# Windows MBox Viewer
# User Manual 1.0

## Table of Contents

# 1 Modification History

| Revision | Date | Comments |
|----------|------|----------|
| 1.0 | February 28, 2018 | Initial Release |
| | | |

# 2 Overview

MBox Viewer (or mboxview) is Windows GUI based program to view mbox files such as Thunderbird Archives, Google mail archives or simple Eml files.

The mbox viewer is a simple but quite powerful email viewer that supports the following features:

1. large file support > 4Gb
2. fast parsing of mbox archives
3. quick access to attachments
4. export of single mail in Eml
5. search by date, subject, sender or raw email
6. sort by date, from, to, subject and size
7. support for mail's body encoded with different character sets
8. support for searching emails sorted by header fields

# 3 Installation

The executable and the source code can be downloaded from Sourceforge or Github.

https://sourceforge.net/projects/mbox-viewer/files/

https://github.com/eneam/mboxviewer/releases

Download the executable package, for example the mbox-viewer.exe-v1.0.1.11.zip, to the working directory and unzip. This will create the mbox-viewer.exe-v1.0.1.11 directory and the stand-alone mboxview.exe executable in that directory. No administrator privileges are required.

# 4 Running the MBox viewer

The mboxview program can be executed by double clicking the executable from the explorer window or from the command line by typing the command name and argument list to it.

## 4.1  Argument List Summary

The mboxview accept the following command line options.

**-FOLDER=**folderPath – the full path to the folder containing one or more mbox or eml files. Persists in the registry across multiple runs.

**-MAIL_FILE=**fileName – full file path or just file name of mbox/eml file to load. If the full path is not specified, the full path is created from the folderPath and the fileName. Doesn't persist in the registry across multiple runs.

**-EXPORT_EML=**y|n – enables or disables automatic export of eml files generated from mbox archive. Improves traversing performance of mail if set to 'n". Persists in the registry across multiple runs.

**-PROGRESS_BAR_DELAY=**seconds – search progress bar is activated when the search duration lasts longer than the value set for PROGRESS_BAR_DELAY. Applicable to searches of RAW mail. If set to -1, the progress bar is disables. Default value is set to 4 seconds. Persists in the registry across multiple runs.

If desired, instead of typing directly desired command line options, a simple .cmd or .bat file can be created for convenience and run from the explorer.

