



Maildir2mbox script

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maildir2mbox is a command line Python script adapted by SFU Archives ca. 2013 from an existing project originally created by Nathan Yergler in June 2010 and ported to Python 3 by Philippe Fremy. SFU's Alex Garnett made additional modifications in 2019.

The Archives has used the script to take maildir email exported from SFU Mail by Offlinemap and convert it to mbox format for ingest into Archivematica and ePADD.

Note that as of June 2022, SFU Archives also uses the proprietary software Emailchemy to perform conversions. Emailchemy's user interface makes it somewhat easier to use, and it also supports conversions to and from other email formats.

^ Installation

Download the Python file stored on the Archives' shared drive at ITM002-40. The code is can also be downloaded from the Archives' [GitHub repository](#).

- Once downloaded, the script can be run from any location on your computer.
- No configuration is required.

^ Code

```
#!/usr/bin/env python3
import os
import sys
import mailbox
import email
USAGE = u"""
$ python maildir2mbox.py [maildir_path] [mbox_path]
"""
def maildir_to_mailbox(maildir_path, mbox_path):
    """
    slightly adapted from maildir2mbox.py,
    Nathan R. Yergler, 6 June 2010
    http://yergler.net/blog/2010/06/06/batteries-included-or-maildir-to-mbox-again/
    Port to Python 3 by Philippe Fremy
    """
    # open the existing maildir and the target mbox file
    maildir = mailbox.Maildir(maildir_path, email.message_from_binary_file)
    n = len(maildir)
    if n == 0:
        return
```

```

mbox = mailbox.mbox(mbox_path)
# lock the mbox
# mbox.lock()
# iterate over messages in the maildir and add to the mbox
n = len(maildir)
for i, v in enumerate(maildir.iteritems()):
    key, msg = v
    if (i % 10) == 9:
        print( 'Progress: msg %d of %d' % (i+1,n))
    try:
        mbox.add(msg)
    except Exception:
        print( 'Exception while processing msg with key: %s' % key )
        traceback.print_exc()
# close and unlock
mbox.close()
maildir.close()
if __name__ == '__main__':
    if len(sys.argv) < 3:
        print(USAGE)
        sys.exit(0)
    maildir_path = sys.argv[-2]
    mbox_path = sys.argv[-1]
    # Canonize paths
    maildir_path = os.path.realpath(maildir_path)
    mbox_path = os.path.realpath(mbox_path)
    print("{} -> {}".format(maildir_path, mbox_path))
    if not os.path.exists(mbox_path):
        os.makedirs(mbox_path)
    maildir_dirs = ['cur', 'new', 'tmp']
    for root, dirs, files in os.walk(maildir_path):
        if root == maildir_path:
            continue
        relpath = os.path.relpath(root, maildir_path)
        mbox_subpath = os.path.join(mbox_path, relpath)
        os.makedirs(mbox_subpath)
        # We don't have to traverse empty directories, only if they are Maildir
        if not set(maildir_dirs).issubset(dirs):
            continue
        # Prune from dirs subsequent cur, new, tmp directories
        dirs[:] = [d for d in dirs if d not in maildir_dirs]
        # Create directory in the target
        # This isn't needed with Outlook, uncomment on other IMAPs
        # if not os.path.exists(mbox_subpath):
        #     print("Creating {}".format(mbox_subpath))
        #     os.makedirs(mbox_subpath)
        maildir_to_mailbox(root, mbox_subpath + '.mbox')

```

^ Usage

To run, open a Terminal window and run the following command:

```
python3 /path/to/script path/to/maildir/input-folder/ /path/to/mbox/output-folder
```

There are three script arguments:

- **script**: the file path of the maildir2mbox.py file.
- **input folder**: the folder containing the maildir email to be converted.
- **output folder**: the folder that will take the email converted to mbox.

^ Links

Nathan Yergler / Philippe Fremy GitHub site (original code):

- <https://github.com/bluebird75/maildir2mbox/tree/master>

SFU Archives GitHub site (modified code):

- <https://github.com/SFU-Archives/digital-repository-utilities/blob/master/downloads/maildir2mbox2.py>