



<http://www.pfinders.com>

Email Gateway

version 3.0

Revised June 1, 1999

Pathfinders Software
1755 O'Farrell, suite 905
San Francisco, CA 94115 USA

Sales: (415) 292-4935
FAX: (415) 292-4913

sales@pfinders.com
support@pfinders.com

End User Software License Agreement

Installation of this software indicates your acceptance of these terms and conditions. If you do not agree, do not load this software!

This software product ("Product") is a proprietary and copyrighted Product of Pathfinders Software. It is licensed (not sold) to you, and you may use this Product only under the terms of this license from Pathfinders Software, even though you may have obtained the Product from a dealer or other source.

License

Pathfinders Software grants you a non-exclusive license only to:

1. use the Product on one Computer which you own or use. A separate License is required for use on each other Computer on which the Product is used. But, you may transfer the Product to another Computer if it is a replacement for the original Computer and all traces of the original Product are removed from the replaced Computer.
2. merge the Product with other applications which utilize the Product. This license shall remain effective as to any merged portion of this Product.
3. make one copy of the Product for archival or backup purposes in support of your own use of the Product, and copy the installed Product and its data base from time to time as part of your regular backup routines.

You have no right under this License to rent or lease the Product. You may use the Product in object code form only. If source code is present, it is provided only to create (compile) the necessary object code on your particular system and to protect your investment should Pathfinders Software cease to exist or you replace your Computer with a different model.

Title

The Title and copyright of the Product, including the Product Media and Documentation, remain with Pathfinders Software. You agree not to modify, reverse engineer or translate the Product except to the extent required to make the Product execute correctly on your own system.

License Terms

The license is effective upon date of purchase or upon receiving an activation code from Pathfinders Software and shall continue until terminated. You may terminate this License at any time by destroying or deleting the Product and all documentation. This license will terminate automatically if you fail to comply with any term or condition of this License and you may be subject to severe penalty under copyright and license laws. Upon termination you agree to destroy the Product, the Product Documentation and all copies, purge the Product from all computers and memory devices such as hard disks, and eliminate the Product from any merged programs.

Limited Warranty

Pathfinders Software warrants that for a period of six (6) months from the date of purchase the Product will perform according to the specifications set forth in the associated Product Documentation. Pathfinders Software further warrants the diskette (or other medium) on which the Product was shipped on will be free from defects in materials and workmanship under normal use, providing such media was not customer supplied.

YOU ASSUME THE RESPONSIBILITY FOR SELECTION OF THE PRODUCT TO ACHIEVE YOUR INTENDED RESULTS, AND FOR THE INSTALLATION, USE AND RESULTS OBTAINED FROM THE PRODUCT. Pathfinders Software does not warrant that the functions contained in the Product will meet your requirements or that the operations of the Product will be uninterrupted or error free, or will function properly in every hardware environment. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Except as expressed herein, the Licensed Program is provided to you "as is". Pathfinders Software disclaims to the fullest extent permitted by law all other warranties expressed or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, which shall in no event exceed one year. Some states do not allow the exclusion of implied warranties so the above exclusion may not apply to you.

Limitation of Remedies

Pathfinders Software's liability and your exclusive remedy shall be limited to:

1. the replacement of Product, including the diskette or other medium, that does not meet the standards of the limited warranty above.
2. if Pathfinders Software or its Dealer is unable to deliver a replacement which is free of defects, your purchase price will be refunded.

In no event will Pathfinders Software or its Dealer be liable to you for any damages, including any lost profits, lost savings, lost data or other incidental or consequential damages arising out of the use or inability to use the Product even if Pathfinders Software or any of its Dealers have been advised of the possibility of such damages, or for any claim by any other party. The maximum liability shall in no event exceed the purchase price you paid for the Product. Some states do not allow the limitation or exclusion of liability for incidental or consequential damages so the above limitation may not apply to you.

Customer Registration

By registering with Pathfinders Software you are entitled to these one time privileges:

1. Limited telephone support during installation
2. In the event of a problem on your specific system, you may qualify for free upgrades or Product customization to make the Product work properly on your system.

General

This Agreement shall be governed by the laws of the State of California USA, exclusive of its choice of law provisions.

You further agree that this is the complete and exclusive statement of the agreement between us which supersedes any proposal or prior agreement, oral or written, and any other communications between us relating to the subject matter of this agreement.

