E-mail and e-mail merge from R

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The `Rmail` package is a tiny package designed for sending e-mail directly from within R, and for mail merges. R is probably not the best platform, but it was the one I knew.

Here is an extended example of its use.

If you haven't done it yet, install the package (`R CMD INSTALL Rmail_1.0.tar.gz` from the command line or go to the `Packages` menu and "Install from local zip file")

Now load the package:

```
> library(Rmail)
```

Read in data:

```
> gdata <- as.matrix(read.csv("ex1.csv"))
```

`read.csv` reads a comma-separated file; `as.matrix` turns the resulting data frame into a matrix of character strings.

Look at the first few lines:

```
> head(gdata)
```

```
     Last.name    First.name Co.authors
[1,] "Bloggs"     "Joe"      "Fred Smith"
[2,] "Roe"        "Susan"    "A. N. Other"
[3,] "Gladumovka" "Natalia"  "Y. A. N. Other"
     Title
[1,] "The evolution of cooperation by mutual regard"
[2,] "Chaos in a long-term experiment with a plankton community"
[3,] "Foraging-predation risk tradeoff governs evolution of inducible defenses"
     Talk.Poster Session
[1,] "Talk"      "New approaches to the evolution of social behavior"
[2,] "Talk"      "Food Webs"
[3,] "Poster"    "Life history theory"
     Date         Time        Place              e.mail
[1,] "2008/08/05" "10:00:00"  "104B MAC"         "bloggs@somewhere.com"
[2,] "2008/08/04" "13:30:00"  "COS 6-1"          "roe@somewhere.edu"
[3,] "2008/08/05" "5-6:30 PM" "MAC Exhibit hall" "bl@xy.ed.ac.uk"
```

```
     judge               jfirst   jemail
[1,] "Karl Gauss"        "Karl"   "gauss@wherever"
[2,] "Alfred Lotka"      "Al"     "lotka@somewhere"
[3,] "Evelyn Hutchinson" "Evelyn" "hutch@hutch.com"
```

The `judge` (judge's full name), `jfirst` (judge's first name), and `jemail` (judge's e-mail address) are the most important columns here.

Here's our mail message, stored separately as a file in the current working directory (use `getwd()`/`setwd()` to get or set the working directory, or use the File menu on Windows): in this case it is stored as `ex1-msg.txt`.

```
Subject: competition judging
Reply-to: joe@joeshouse.com

  Dear #jfirst#,

Thanks for agreeing to judge a presentation ...

Here's your assignment:

Presenter: #Last.name#, #First.name#
Co-authors: #Co.authors#
Title: #Title#
Presentation type: #Talk.Poster#
Sesssion: #Session#
Date: #Date#
Time: #Time#
Location: #Place#

  The judging form is available at <http://...> ; I will also put some
copies in an envelope on the bulletin board at the meeting.

Please return completed forms to me at the meeting, or put them back
in the envelope, or e-mail me electronic copies.

  Please feel free to contact me with any questions -- especially,
check your assignment and let me know if I made a mistake.

 cheers
   Joe
```

Run a fake mail-merge:

```
> mailmerge(data=gdata,
+           msgfile="ex1-msg.txt",
+           id="judge",
+           email="jemail",
```

```
+           mail=FALSE,
+           auth=FALSE,  ## no authorization
+           user="bolker",
+           from="bolker@ufl.edu",
+           host="bolker-laptop@ufl.edu",
+           server="smtp.somewhere.edu",
+           port=587,
+           fake=TRUE,
+           trace=2)

Karl Gauss
Alfred Lotka
Evelyn Hutchinson
```

- `auth` specifies whether you need to enter your mail password.
- `user` is your username on your mail system
- `port` is 25 by default (typically works if you are sending mail to an "open relay", e.g. from work to a work e-mail), but 587 is commonly used as a more secure option
- `hostname`: your machine name
- `from`: the e-mail address from which the mail will appear to originate
- `server`: the name of your SMTP server (check the configuration file for your regular mail client)
- `mail=FALSE` and `fake=FALSE` both say not to send real mail (probably redundant, but I'm paranoid about sending out e-mail by accident!)

Here's what the message to Karl Gauss (our first judge) looks like:

```
Subject: competition judging
Reply-to: joe@joeshouse.com

  Dear Karl,

Thanks for agreeing to judge a presentation ...

Here's your assignment:

Presenter: Bloggs, Joe
Co-authors: Fred Smith
Title: The evolution of cooperation by mutual regard
Presentation type: Talk
Sesssion: New approaches to the evolution of social behavior
Date: 2008/08/05
```

```
Time: 10:00:00
Location: 104B MAC

  The judging form is available at <http://...> ; I will also put some
copies in an envelope on the bulletin board at the meeting.

Please return completed forms to me at the meeting, or put them back
in the envelope, or e-mail me electronic copies.

  Please feel free to contact me with any questions -- especially,
check your assignment and let me know if I made a mistake.

 cheers
   Joe
```

If we wanted to get rid of these test files we could run

```
> unlink("mmerge.*")
```

Once you are happy that you're sending out the right e-mail, you can do it for real.

```
> mailmerge(data=gdata,
+           msgfile="ex1-msg.txt",
+           id="judge",
+           email="jemail",
+           auth=TRUE,
+           user="bolker",
+           from="bolker@ufl.edu",
+           host="bolker-laptop@ufl.edu",
+           server="smtp.somewhere.edu",
+           port=587,
+           trace=2)
```

A text box will pop up that asks you to enter your password.