Ivory Tower
Software

Documentation for freeware **Network Email™**
Version 3.20, updated August 6, 1994

Network Email Installation

Copy EMAIL.EXE to a network drive to which all potential users have read and write access. I suggest that you create a directory called EMAIL and copy EMAIL.EXE there. For example, if your workstation sees a public drive as drive H:, the workstation's path for *Network Email* would be:

```
H:\EMAIL\EMAIL.EXE
```

Any user who wants to run *Network Email* should install the *Email* icon in his Windows program manager. He simply needs to do 'File,' 'New,' 'Program Item,' 'Browse' from the program manager menu, and browse the network drive for EMAIL.EXE, and the *Email* icon will be placed in the current program group. *Email* can then be run by simply double-clicking the *Email* icon. *Email* will create subdirectories for users automatically as each user logs on for the first time.

You need one copy of VBRUN300.DLL installed in the *Email* directory, right beside EMAIL.EXE. For faster loading from a local disk or RAM drive, see Advanced Features, below. (VBRUN300.DLL is not included with EMAIL.ZIP, but can be downloaded as VBRUN3.ZIP from CompuServe WinShare forum.)

If you should have any problems with "sharing" violations when running *Email*, simply make the attributes for the EXE and DLL files read only. There is no limit to the number of accounts *Email* can service, and an individual user can keep up to 1000 received messages.

Adding a New User

Network Email, like most things in Windows, allows several ways of doing things. For instance, the default login ID can be set either from a DOS environment variable, or from the Program Manager icon properties "Command Line" entry, which will override the DOS environment variable, if it exists.

This is how to quickly add a new user on your network:

0. Make sure that the new user's machine has no *Email*-related DOS environment variables. Reboot if necessary.

1. From the Program Manager on the new user's machine, do "File, New, Program Item, Browse." Then browse the drives, directories, and files in the dialog box for the EMAIL.EXE file in the *Network Email* directory on the network public volume. Click "OK" for everything when you find it, and the *Email* "whizzing envelope" icon will appear in the current Program Manager program group.

2. Double click the new *Email* icon to run the program. When the log-in list appears click "Cancel." The new user name entry box will appear, and type in the new user's name as it should appear to other users in the recipient list. Then the ID entry box will appear. Type in a one-to-eight character unique identifier. Your new user's account is now established. Exit the program from the "File" menu in the Mailbox window, or double click the control icon in the upper left hand corner of the Mailbox window.

3. Only after the account is established in (2) above should you make the user log-in automatic by going back to the *Email* icon in his Program Manager and entering a single space followed by the new user's ID after the "email.exe" in the "File Properties" dialog box.

4. To make *Network Email* run automatically every time Windows is run, drag the *Email* icon into the startup group (if you didn't create it there). Now, the user will have Network Email running automatically without any log-in action required. Please note that security is enforced at the network level. For the new user's subdirectory of the *Network Email* directory on the public volume, set his rights to read, create, and write, and those for everyone else to create and write (and filescan for Netware). Then no one else can log on falsely as the user, and no one else can read his mail.

Most network installations require nothing more than the above steps (for each user) for full installation of *Network Email* and accessing all its features. Read on for more detailed information, and some help for special circumstances.

Email is Free!

This freeware version of *Email* is provided to the public domain as a public service by **Ivory Tower Software** (ITS). Standard features include:

Text messages
Popup mail notification
Send to distribution lists
Attach a document, program, picture (or any other) file to a message
Archive received messages for future reference
Support for *Network Bulletin Board* add-in program

Keep this freeware version and run it for as long as you like. I wish to thank everyone who helped me find the bugs. Permission to upload or otherwise distribute this program is granted.

I hope you like *Email* and find it useful. If there are features you would like to see in future versions of this software, or if you find a bug or have any other comment, please contact me at the following address:

Ivory Tower Software
Richard Wagner
4319 W. 180th St.
Torrance, CA 90504

You may also send me a message via Compuserve (76427,2611). Please mention your *Email* version number.