Copyright 1997 Pathfinders Software

Document revised: June, 1st, 1999

Before You Begin

CD-ROM Inventory

The Email Gateway distribution comprises one CD-ROM:

Internet Email Gateway	/pick directory with the T-DUMP images D3.img, Mentor.img, Unidata.img, Universe.img and Ultimate.img
Serial Gateway	install.exe file
Microsoft Patches	/patches directory
Documents	/docs directory
Utilities	/utilities

See the README.TXT file for creating a T-LOAD diskette from a file using the RAWRITE.COM program. This text file is kept in the pick directory on the CD-ROM.

The utilities directory has two Windows programs that are optional:

Memstats.exe	Helpful in monitoring memory usage.
Wincode.exe	Useful to encode Windows files for attaching to Pick email messages. Also useful for decoding attachments in strange formats, such as newsgroup formats or Mac formats, etc.

Hardware Requirements

A null modem cable is required to run from the Pick serial port to a Com port on your Windows 95, 98 or NT machine. If you wish to build your own cable, a schematic is presented in Appendix E.

If using the Telnet connection to your Pick host, then no cable is required.

An Activation Code Is Required For This Software

Contact your dealer for your unique activation code. It will be entered on both the MultiValue system (native) and the Windows system.

New TCL commands for the Internet:

AF
IMPORTMAIL
POPPASSWORD
PS-MONITOR
SENDREC

These commands are described in more detail later.

Table of Contents

Introduction	6
Installation Procedure	7
Appendix A: Starting the Gateway	11
Appendix B: Internet Commands	13
AF.....	13
IMPORTMAIL.....	14
POPPASSWORD	15
PS-MONITOR	16
SENDREC	17
Appendix C: Gateway Configuration	19
Appendix D: UniVerse Specific Notes	22
Appendix E: Null Modem Cable	24
Appendix F: The Auto Fetcher	25

Introduction

The **Internet Email Gateway** from Pathfinders Software is an Internet mail relaying system. It runs on all flavors of Pick, including General Automation, Sequoia, UniVerse, Unidata, Ultimate, etc.

It was originally designed to run on its own Pick serial port. This port is then connected to a Com port on a Windows 95, 98 or NT machine through a null modem cable. But, if your Pick host supports telnet through a LAN network, then it can be used instead of a cable. The Gateway can initiate a telnet session from the Windows side to the Pick side through the network and log in.

On the Windows machine runs **The Serial Gateway** from Pathfinders Software. On the Pick side runs the **Internet Email Gateway** which talks to the Serial Gateway in a client / server manner. The Pick (multivalued) host controls the Windows computer as the client. The Serial Gateway is the server.

Outgoing Internet mail generated on the Pick host, is passed through the Email Gateway to the Serial Gateway on the Windows machine. It is then delivered via standard Internet protocols. The Serial Gateway can dial the Internet, send the mail and disconnect automatically. Also, incoming mail is retrieved (upon request) from standard POP3 mailboxes located on any Internet or local network Mail Server. Again, the Serial Gateway is smart enough to dial the Internet, retrieve the mail and disconnect. All the settings are adjustable by you.

You may use the Microsoft built in Dial-Up Networking or Ethernet LAN. The Email Gateway supports all mail servers including Netscape and Microsoft Exchange (via POP3). Novell LAN mail is supported only if POP3 access is available. See the free Mercury Mail plug in for Novell from Pegasus.

This software requires a mail reader and mail composer (front end program). Weaver Consulting's Email-FOR-Pick version 6 is the first approved mail package available from Wordmark International at (408) 975-1100 USA. You may write your own front end programs to send and receive email. An email developers guide is available on our web site at <http://www.pfinders.com/support> in adobe acrobat format.

Note: You must load some patches on Windows 95/98 for the Serial Gateway to work. On the CD-ROM in the /patches directory will be found these Microsoft patches. Or get them from Pathfinders Software's website at <http://www.pfinders.com/support>. You should get the Dial-Up Networking Update 1.3 and DCOM95 if on Windows 95. If you are using Windows 98 then you only need DCOM98.

Also, case sensitivity must be turned on for this program to work. The gateway program checks for this condition and aborts if case sensitivity is turned off.

Installation Procedure

Create an account called INTERNET or logto the account you wish to use. Later, we will setup all other accounts that you wish to enable Internet mail in.

1) Create an account called INTERNET and LOGTO it.

Some systems require setting BASICTYPE "P", such as Unidata. On Universe create a "Pick" flavor type of account.