## 4.2  Basic Use Case

Double click of the mboxview to start the viewer. The picture below shows the screen created by mboxview after few steps performed by a user. Mail Archive, Summary and Message windows are initially blank after startup. Steps to load an archive and display the content are described next.
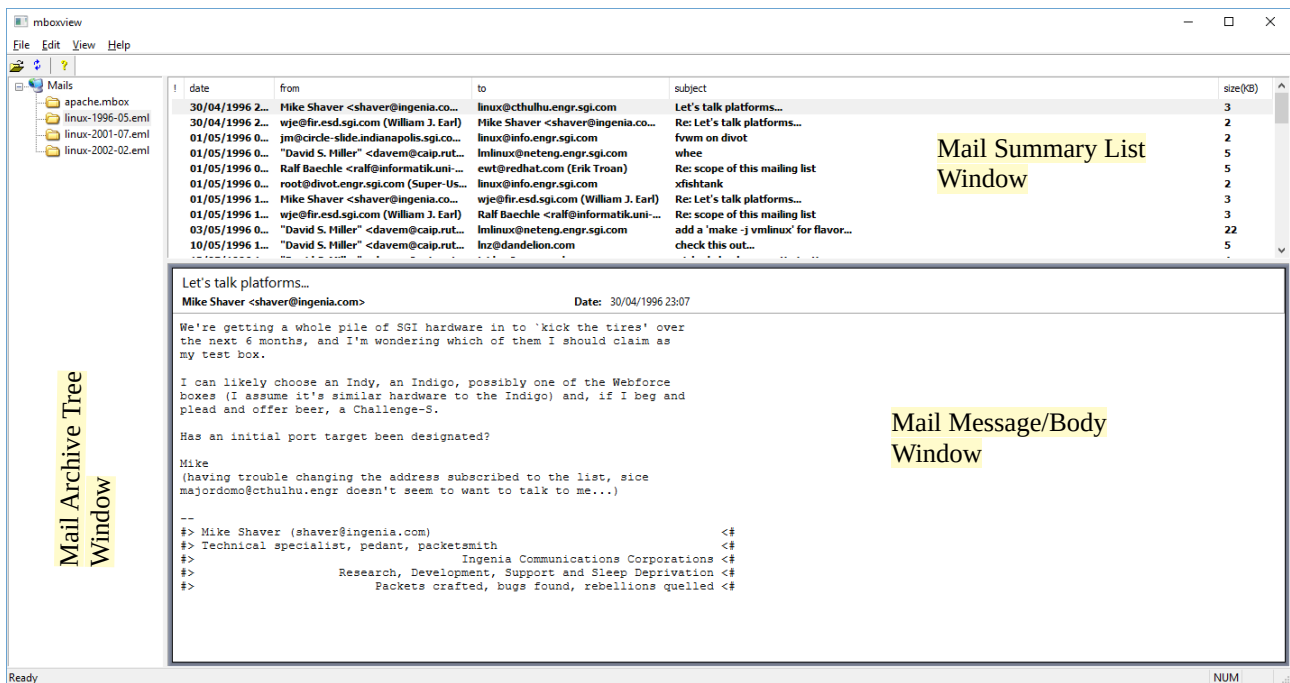
1. Click on the "File" to open the drop menu and then select the "Select Folder.." option. Browse to the folder containing one or more mbox and/or eml mail archive files and select it. All valid mail archive files will appear in the Mail Archive Tree window.
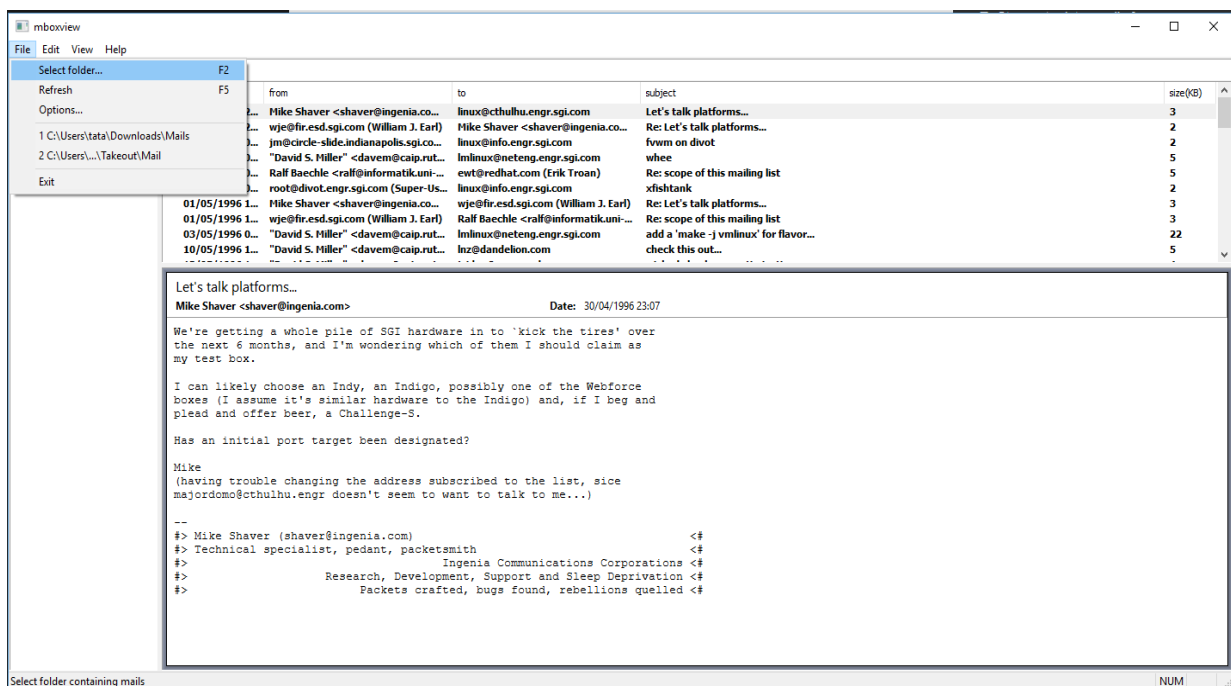


2. Click on one of the archive files to load all mails present in the archive. Progress bar will appear and automatically close after the selected archive is fully processed. Header information of each email will appear in the Summary window.

   Note that parsing of very large archive file may take some time since the mail archives are text files and every character has to be examine one by one. However, subsequent loading of mails is done from the index file created by the mboxview during the initial parsing of the

archive file. The created index file contains the header information of each mail in the archive file and the position of each mail within the mail file for quick access to the mail message/body. Loading from the index file is much faster. The index files have the .mboxview suffix.