Network Bulletin Board

Network Bulletin Board™ is an add-in shareware program that works with *Network Email*. The program file, NBB.EXE, must be in your Email directory. To launch the bulletin board, use the "View" "Bulletin Board" menu options from the mailbox window. The NBB.EXE file is not included with freeware *Network Email*, but may be downloaded from CIS WinShare forum (download NBB.ZIP). To see all **Ivory Tower Software** freeware and shareware products, search uploaded files on the keyword ITS.

Network Chat

Network Chat™ is an add-in shareware program that works with *Network Email*. The program file, NCHAT.EXE, must be in your Email directory. To launch NChat, use the "View, Chat Window" menu option from the mailbox window. The NCHAT.EXE file is not included with freeware *Network Email*, but may be downloaded from CIS WinShare forum (download NCHAT.ZIP).

Commercial Email

A commercial version of *Network Email* is now available that has all the features of freeware *Email* plus the following enhancements:

> **Save the messages you send**
> **Attach multiple files to a message**
> **Create, save, and recall named distribution lists**
> **Forward messages to another user**
> **Optionally time-stamp messages**
> **Open attached files**
> **Message receipt acknowledgment**
> **Message file encryption**
> **Easy-to-use fully compatible DOS version**
> **Complete compatibility with freeware Email**
> **And much more**

Like freeware *Email*, the commercial version has no limitation on the number of users on the LAN. A license for the commercial version of *Email* costs $150 (US).

For a license to use the commercial version software on a **single LAN**, send $150 to **Ivory Tower Software** at the above address, and we will promptly send you a copy of the current commercial **Network Email** program package. For overseas foreign orders, please add $35 for express air shipping, and please be prepared to correspond in English. We are now shipping French and German language versions: All orders shipped to German-speaking countries will include the German language commercial version as well as the standard English commercial version, and all orders shipped to French-speaking countries will include the French language commercial version (at no extra charge).

How Email Works

The first time a user runs *Email*, his name will not appear in the log-in list. He should just click Cancel and he will be prompted for a user ID (8 characters maximum) and a user name (20 characters maximum). The user ID becomes the user's mail box directory name. For example, my user ID is RICK and my *Email* user name is Richard Wagner.

When *Email* runs, it first looks to see if there is a DOS environment variable called 'USR.' If it finds it, it logs the user on as that user ID (the environment variable value). Users should set the environment variable in their AUTOEXEC.BATs. For instance, my AUTOEXEC.BAT contains the line:

```
SET USR=RICK
```

(Note: do not set the "USR" environment variable until **after** you have run *Email* once to

create your user ID.) The "USR" environment variable is not necessary if the user ID is specified in the Program Manager icon properties. Windows 3.1 has a "startup" group in which you can put *Email* for automatic starting when Windows runs.

Email sends messages by creating a .YMS file (send file) in the recipient's subdirectory on the network drive. The recipient's *Email* session looks at its subdirectory every five seconds. If it sees any .YMS file there, it renames it to a .YMM file so it won't see it again as a new message, and then alerts the user. Archiving a message causes it to be renamed to a .YMF extension. That's all there is to it. Deleting a message erases the message file, of course.

Attaching a file causes *Email* to copy the file to the recipient's subdirectory. If the 'Attached file notification' option is checked in the sender's *Email* session, the line 'File Attached: *filename*' is automatically appended to the sender's message. The same goes for distribution lists.

Security

Email can provide iron-clad security, depending on the features provided by your network operating system. Microsoft Lan Manager and Novell Netware both can provide total security for *Email* users. Make sure everybody has write and create priviliges on all directories, and read access to the *Email* directory itself. The user subdirectories need read access for their individual owners only. With this arrangement, only the recipient can read his mail, and trying to make mischief by sending a false message by logging in as somebody else is prohibited.

(Note to users of Unix servers: Apparently Unix takes an extreme position on the absence of read priviliges on a file, not letting the user even see the file name. This causes problems for *Email* unless all users have read privileges everywhere within the Email directories.)

Advanced Features

Many of the advanced features of *Network Email* are accessed by setting DOS environment variables. If you should get the error message "Out of environment space" during DOS boot up, increase your environment space in your CONFIG.SYS SHELL= statement. See your DOS manual for details. Environment variables are set with the SET statement. There should not be a space on either side of the "=" sign in the SET statement. This is an undocumented DOS bug.