2) Create THREE files

<u>File Name</u>	<u>Usage</u>	<u>DICT size</u>	<u>DATA size</u>
PS.BP	for BASIC programs	3,1	3,1
MAIL.IN	for normal items	1,1	101,1
MAIL.OUT	for normal items	1,1	101,1

Remember PS.BP is going to be for BASIC programs. On some systems this means it will be a "DC" type file. On UniVerse it is a type 1 file.

Different implementations use different syntax to create files. Consult your system manuals for proper syntax. But here are some examples:

```
R83, Mentor:          CREATE-BFILE PS.BP 3,1 3,1
                      CREATE-FILE MAIL.IN 1,1 101,1
                      CREATE-FILE MAIL.OUT 1,1 101,1

Advanced Pick,
MDC & Sequoia:       CREATE-FILE PS.BP 3,1 3,1
                      CREATE-FILE MAIL.IN 1,1 101,1
                      CREATE-FILE MAIL.OUT 1,1 101,1

GA, Icon & UpBoard:  CREATE-FILE PS.BP 3,1 3,1 (C
                      CREATE-FILE MAIL.IN 1,1 101,1
                      CREATE-FILE MAIL.OUT 1,1 101,1
```

3) Insert Email Gateway diskette #1 of 1 and set, attach, select or assign the floppy drive.

Consult your system manuals for the proper syntax. On some implementations it is SET-FLOPPY, SET-DEVICE 0, T-SELECT 0, T-ATT, or ASSIGN.

4) Load the installation programs with:

T-LOAD MD (O

```
T-LOAD MD (O
  1 SENDREC
  2 IMPORTMAIL
  3 POPPASSWORD
  4 INSTALL
  5 AF
[803] 5 item(s) loaded
```

Some implementations use T-LOAD VOC (O
or possibly T-LOAD VOC PICK.FORMAT

5) Run the Installation program by typing: INSTALL

If you forgot to create the PS.BP file or created it of the wrong type, you will get an error and the installation will stop. Create the file as in step 2 and type INSTALL again.

If the Installation program cannot finish loading the rest of the software from the diskette, you may do it by hand by typing T-REW, T-FWD, T-LOAD PS.BP then perform step 5 again.

The screen clears and you will see:

```
                P a t h f i n d e r s   S o f t w a r e
                  E m a i l   G a t e w a y   3 . 0   I n s t a l l a t i o n

Loading TCL commands...
Uncompressing, please wait...                100% DONE
```

This may take up to 5 minutes on slow systems.

6) If you should see the box below then you may skip step 7. The Email Gateway came fully activated.

Activation Code accepted.

Email Gateway installed successfully.

Thank you for choosing Pathfinders Software.

7) Next you will see the "Product Activation Menu". Choose option one "Activate Product". Type in the 20 digit activation code from your dealer. You may press ENTER to exit out of the PSACTIVATE menu.

Email Gateway installed successfully.

Thank you for choosing Pathfinders Software.

8) To Enable other accounts, at TCL, type:

PSACTIVATE

and choose option four. Enter the account name you wish to enable. Note: On certain systems such as Prime and UniVerse, you will have to logto the other account and enable it from there.

Prime or UniVerse Only:

8a) Create a q pointer called PS.BP and have it point to the INTERNET account and PS.BP file.

8b) CATALOG PS.BP PSACTIVATE

8c) Type PSACTIVATE at TCL.

8d) Choose option 4 and when prompted for Account name, press ENTER

You may press ENTER to exit out of the PSACTIVATE menu.

9) Edit the GATEWAY.CONFIG item. Make sure any parameters specified are what you expect. The default behavior of the Email Gateway is to sleep every 3 minutes (180 seconds) if there is nothing in the queue to deliver. For a complete list of configuration parameters see Appendix C

ED PS.BP GATEWAY.CONFIG

*MSGSIZE= Uncomment this line if you do not want to download large messages.
SLEEPTIME= Checks the queue every 10 minutes. Keeps the gateway from using up CPU time
INITIALSLEEP= Time to wait before synchronizing with server. Useful for quick cabling changes.

That's it, you are installed and activated.

To Start the Gateway you must review Appendix A.

Appendix A: Starting The Gateway

Install the Windows software before continuing here. INSTALL.EXE on the CD-ROM.

The Email Gateway is designed to run on its own serial port or telnet. Make sure you run a cable from this serial port to a Com port on the PC that is running Windows 95 or NT.

