Poste Restante v2.0
Mail Delivery for Shared File Servers

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I. Mail Systems: Who needs them?

Poste Restante is a simple but convenient utility designed to facilitate communication between Macintoshes on an extended Appletalk™ network. Currently, most netmail systems for the Mac require a dedicated or background "mail server" program to run at all times on some node on the network (the notorious "Message Center" to which InBox™ connects, for instance). Such extravagant resource expenditure is often beyond the means of network administrators. **Poste Restante** doesn't require a mail server application to constantly run, using instead the directory structure of a shared file server volume to communicate files, programs, and documents between nodes. Of course, all this implies that if you have no network, or if your network doesn't have a file server on it, you'll get nothing out of **Poste Restante**. (Except for some cool graphics, of course.)

II. Setting Up the Server

Poste Restante does not provide an editing environment; it may only be used to transmit existing files between nodes. If you wish to send a memo or note, instead of a program or document, you'll have to compose this note in a word processor and save it as a text file. The disadvantages of a non-integrated system, if any, are balanced by the compact size which **Poste Restante** can maintain *sans* editor, and by your freedom to use the editor of your choice (rather than a new, single-purpose bundled editor). I use **MockWrite**.

In order to set up **Poste Restante**, every possible mail recipient should have a dedicated mail folder on the server. These are simple HFS folders, created in the Finder. People who wish to send you mail will simply drag or copy the desired mail files into your folder. You, running Poste Restante at your workstation, will be notified almost instantly of the arrival of new mail in that folder. To insure that your mail is kept confidential, you may wish to make your mail folder a "drop folder." Drop folders grant WRITE- but no READ- access to other users of the server. Consequently, people can deposit mail in your folder, but can never open your folder to read others' mail to you. For convenience and standardization, you may want to set up a top-level folder called simply "• Mail •" and keep individuals' mail folders inside it. (The bullets in "• Mail •" cause it to appear first in the file- and folder- list most applications present upon "Open…".) Once you have named and configured your personal mail folder, you're ready to use **Poste Restante**.

III. Configuring Poste Restante

Drop the **Poste Restante** file into your System Folder, and then enter the Control Panel desk accessory. Scroll down the list of control panel devices until you see the Poste Restante icon, which you should select by clicking. Several options appear on the screen.

- § HFS Mail Folder name.
- § Beep when Mail arrives.
- § Blink when Mail exists.

Set the "HFS Mail Folder name" to the full pathname of your mail folder. HFS pathnames are explained in your Macintosh Owner's Manual, and consist of the volume name, and every sub-directory name, in the path from the "top" of the volume down to your particular folder, with individual directory names separated by colons. For instance, my file server is named "VeeGeePee", and so my mail folder pathname is "VeeGeePee:•Mail•:Jackiw". My colleague Annie's is "VeeGeePee:•Mail•:Fetter" and so forth.

Set the two remaining options by clicking their checkboxes. At some later point, you may wish to disable one of them, but initially, you should try both options. "Beep when Mail arrives" gives you a three-tone notification whenever someone on the network deposits mail in your mail folder. "Blink when Mail exists" causes the menu bar to blink at five second intervals whenever mail is resident in your mail folder. (After reading your mail, you should either discard it or move it to some more permanent folder. The menu bar will cease blinking when the folder is empty again.)

That's all it takes to use **Poste Restante**. Click the "Save" button to save your configuration changes; and then restart your Macintosh to let the changes take effect. While the Mac is starting up, an mailbox icon will temporarily be displayed.   (If the flag on the mailbox is down, your mailfolder is empty; otherwise, you have mail.) The program should notify you (in either of its two manners) regardless of what application you're running, which System Software you're operating, and what Macintosh you're using.

If, for some reason, **Poste Restante** cannot install itself, it will display an upside-down icon of a "prohibited mailbox" at startup time. The following cases seem to cover the majority of errors which you may encounter:

§ The Mail Folder doesn't exist.
Check the configurations in the Control Panel again to make sure the pathname is given *in full* and each component is correctly spelled.

§ You don't have the access rights required to see your own Mail Folder!
This you can check by trying to open the folder's window in the Finder. If you get an access violation, go back—with your Network Administrator, if need be—and set the access rights so that others can write to it, and so that you can read *and* write to it.

§ The Server Volume doesn't exist.
This isn't as unlikely as it sounds. Unlike internal and external hard disks, which your Mac recognizes before running any of its startup programs (like **Poste Restante**), server volumes only become "known" to your Mac at some point during the run of startup programs. Your server will have come with a startup program of its own, which needs to run before **Poste Restante**. In that startups are executed in alphabetical order, you can rename Poste Restante as necessary. AppleShare's server startup is named "AppleShare," so this won't be a problem, alphabetically-speaking.

§ Your copy of **Poste Restante** is corrupted.
Restore from backup, download, or write to me for a new one.

§ You're holding down SHIFT during startup.
That's not a bug, that's a feature! Hold down SHIFT whenever you want to bring your Macintosh up *without* **Poste Restante**'s mail notification system.

IV. Theory of Operation / Tech Talk

Poste Restante's an INIT and a cdev. The cdev builds a PRst resource, private format, containing the configuration data. The init merges this resource with its watchdog, in order to minimize the system heap space requirements. (One heap-block instead of two; plus dynamically-allocated string length, instead of the [typically gross overestimate] 256 byte maximum.) Before terminating, the INIT patches GetNextEvent() to point to the watchdog in the heap. The dog's purpose is to wait five or six seconds, and then calculate the valence of the HFS mail folder. If the valence's changed since the last read, there's been activity, so it starts notifying. There's no way to kill the dog after it gets loose in the heap. I chose to patch GNE() instead of something more regular in periodicity (like a Vertical Retrace task) because application-intensive processing (i. e. GNE timeouts) should take precedence over **Poste Restante**. The cdev code was developed using THINK Pascal; the INIT and watchdog were done in assembly. The boot-icon drawing routine is a customized version of Paul Mercer's legendary ShowINIT, of course.

V. Shareware

I like programming; sometimes I do something I think could be useful to people outside my immediate lab. The shareware fee I'm requesting isn't meant to make me a millionaire, it's meant to justify some of the hours I spend taking a program from the point where it works to my and my co-workers' satisfaction to the point where it is extensively debugged, well documented, and rigorously tested for commercial release. If you have any use for **Poste Restante**, you run a medium- to large-sized Mac setup. You can afford to pay your shareware fees. So please do.

At any rate, the plangent request of the hungry author: if you send me two or three bucks per node on your network that stands to have its life infinitely improved by **Poste Restante**, I'll be sure to keep you up to date with any bug fixes and future versions I release. Also, if you're going to pay for it, be sure to tell me what you'd like to *see* in these future versions. A built-in editor? Posting and receiving facilities? Do write.

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Features of v2.1 (forthcoming):

• "Blink when mail exists" will use the Notification Manager rather than blinking the menu bar. This will keep blinking from interfering with mouse-tracking activities such as dragging.

• The "About…" graphics bug on Mac II displays will be fixed.

• Users can set the sound played when "Beep when mail arrives" happens.

• When mail arrives, an "auto-read mail" option will invoke one's favorite desk-accessory editor with the message to be read freshly-opened.