Network Email can be loaded from a local drive for improved loading time on slow networks. This works best from a RAM drive, but works well with a local hard disk too. If your network has over 50 users, you might want to consider doing this for all your users to cut down on network traffic You can have your AUTOEXEC.BAT copy EMAIL.EXE and VBRUN300.DLL to the RAM drive on bootup. To tell Email where the network drive and directory with the Email user directories is, you set an environment variable. That variable is EMAH (Email home). For example,

```
SET EMAH=H:\EMAIL
```

If your workstation has no hard drive, but a floppy only, and if *Email* causes your floppy to be accessed spruriously, you can set another environment variable (EMAF, "Email force"). For instance, to force *Email* away from A: and back to the network drive, include the line:

```
SET EMAF=YES
```

in your AUTOEXEC.BAT. If you set EMAF, you must also set EMAH. Do not set EMAF if you are not experiencing drive A: access problems.

Some people want really slow polling intervals. Those users can set yet another environment variable:

```
SET EMAT=YES
```

This variable ("*Email* is a Tortoise") slows down Mailbox polling to once every minute, for reduced network traffic (generally, this will not make a significant difference).

Email counts the messages sent. In the *Email* directory you will see a file named COUNT.TXT. Double clicking on this file usually opens it in Notepad, and allows you to see the total number of messages *Email* has sent from all users. To reset this number, just highlight it and replace it with zero. This feature allows you to see how many messages are sent in any period you wish to observe. A system administrator might use this information as supporting data to justify upgrading to the commercial verison of *Email*.

Starting with version 2.17, *Network Email* supports command line parameters which will override their enviornment variable counterparts. These parameters are *userid*, *path*, and *drive*, each separated by a single space, and in that order. The following is an example of the command line syntax:

```
d:\email.exe rick \email h
```

This line tells Windows to run EMAIL.EXE from my RAM drive (drive d:), and the three parameters tell Email that my UserID is RICK, that the Email home directory is \email on network drive h:. The command line parameters are optional. If the third parameter is used, the first two must be present. If the second is used, the first must be present. Here is another example:

```
h:\email\email.exe rick
```

With this command line example, using the Program Manager "File, Run" menu option, I can sit down at any machine and connect to Email without having to change the machine's environment variable USR. The command line parameters may also be set in the Program Manager icon properties dialog box.

The default date format for Network Email is the American (USA) format (mm-dd-yy). If you want to use the international date format (dd-mm-yy), have each user on your network set the following environment variable:

SET EMAD=INT

The date associated with a message is generated by the sending machine.

If you want your novice users not to run multiple copies of Email and not to quit Email casually, set their environment variables:

SET EMASJ=YES

Setting this environment variable (EMAil is a Straight Jacket) will prevent multiple instances and will disable the "Exit" menu option. Closing *Email* via the control menu will display an "Are you Sure?" dialog box.

In the earlier versions of *Network Email*, a modal popup dialog was used to notify users of new mail. This caused problems for some users so in early 1994, a modeless popup dialog box was used. The modeless dialog box will not pop up on top of other applications or through a screen saver, however. Now *Network Email* uses a modal dialog by default. If you want the modeless dialog box, set the environment variable:

SET EMAAMD=YES

This stands for EMAil AModal Dialog.

When *Email* is a normal window, the popup dialog is normally disabled. This is because a person looking at the MailBox window will see the new message appear and might be annoyed at a popup box telling him the obvious. However, some users have requested that a popup should appear when the window is up because it might be buried behind other windows, and in that case the user would want the popup notification. For *Email* to always notify the user of new mail with a popup, set the environment variable:

SET EMANA=YES

This stands for EMAil Notify Always.

Wide Area Network Support

Network Email has some limited support for wide area networking (WAN), with two different approaches. For the first method, set the DOS environment variable EMAW=YES and a new checkbox will be visible in the editor, which when checked, will write a send file to a new subdirectory of the Email directory (OUTGOING). The

outgoing message file will have its header in Unix sendmail format. Your mail daemon can pick up internet messages from the OUTGOING directory. You must type in the Internet address yourself, as checking the WAN box disables the recipient pick list.