You may login using by hand to the INTERNET account using Accuterm, Viaduct, Wintegrate, etc. This way you can test that the baud rate is correct. But, normally the Email Gateway should be started in the coldstart procedure with a LOGON command along with your printers. The following section describes this further. Without a LOGON command you may have to start it manually.

1) In the SYSTEM file create a Q pointer called GATEWAY.

```
ED SYSTEM GATEWAY
```

```
001 Q  
002 INTERNET
```

2) On D3 and AP, you will also have to create a USER called GATEWAY and remember to turn on case sensitivity.

On D3 (Advanced Pick):

1) Create a USER called GATEWAY

```
U USERS GATEWAY
```

2) Give it SYSPRIV level SYS2, the highest on Advanced Pick.

3) At the end of the item, add two lines

```
CASE-ON  
LOGTO GATEWAY
```

4) File this item by typing CTRL-X F

5) To run the Gateway on port 3, at TCL, type:

```
LOGON 3 , GATEWAY
```

Note: You might want to turn the break key off as well with `break-key-off`

3) Place a LOGON command in your coldstart procedure usually USER-COLDSTART. It is commonly found in the SYSPROG master dictionary. But, consult your system manuals for its location.

The format of the LOGON command is

```
LOGON n,GATEWAY
```

Where "n" is the port number.

4) To test this connection, issue the LOGON command from the SYSPROG account.

Mentor Specifics:

On Mentor Systems, you cannot logon a process that invokes a cataloged basic program, you must call a PROC that calls the Basic program.

```
ED SYSTEM GW
```

```
001 Q  
002 INTERNET
```

```
ED MD GW
```

```
001 PQ  
002 HGATEWAY  
003 P
```

Appendix B: Internet Commands

AF (options)

The Autofetch program (AF) gives you the ability to retrieve email automatically from your mail server at regular intervals. This program comprises 3 files in the PS.BP file. AF, AF.CONFIG and AFLIST.

This program can be run as a phantom process. Or the Gateway can call this program with the Q option regularly. See Appendix F for details.

Options:

- T Test mode. Display the schedule.
- V Verbose. Display output. Normally, this program has no visible output.
- Q Quick mode. Check current interval and exit when done.

IMPORTMAIL [userid] [password] [POPHost] [key] (options

This program pulls in all the mail from a specific mailbox into a Pick file called MAIL.IN. This is useful for creating a queue of incoming mail. The item-ids will be assigned the current date, time, port number and optional "key". They will all be separated by underscores, such as:

```
10510_3910_11_key
```

The "key" is optional and could be used to identify the local userid by the local delivery program. This avoids having an alias translation file from Internet address to local address.

Once the mail is imported, it is deleted from the user's Internet POP3 mailbox. This default behavior can be overridden with the L option.

Options:

- A Add retrieval request to the Autofetcher AFLIST record. Do not get mail now.
- L leave mail on remote machine. Do not delete it. Just make a copy on local machine. Useful when testing mail retrieval.
- R Remove the retrieval request from the Autofetcher AFLIST record. Do not get mail now.

Example 1: Retrieving all the mail into an in queue.

```
>IMPORTMAIL fred xyz321 popd.ix.netcom.com  
Queued for later retrieval.
```

Fred's mail will be removed from his Netcom account on the Internet and placed in the Pick file MAIL.IN. The local delivery program is then called to finish the delivery process. There may be a time delay depending on the connection type and speed of the gateway. On Unix implementations there will most likely be no delay.

Example 2: Placing request with autofetcher.

```
>IMPORTMAIL fred xyz321 popd.ix.netcom.com (A  
Retrieval request added to Auto Fetcher.
```

POPPASSWORD [userid] [oldpasswd] [mailhost] [newpasswd] [key]

This command allows you to change the password of an Internet mailbox. The userid is the mailbox owner. The mailhost is the POP mail server. This command sends a request to change the password to your Internet Service Provider. The "POP3host" name may not be the same as the email address. Ask your ISP what the hostname of their POP3 mail server is.

If your ISP is not running the POPPASSD protocol, this command will fail. If you choose a password that is not "acceptable" then it will fail also. The rules of acceptability usually include a minimum of 6 characters and a mix of letters and number.

If the optional [localuser] field exists, then the result of this command will generate a confirmation mail message to the local user as incoming mail. The Key will be part of the item-id for ease of delivery.

Errors will be logged if error logging has been turned on.