Note that all mails in the Summary window are marked in bold to indicate loading from the archive file while mails loaded from the index file are not marked in bold.
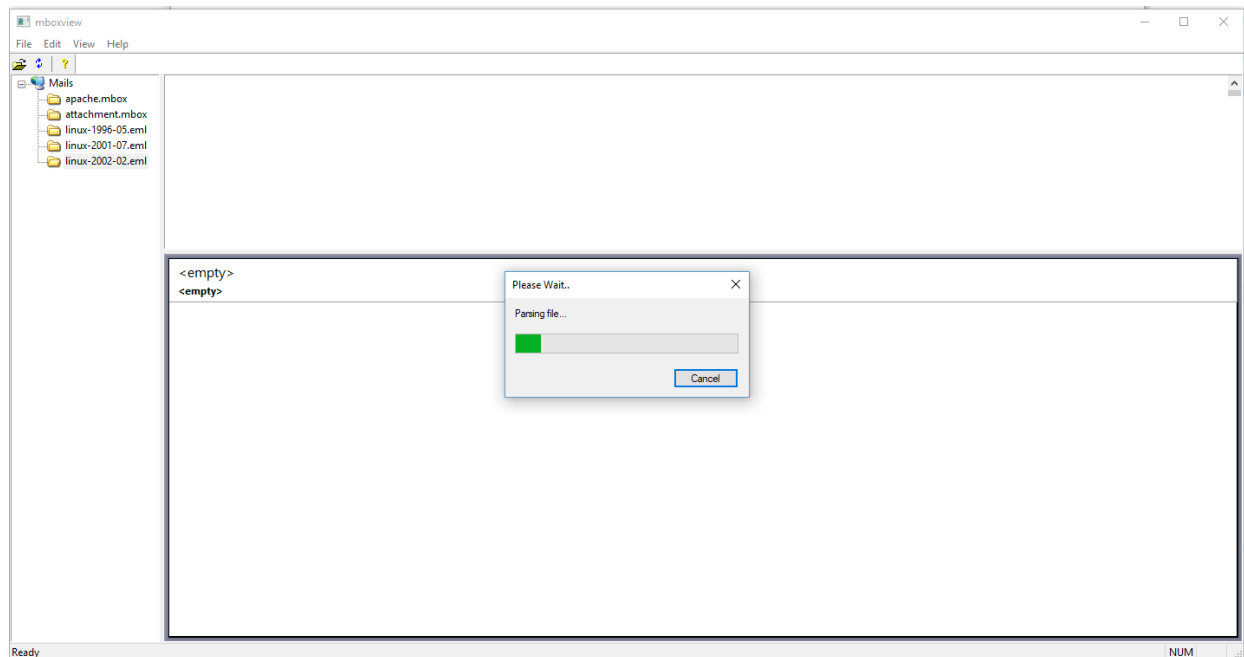


3. Click on one of the mails in the Summary window to show the Message/Body of that email in the Message window.

# 4.3  Language Support

## 4.3.1     Message Window

Different languages (or character sets) are quite well supported in the Message window. This is due to the Microsoft Web Browser control class integrated into the mboxview. The mboxview generates the htm file from the mail's body and Web Browser displays the generated file in the Message window.