Internet Connection

A second type of WAN support is independent of the first and can be used in conjunction with it if desired. Set the environment variable EMOUT=<internet output directory> and if a user name (i.e. an Internet address) that Email does not recognize is typed into the Editor "to" field, the message file will be written to the EMOUT directory. This method also requires a mail daemon on your Unix server. Additional documentation for this feature is under development.

New Features

Some version highlights are listed below. Version numbers for the freeware and commercial versions are synchronized.

2.20 revised the Email file extensions for better attached file operations support.

2.34 has better font support for non-standard screen drivers by using True Type fonts as a default in some list boxes.

2.36 makes deleting messages a smoother operation, and the MailBox window will not automatically minimize unless it is empty.

2.37 lets users attach a file to a message reply.

2.38 fixes some fonts which displayed in boldface with the 8514 monitor option.

2.40 fixes the subject text box boldface with the 8514 monitor option in the commercial version only. The freeware version was updated to synchronize the version numbers.

2.41 incorporates customizable application launching from the "View Attached Files" dialog window (commercial version only).

2.42 (11-Oct-92) fixes the message corruption which resulted if double quotes were entered in the "Subject" of the message. Now double quotes in the Subject are converted to single quotes.

2.43 (16-Oct-92) allows users to enter a comma in their user names (for last name first format) when establishing an account. Does not put the file selection back to the top of the list box when deleting or moving a file from the "Attached File Operations" dialog window. Eliminates the "File moved to ... " popup when moving an attached file if the "No confirm on send" option is enabled (commercial version only). Eliminates the

"Message saved" popup when saving a sent message if the "No confirm on send" option is enabled (commercial version only).

2.44 (23-Oct-92) increases the width of user name list boxes so all 20 characters will show, adds order form printing (freeware version only), and pops the mailbox window back up when a send or reply is canceled.

2.48 (15-Nov-92) improves message printing.

2.50 (7-Dec-92) eliminates the startup screen with its gratuitous graphic image of a galaxy, saving about 30k in file size for faster startup.

2.51 (21-Dec-92) fixes a bug in "View Attached Files" which occurs when the user's directory is attached directly to the root.

2.52 (21-Dec-92) is compiled with Visual Basic version 2.0 for faster loading and better performance.

2.55 (4-Jan-93) has three new color options.

2.56 (14-Jan-93) incorporates WAN send support.

2.57 (19-Jan-93) minor cosmetic changes.

2.58 (22-Jan-93) adds error trapping to suppress "file already open" and "input past end of file" error messages on startup. If these errors should occur when sending mail, delete count.txt from from the Email directory.

2.60 (27-Jan-93) fixes some font width problems in the Mail List and Recipient List.

2.61 (8-Feb-93) adds path diagnostic information to the Main subroutine error message.

2.63 (3-Apr-93) adds path and filename diagnostic information to the Mailbox Timer1 subroutine error message.

2.65 (18-Apr-93) synchronizes version numbers with the commercial version (which now has message receipt acknowledgment).

2.70 (25-Jul-93) recompiled with version 3.0 of Visual Basic.

2.72 (4-Aug-93) fixes a font error that occurs when running under OS/2 and "Fixed Pitch Fonts" is selected. The fixed pitch font (Courier New) may not be available, but the error message is suppressed.

2.73 (25-Aug-93) allows the user to insert a tab in a message in the Editor or Reply windows from the Edit menu.

2.74 (4-Sep-93) appends "to" and "from" fields to message files for better internet support. The AddMessage subroutine error trapping is improved.

2.77 (17-Sep-93) fixes the bug where attached files with a null extension would not show up in the "View Attached Files" list box. Also fixes the recipient list display that was too narrow when the Courier New true type font was missing from the Windows installation.

2.83 (14-Nov-93) uses a non-modal popup for new mail notification for less constrained operation.

2.84 (19-Dec-93) The delete key in the editing windows will now delete the next letter if no text is selected.

2.85 (24-Dec-93) Implements support for the international date format (see "EMAD" above).

3.01 (7-Feb-94) Adds a directory scan loop abort (at 1000 scans) in the "View Bulletin Board" procedure.

3.02 (19-Feb-94) Adds an interface for the *Network Chat* add-in program.