Example 1:

```
>POPPASSWORD herbr xyz567 popd.ix.netcom.com book554 HERB
Queued for later change
```

This example will change herbr@ix.netcom.com 's password form xyz567 to book554 and mail the results back to local user HERB. Notice that Netcom's mail server is called popd.ix.netcom.com but we send mail to ix.netcom.com. Check with your ISP if their mail server is different from the email address. This is common.

Example 2: Password too short

```
>POPPASSWORD herbr xyz567 popd.ix.netcom.com penny HERB
Queued for later change
```

This example attempts to change the password of user "herbr" from "xyz567" to "penny". But it will probably fail when the Email Gateway tries to process the request because "penny" is not at least 6 characters and has no numbers in it. The user will get a failed confirmation message back as incoming email.

PS-MONITOR

This command provides you with a menu used to track the Email Gateway's progress, performance and errors. It can also display email statistics of your gateway. The error and debug trace logs are usually cleared when the Gateway starts up.

If you are having trouble you may turn on the debug trace and view its logs here. Do not forget to turn the debug trace log off after you finish diagnosing your problem or else it might grow so large that it affects system performance.

On version 3.0 the debug trace is turned on by default but will not grow in size beyond a maximum number of lines as set by a new parameter MAXLOGS.

The debug trace is turned on by editing the configuration file:

```
ED PS.BP GATEWAY.CONFIG
```

Near the end is the line

```
DEBUGTRACE=OFF
```

turn it on.

```
DEBUGTRACE=ON  
MAXLOGS=90      (Version 3.0 only)
```

Save it, then restart the gateway by logging it off and back on again.

SENDREC [filename] [itemid] {to@addr1} {from@addr2} options

Mails the specified item across the Internet. This program will build a header, (if one does not exist), and send the record. A header is a series of lines separated by a blank line from the body of the record. No parsing of the record is done to remove "illegal" mail characters such as value marks and subvalue marks.

On version 3.0 the Date: field is not required because the gateway will build one for you if you leave it out.

This command is perfect for custom email environments. It allows a programmer to send Pick records as email using an EXECUTE statement in BASIC. This is used often in Weaver's EMAIL-for-PICK version 5.0 and higher.

SENDREC can attach an Internet style attachment to your email message using the A or B options.

If the header is prebuilt, then the record is sent "as is". This is the more desirable approach.

Header lines:

To:
From:
Subject:
Date:
Cc:
Bcc:

If To: or Subject: do not exist, they are prompted for. If the From: line does not exist and not provided as a TCL argument, the current user's "who" information is assumed. It is not prompted for.

The Cc: Bcc: (blind copy) and the To: lines are comma separated lists of email addresses. Use your favorite editor to enter Cc: and Bcc: because they are not prompted for.

The best way to use this program in a fully automated way, is to build the header yourself in the beginning part of the record. This way, the sendrec program will not stop and prompt for anything, it will just send it.

Options:

- A Attach a record to email message, converting attribute marks to CR LF sequences.
- B Binary attachment desired, no conversion of attribute marks.

- S Suppress prompting for Subject:, leave it blank
- T Testing mode. Do not send the record, just display the final version of the header.

Example: sendrec with prebuilt header in record

```
>CT PROCFILE REPORT2

001 To: joe@abc.global.com
002 From: fred@picksys.com
002 Subject: Here is the final version of the report
003 Cc: sales@global.com
004
005 PQ
006 HSORT CUSTOMERS BY INVOICE.DATE DATE BALANCE (P
007 P
008 X

>SENDREC PROCFILE REPORT2
Queued for later delivery.
```

I was not prompted for anything. The header lines are in the record already. The date will be built for you. You may put a Date: header line if you wish. The legal form of dates on the Internet must be adhered to.

Example 2: sendrec with attachment

```
>SENDREC MAILFILE MESSAGE5 (A
Attachment: INVOICES INV00134
Queued for later delivery.
```

Notice that it prompted me for the file and item name of the attached record. The item INV00134 was embedded inside the email message MESSAGE5 before it was sent.

Appendix C: Gateway Configuration Parameters

GATEWAY.CONFIG

The Email Gateway comes with a configuration file which is read when the gateway is first logged on. These control various aspects of its behavior, polling rate, and what information is logged to files. Below describes these parameters in the order they appear in the configuration file.