Display may not be correct if the character set for the mail's body is not defined in the mail. You can try to apply different encoding by right clicking within the window, selecting "encoding" and "more" options to apply different language.
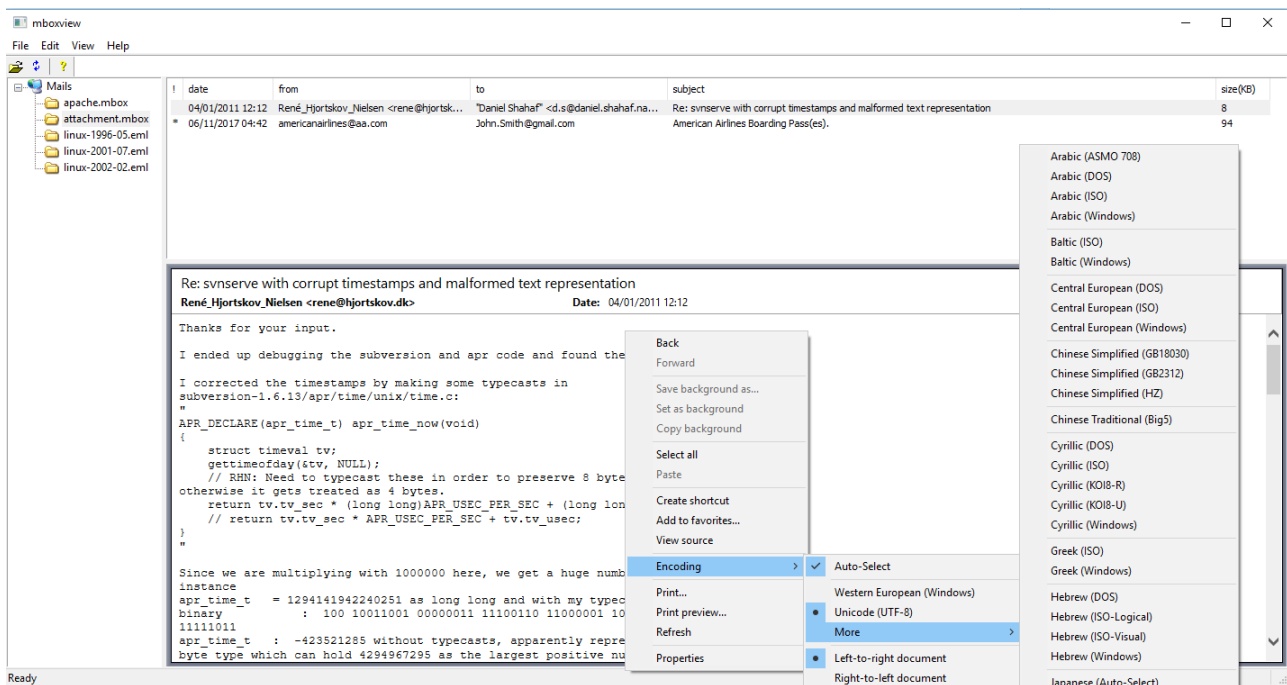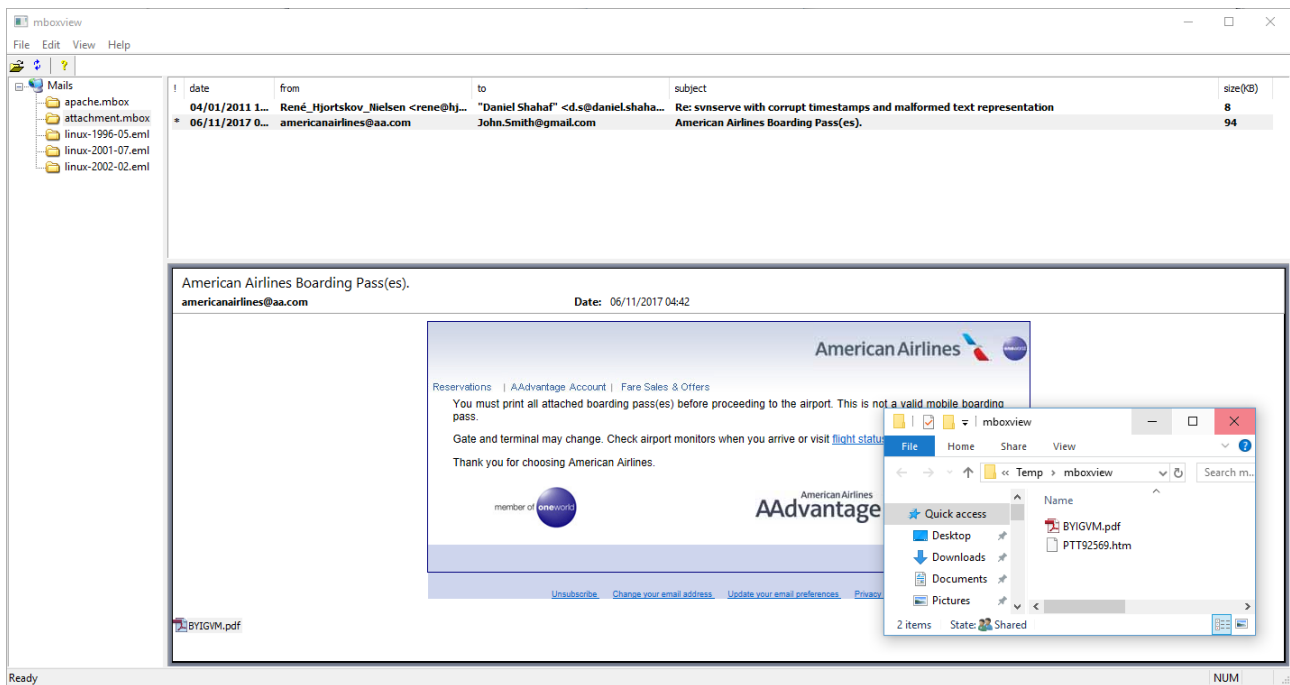
## 4.3.2 Summary Window

Current Windows MFC window object to support Summary window has limited ability to support different character sets and therefore presentation of the to, from and subject fields is not always entirely correct, except perhaps for ASCII characters. Current implementation re-encodes the received characters to the default Windows ANSI code page/character set which can differ on different computers.

