maxrows

10

skiprows

0

target

https://[redacted]/orsee/admin/participants\_show.php

Form input values

form[query][0][bracket_open][type]	open
form[query][1][pformtextfields_freertextsearch][search_string]	[redacted]@umail.ucsb.edu
form[query][1][pformtextfields_freertextsearch][search_field]	email
form[query][1][pformtextfields_freertextsearch][not]	
form[query][2][pformtextfields_freertextsearch][logical_op]	or
form[query][2][pformtextfields_freertextsearch][search_string]	[redacted]@umail.ucsb.edu
form[query][2][pformtextfields_freertextsearch][search_field]	email
form[query][2][pformtextfields_freertextsearch][not]	
form[query][3][pformtextfields_freertextsearch][logical_op]	or

# ORSEE search results

ORSEE.3  
THE EASE OF RECRUITMENT

## EDIT PARTICIPANTS

Admin Area  
User: [redacted]  
Date: 08/03  
Time: 04:56pm

- Main
- Experiments
  - Overview
  - My Experiments
  - Create new
  - Completed experiments
- Participants**
  - Overview
  - Create new
- Calendar
- Files
- Options
- Statistics
- Logout

Select all ...

( where "[redacted]@umail.ucsb.edu" in email  
OR where "[redacted]@umail.ucsb.edu" in email  
OR where "[redacted]@umail.ucsb.edu" in email  
OR where "[redacted]@umail.ucsb.edu" in email  
OR where "[redacted]@umail.ucsb.edu" in email  
OR where "[redacted]@umail.ucsb.edu" in email  
OR where "[redacted]@umail.ucsb.edu" in email  
OR where "[redacted]@umail.ucsb.edu" in email  
OR where "[redacted]@umail.ucsb.edu" in email  
OR where "[redacted]@umail.ucsb.edu" in email )

AND only participants of state: Active  
AND where Begin of studies <=2015

0 participants in result set

For all selected participants, ... do ...

Back to query form Save query

All	Participant ID	State	First name	Last name	E-Mail	Gender
-----	----------------	-------	------------	-----------	--------	--------

[Main](#)  
[Logout](#)