

Re: Generic format for saving EMail

Source: <http://coding.derkeiler.com/Archive/Java/comp.lang.java.programmer/2006-01/msg01441.html>

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 - *Date:* Wed, 11 Jan 2006 15:04:50 +0100
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aaronfude@xxxxxxxxxx wrote:

We have written a number of java tools for analyzing the contents of an imap mailbox. What we would like to be able to do is save a particular email message as a file on our hard drive. Is there a more or less generic format for doing so and if so, can it be created in java? (Something like the .eml)

(Unix) mbox format. It is extremely simple, and for a single message almost boils down to just the messages contents as received.

An mbox file is an ASCII file, containing a sequence of e-mails. Each entry (e-mail) in an mbox begins with a "From " line (note, no ':' in that tag). This is *not* the "From:"-header (note the ':' here), but was originally the UUCP path. Today the SMTP sender should go there if possible but mail programs often place nonsense into it, or repeat the "From:"-header.

E.g. a "From " line looks like:

```
From someone@xxxxxxxxxxxx Fri Mar 28 10:02:15 2006
```

The "From " line is followed by the mail. First the mail headers, then the mail body, separated by an empty line. Which is the format as specified for SMTP in RFC 2822.

At the end of the mail an empty line is appended.

In case a line in the mail body starts with "From ", the "From " is appended with an '>' to avoid that this mail body line is interpreted as the "From " line which starts a new entry. That quote is supposed to be removed again when a program displays the mail.

A common extension is that any line in the mail body which already starts

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with a quoted from (e.g. ">From ", or ">>From ") is also quoted one more time, and that a program displaying such a mail always removes one quote level from a line which starts with a quoted from.

The result looks something like:

```
From someone@xxxxxxxxxxxxx Fri Mar 28 10:02:15 2006
Subject: some subject
Date: 28 Mar 2006 08:02:15 GMT
From: someone@xxxxxxxxxxxxx
To: someone-else@xxxxxxxxxxxxx
```

```
The mail body>
>From now on we do the following things ...
[an empty line]
[next mail, if any, follows here]
```

Some people hate the format, because it is not "database-ish" enough for them. But it works like a charm.

The file should contain all information pertaining to the email (from, to, subject, content, attachments, etc.)

Attachments are sent inline in a mail body, so that is no problem (mails with attachments are just MIME mails). The other stuff is in the headers. In case you need to store additional own management information, it is typical to invent "X" headers and just add them to the normal mail headers:

```
X-Your-App-Name-Something: a value
X-Your-App-Name-Something-else: another value
```

In case you need per-mbox file information, it is typical to add a pseudo mail to the beginning of such a file. Your program is then supposed to know about this mail.

/Thomas

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The comp.lang.java.gui FAQ:

<ftp://ftp.cs.uu.nl/pub/NEWS.ANSWERS/computer-lang/java/gui/faq>

<http://www.uni-qiessen.de/faq/archiv/computer-lang.java.gui.faq/>

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