Better support/implementation needs to be investigated but may require non trivial code changes.

## 4.4 Mail Attachments

Mail attachments are shown at the bottom of the Message window. Also, the "*' character appears in the first column for the associated mail. To view attachments, click on the attachment icon or double click on the mail in the Summary window. Folder will open containing all attachments for the email. Use standard Windows applications to view attachments.

## 4.5  Mail Navigation

Click on a specific mail in the Summary window and use **UP, DOWN** keys to move to the next or previous mail respectively. Navigation wraps around to the first or last mail.

Use **HOME** key to jump to the first mail. Use **END** key to jump to the last mail.

## 4.6  Mail Sorting

The Summary window is divided into 6 columns: attachment indicator, date, from, to, subject and mail size. Each column, except the first column, can be sorted by clicking on the column title. Subsequent click on the same column title will reverse the sorting rule.

## 4.7  Dynamic Column Resize

Columns in the Summary windows are automatically resized when the window is resized.

However, if columns are resized manually, some of the columns may no longer be present in visible area/window.

You may need to use the scroll bar to see missing columns, otherwise maximize and then restore the window to see all columns within the Summary window again.

## 4.8  Mail Search

The mboxview supports mail searching either by searching by the mail header fields only or by searching the entire raw mail message.

Click the "Edit" drop menu and select "Find" option to configure and start the search. Alternatively

the CTRL+F will also present the search dialog.

The search dialog box allows user to specify the search string, whether to match the whole word, whether the search is case sensitive, whether to search the header fields or the raw message and the start and end dates to consider for filtering.

To repeat the search in order to find the next matching mail, click the "Edit" drop menu and select "Find again" option, or select F3 key.

If "Find again" or F3 key is selected without prior "Find" or CTRL+F, the search dialog box will be presented to a user.

NOTE: Currently the "date" and "to" header fields are not consider for searching.
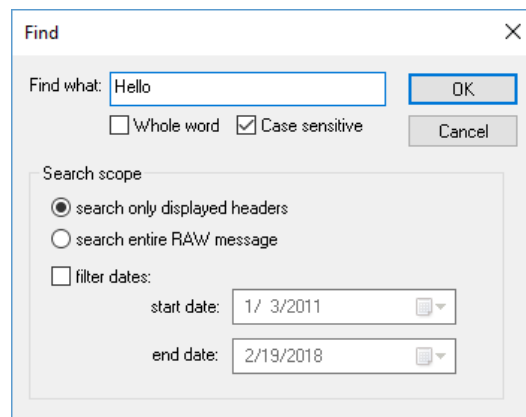


### 4.8.1 Search Reliability

Searching may not work as expected in all cases due to limited support of different character sets on input and in the mails.

Note also that searching by the header fields, matching is done against re-encoded strings while it is not the case while searching the raw mail content.

If possible, use ASCII character only to compose the search string.

### 4.8.2 Special Search Key

The single character '*', i.e. the star character can be specified as the search string to enable traversing the subset of mails between the start and end dates.

### 4.8.3 Search Progress Bar

Search progress bar displays the progress along the configured search string and enables user to cancel the search is so desired. The progress bar is not created unless a given search duration lasts longer than the delay time controlled by -PROGRESS_BAR_DELAY command line option. Default value is 4 seconds.

### 4.8.4 Search Performance

Searching of header fields performs best since the all fields reside in the memory.

Searching of raw mail messages may take some time for very large files, say larger than 10-20 Gbytes. Search is performed directly on the file. Worse case scenario is when the specified search string is not present in the mail archive. When activated, the search progress bar shows the configured search string and enables user to cancel the search is so desired.

## 4.9  Refreshing Archive Tree Window

If an additional mbox or eml file is placed in the already selected folder, the Archive Tree window needs to be refreshed to see the new additions. This can be done by selecting "Refresh" option under the "File" drop menu or by clicking on the button showed below.