To view or change them, at TCL type:

```
ED PS.BP GATEWAY.CONFIG
```

Parameter	Meaning
MSGSIZE=100000	Maximum size in bytes of incoming messages. Some older systems had a limited item size of 32kb. Some do not want huge messages with attachments coming in. Any incoming message above this size will not be retrieved from the Internet. You may leave it commented out.
NOTIFYUSER=ON	This will send an email to the recipient when the gateway encounters a piece of mail that is too big. The email message will include the full header of the original message and the first 20 lines plus a note at the bottom that it was too big.
SLEEPTIME=600	The number of seconds to wait before checking the outgoing mail queue when it becomes empty. This saves CPU time. 600 = 10 minutes, 3600 = 1 hour
INITIALSLEEP=5	The number of seconds to sleep when the Gateway is first run. This is for those systems requiring a quick cabling change or flipping an A/B switch.
INQUEUE=MAIL.OUT	Mail readers create records in this file when calling SENDREC. The Gateway pulls them out and deletes them.
OUTQUEUE=MAIL.IN	Local mail delivery programs pull from this file. The Gateway creates these records.
AUTHUSER=	For future use in connecting with the Serial Gateway.
AUTHPASS=	For future use in connecting with the Serial Gateway.
LOGERRORS=ON	ON or OFF. This will turn on error logging. A record will be appended

to called ERROR.LOG.portnum

INITERRORLOG=ON	ON or OFF. This will clear the error log each time the Email Gateway is logged on.
STATISTICS=ON	ON or OFF. This will log the number of email messages sent and received in a record called STATISTICS.portnum. Where the "portnum" is the port that the Email Gateway is running on. Attribute 1 is the sent count and attribute 2 is the received count. Also, attribute 3 is the control message count and attribute 4 is the time when the Gateway successfully contacted the Server.
INITSTATS=OFF	ON or OFF. This will clear out the statistics every time the Email Gateway is logged on. We recommend leaving it off to get a running total of statistics.
DEBUG=OFF	ON or OFF. This will turn on the logging of messages of progress of the gateway. If you wish to see what it is doing at every step, this is the way. This record will get long, so leave it off unless you are having trouble.
INITDEBUGTRACE=ON	ON or OFF. This will clear out the debug information every time the Email Gateway is logged on.
DELIVERPROG=	This is your program for local delivery. The Gateway will call this program once each time it cycles through the MAIL.OUT file. But, only if the gateway had received incoming mail and placed it into the MAIL.IN file. This allows for automatic local delivery of Internet email.
SLEEPINPLACE=ON	This command works with DEBUG=ON and does not fill up the debug trace with sleeping commands when the Gateway is cycling between sleeping and checking the empty queue.
CHECKSUM=ON	This is a low level protocol that verifies data is not corrupted by poorly designed XON/XOFF handshaking. It is recommended to be left on. If you are sure your software can handle turning it off you will experience a performance gain.
STRIPX=OFF STRIPRETURNPATH=OFF STRIPRECEIVED=OFF CPUSAVER=0	These parameters will strip ugly header lines from incoming mail messages. The number of lines to send or receive before releasing the CPU timeslice. Use this if system performance is affected by gateway operation. This mostly happens on native systems. Try 5, 10 or 20.
AUTOFETCH=OFF AFPROG=AF (Q)	Turn this ON if you want autofetching inside the gateway rather than as a phantom job. If you have your own autofetch program you can specify it.

MAXLOGS=100

Limit the number of lines in the error log and debug log. This allows you to leave logging turned on and not worry that errors will cause the logs to grow without bound. Once the maximum number of lines in the log files have been reached, old lines are removed to make room for new lines.

Q Pointer in SYSTEM file

If your system has a LOGON command, you will have to create a Q pointer in the system file called GATEWAY and have it point to the INTERNET account that you loaded the Email Gateway into. This is helpful for placing a LOGON command in the Coldstart procedure to start the Gateway when you reboot.

```
ED SYSTEM GATEWAY
```

```
001 Q  
002 INTERNET
```

Mentor Specific Notes:

If you logon the process and it goes to TCL then you cannot invoke a Basic program from logon. You must call it from a PROC.

```
ED MD GW
```

```
001 PQ  
002 HRUN PS.BP GATEWAY  
003 P
```

```
ED SYSTEM GW
```

```
001 Q  
002 INTERNET
```

Appendix D: UniVerse Specific Notes

Since UniVerse runs on Unix, make sure there is no *getty* process running on the serial port you wish to use. Edit your */etc/inittab* file and turn off the *getty* on the serial port (tty) you are using for the Email Gateway. This way you can start a phantom process on that serial port with the LOGON command.