3.03 (26-Feb-94) Fixes a security hole. Now when a user with no read priviliges for the directory tries to log on as that directory owner, he will get a message that he is incorrectly logged in and then the program will terminate. A file (INTRUDER.YMI) containing the environment string from the computer will be left in the directory. The file is deleted for a normal log-in. The intruder file can be used to trace michief makers.

3.04 (27-Feb-94) Fixes occasional MailBox list sort order problems. Now all your messages will be shown correctly in order of the date sent whether you are using the European date format or the default American format.

3.05 (3-Mar-94) Minor cosmetic changes to some dialog boxes.

3.07 (19-Mar-94) Implements Internet connectivity via the EMOUT environment variable.

3.074 (21-April-94) Fixes a minor mailbox list date sorting bug.

3.100 (11-May-94) Refines the fix for the date sorting bug and improves Internet connectivity.

3.101 (16-May-94) Adds a modal popup dialog feature to notify a user that somebody is requesting a Network Chat session. This popup is in addition to the normal "You have new mail" popup and contains the name of the chat session requester.

3.13 (28-June-94) Smoother operation with *Network Chat*.

3.16 (12-July-94) Adds diagnostics for the SendMail subroutine and prints with True Type font Arial when available.

3.18 (12-July-94) Adds more diagnostics for the SendMail subroutine for troubleshooting a specific network installation problem. A SendMail error message will now show the directory that Email thinks is home.

Upgrading

Replace the executable file, EMAIL.EXE with the newer version. With version 2.20, all the *Email* file extensions changed. With earlier versions, there were problems with some file types not showing up in the "attached files" list. Now any file with an extension that doesn't start with "Y" will be listed. All *Email* file extensions now begin with "Y." Therefore, to see old messages and to keep *Email* preferences, each user should perform these **rename** commands for the following files in his *Email* directory:

```
rename *.ema *.yma
rename *.snd *.yms
rename *.msg *.ymm
rename *.fil *.ymf
```

Trouble Shooting

If *Email* works properly initially, but then later begins to generate error messages, the cause has been found in all cases to be due to a (perhaps transient) network problem. Delete any zero-byte files in the *Email* directory and subdirectories. A zero-byte file is caused by a network failure occuring after a file is opened for write, but before the file is closed again. (The characteristic error message in the case of zero byte files is "input past end of file.")

Another source of errors is uncoordinated changes in user access rights. Make sure that everybody can WRITE and CREATE to all subdirectories. Only the subdirectory owner needs to READ the files. (Unix is an exception, where everybody needs to READ.)

If errors occur upon initial installation, remove any Email environment variables, delete the Program Manager icon and try running Email by double clicking the executable file from the File Manager. If it works, then go back and reinstall the icon. If you still have problems, please contact us and we will help you directly. So far out of thousands of networks, we have not had a single instance where it could not be made to work!

Some Netware users have reported trouble with DOS sessions switching default drives and causing errors, or with Email causing problems with DOS. If you have this problem, change your Windows system.ini to read:

```
[NetWare]
NWShareHandles=FALSE
NWRestoreDrives=FALSE
```

The recipient list requires the true type font Courier New, which is installed by Windows. Some users may have deleted their Courier New (or Arial) font, and it should be reinstalled. If the font is missing, the recipient list window will be very narrow.

Appendix: Environment Variable Summary

The environment variables used with *Email* are summarized below. Search the main text on the environment string name for details of usage.

SET USR=<UserID>
Sets the *Email* user directory so he won't have to pick his name every time *Email* runs. Over-ridden by the command line.

SET EMAD=INT
Sets the *Email* date format to international (day-month-year).

SET EMAF=YES
Makes *Email* force the drive back to the network volume (for buggy network OSs).

SET EMAH=<drive and directory>
Sets the *Email* home drive and directory. Over-ridden by the command line.

SET EMAT=YES
Makes *Email* poll every 60 seconds (instead of the default 5 seconds).

SET EMANA=YES
Makes *Email* always notify with a popup.

SET EMASJ=YES
Makes *Email* harder to quit.

SET EMAAMD=YES
Makes *Email* use an amodal dialog for the popup.