SYSTEM.ADMIN

You must do two things in SYSTEM.ADMIN.

First add an account called GATEWAY. Specify the path to the INTERNET account you loaded this software into.

Second create a device for the tty you will use (serial port). For example let's say I want to use tty15 with the Email gateway. I would create a device called TTY15 and specify */dev/tty15*. Later, at TCL, I would start the Gateway by typing:

```
LOGON 15 GATEWAY
Phantom process started with process ID 961
```

Should you encounter any bugs in your version of UniVerse, the Unix command below can accomplish the same thing as the box above:

```
uv "GATEWAY" </dev/tty15 >/dev/tty15 2>/dev/tty15&
```

STOPPING THE GATEWAY

First use PORT.STATUS to find out the process number of the Email Gateway, then use LOGOUT to stop the phantom process.

```
LOGOUT 961
```

CHECKING SERIAL PORT PARAMETERS

To check the baud rate and parity settings, in Unix use the *stty* command like this:

```
stty < /dev/tty15
```

Appendix E: The Null Modem Cable

In order to use this software you may need a null modem cable. This cable loops back certain signals. If you wish to build one yourself, here are the specifications:

25 Pin to 25 Pin Cable (No DTE to DTE hardware flow control)				
Pick Host Side		PC Com Port		
Signal Name	Pin	Pin	Signal Name	
TD	2	----->	3	RD
RD	3	<-----	2	TD
GND	7	<----->	7	GND
RTS	4	<--] [-->	4	RTS
CTS	5	-->] [<--	5	CTS
DSR	6	<-----] [----->	6	DSR
DCD	8	<-----] [----->	8	DCD
DTR	20	----->] [<-----	20	DTR

Note: Pins 4 and 5 are looped back separately from pins 6, 8, and 20.

9 Pin to 25 Pin Cable (No DTE to DTE hardware flow control)				
Pick Host Side		PC Com Port		
Signal Name	Pin	Pin	Signal Name	
TD	2	----->	3	RD
RD	3	<-----	2	TD
GND	5	<----->	7	GND
RTS	7	<--] [-->	4	RTS
CTS	8	-->] [<--	5	CTS
DSR	6	<-----] [----->	6	DSR
DCD	1	<-----] [----->	8	DCD
DTR	4	----->] [<-----	20	DTR

Note: Pins 7 and 8 are looped back separately from pins 6, 1, and 4.

Appendix F: The Auto Fetcher

The Autofetch program (AF) gives you the ability to retrieve email automatically from your mail server at regular intervals. This program comprises 4 files in the PS.BP file. AF, AF.CONFIG, AFQUICK and AFLIST. AFQUICK is only used with the Q option.

AF

The executable program. It can be run as a phantom process, but it does not have to be. If AUTOFETCH=ON is set in the GATEWAY.CONFIG it will run inside the Gateway program. When first run, this program reads the AF.CONFIG record for the schedule of times to issue IMPORTMAIL commands. The master dictionary entry is called AF (a proc) and the program it runs in the PS.BP file is called AF2.

AF.CONFIG

The file with the specific times to "fetch" the mail. This file is read once when the program AF is run. If you change an entry it will not take effect until you stop and restart the background job AF. If run inside the gateway with AUTOFETCH=ON then changes are picked up without stopping and restarting anything.

All lines beginning with a "*" are considered comments.

Recognized keywords: EVERYDAY, MONDAY, TUESDAY, WEDNESDAY, THURSDAY, FRIDAY, SATURDAY, SUNDAY, WEEKDAYS, WEEKENDS

Specific days of the week override EVERYDAY

Example AF.CONFIG

```
* The following line says "Starting at 9:30 am, auto fetch the email
* every 90 minutes till midnight."
*
WEEKDAYS=9:30,90,R
```

AFLIST

This record holds the email address information needed to open up mailboxes. This record is created and maintained by the IMPORTMAIL (A command and not edited directly. Use the (A option to add info to AFLIST and (R to remove information. If you delete this file then no email will be fetched automatically. Also if a mailbox password changes, don't forget to change AFLIST by reissuing the proper IMPORTMAIL command with (A.

Example AFLIST update

```
>IMPORTMAIL fred abcd mail.global.com FRED (A
Retrieval request added to autofetcher
```