UUPC/extended version 1.12b
Installation and User Reference

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Table of Contents

Introduction 1
Copyright 1
Viewing on a terminal 1
Revision 1
Licensing, Redistribution, and Warranty 3
Terms and Conditions for Copying, Distribution, and Modification 3
NO WARRANTY 4
General Information 7
Software Copyright 7
Overview 8
Introduction 8
Who Should Use UUPC/extended 8
System Requirements 9
Required Reading 9
Special Notes 10
Mailing List 10
Registering 11
Problems 11
Frequently Asked Questions 11
Installation 15
New Installations 15
Ingredients 15
Before you begin 17
Copying files 18
Configuring UUPC/extended 19
Upgrading UUPC/extended 29
The Fine Art of Chat Scripts 29
Permissions Files 31
When Things Go Wrong 32
UUPC/extended Command Reference 35
Command Descriptions 35
COMM34 36

EXPIRE 37
FMT 38
GENSIG 39
MAIL 40
NOVRSTRK 47
RMAIL 48
RNEWS 52
SU 55
UUCICO 56
UUCLEAN 59
UUIO 60
UUCP 61
UUNAME 62
UUPOLL 63
UUPORT 66
UUSTAT 68
UUSUB 70
UUX 71
UUXQT 72
WAITING 73

UUPC/extended Configuration Files 75
The UUPC/extended UUPC.RC and [userid].RC files 75
Modem Files 87
Introduction 87
Modem File Guidelines 87
Valid Fields in Modem Files 88
Boolean Options in Modem files 92
Supplied Modem Files 93
The UUPC/extended SYSTEMS file 96
Introduction 96
Time 97
Call Grades 98
Protocols 99
Scripts 100
Multiple entries in the SYSTEMS file 100

Advanced Installation and Configuration Topics 103

Changing how mail is addressed and delivered 103
Overview of RMAIL 103
Using Alias Files, Forward Files, and the HOSTPATH file 104
The User Alias File 104
Implicit User Alias Processing 106
The System Alias File 106
The FORWARD File 107
Controlling routing for Entire Systems and Subdomains 108
Overview of Mail Routing 108
Routing Mail via Non-Default Mail Servers 109
Preventing Mail For the Local Domain From Leaving the Local System 110
Aliasing Systems Via the HOSTPATH File 110
The Ever So English Sport of Site Hiding 110
Using UUPC/extended As A Mail Gateway 111
Using UUPC/extended Under Windows 3.x 112
Using UUPC/extended Under OS/2 and Windows NT 113
Using UUPC/extended on a LAN 113
Configuring using Universal Naming Convention (UNC) names 113
Specialized Communications drivers 114
General Advice on Multitasking Environments 114
Passive polling 115
Modifying your SYSTEMS, PASSWD, and PERMISSNS files 115
Test your machine's new configuration 116
Test having their machine call yours 116
UUPC/extended and FOSSIL Drivers 117
When things go wrong 118

How to Get UUPC/extended 121

How to Register UUPC/extended 129

Changes From Previous Versions 135

Introduction

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Viewing on a Terminal

This document includes overstrikes for printing on a printer. To read this document on-line, extract the program NOVRSTRK from the UUPC/extended optional programs archive and issue the following command;

```
NOVRSTRK UUPCDOCS.PRN UUPCDOCS.TXT
```

You can then browse the terminal ready version of the document, UUPCDOCS.TXT. **However,** given that this document is well over 100 pages long, you'll want to either print it or have a good search function handy.

Revision

This is the 3rd revision of this document, and applies to UUPC/extended version 1.12b. This document was last updated on September 24, 1993 by Katherine Derbyshire. Even if you have read previous versions of this document, **General Information** on page 7 and **Changes From Previous Versions** on page 133 should be reviewed for updates.

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Honorable mention goes to Snuffles P. Bear, who says to please send chocolate. Warm thanks to Russell Nelson, who, among many other services rendered, did so.

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Overview

Greetings from Kendra Electronic Wonderworks!

UUPC/extended is a PC based version (and pun of) UUCP (UNIX-to-UNIX copy). UUPC/extended is a program which implements peer-to-peer networking using the UNIX UUCP protocols. MS-DOS, OS/2, Windows 3.x, or Windows NT-based personal computers using these protocols can exchange mail and files with a UNIX system, another UUPC/extended system, or other systems using UUCP over dial up or dedicated phone lines.

Introduction

This document provides information on UUPC/extended version 1.12b, produced by Kendra Electronic Wonderworks with contributions from around the globe. UUPC/extended is based on the free widely distributed interim version of UUPC, version 1.05, written by Stuart Lynne, Richard H. Lamb, and Samuel Lam, in Vancouver, BC. The MS-DOS version of UUPC is no longer maintained in Vancouver; UUPC/extended 1.12b is the official current release of UUPC. The differences between UUPC/extended and UUPC version 1.05 include user aliases, routing to multiple hosts, dial in support, limited domain address parsing and routing, support for the OS/2, Windows 3.x, and Windows NT operating environments, and various improvements in the user interface. Because of these changes, much of what is contained in this document does not apply to the original UUPC 1.05 package.

UUPC/extended is written in C, and compiles with Borland C++ 3.1 under MS-DOS, with Microsoft C 6.0 under DOS, Windows 3.x, or OS/2, or with Microsoft C++ for NT under Windows NT (version 3.1), with one additional module in 8086 Assembler (MASM) for the MS-DOS versions. The documentation is written using Microsoft Word for Windows 2.0.

Minor revisions to UUPC/extended are denoted by changes to the letter suffix on the version number. Minor revisions include only those changes, no matter how great, that allow the user to return to a previous release of UUPC/extended by at most updating the configuration file. Major revisions to UUPC/extended are denoted by a change in the number of the version; a major revision has changes in it which introduce a permanent incompatibility with the previous release. Beginning with version 1.12, major revisions are those which are distributed to the registered user base, whether they introduce a permanent incompatibility or not. See How to Register UUPC/extended, page 127, for details on how to register your copy of UUPC/extended.

For a full description of the changes to UUPC/extended and how they affect upgrading from one release to the next, see **Changes From Previous Versions**, page 133, included in this package. It should be duly noted that there is no version 1.24b at this time. A user was having nightmares in which she didn't have version 1.24b and everyone else did . . .

Who Should Use This Program

As mentioned above, UUPC/extended is a peer-to-peer networking program: your local system and systems it communicates with are on an equal footing in that in general the capabilities and access of the systems are symmetrical. You have complete control over and must be responsible for your own system. Compare this to a client-server set-up such as when you dial-in to a central mainframe or Bulletin Board System on which the System Operator handles the administration (and restricts your access).

One application for UUPC/extended is to provide remote access to a private system or small network, for example allowing a laptop machine access a single remote PC or UNIX system. This requires very little overhead, and may be used for connections needed for just a few days.

A more common use for UUPC/extended is to provide dial-up e-mail access to public networks such as the UUCP network and/or the Internet. When UUPC/extended is used for this purpose then you, as the system administrator, will be responsible for keeping up your own system as a member of the global network community. Related duties include making sure your system calls other systems regularly (including when you are not around), monitoring your links to other systems, registering your system with a central authority such as the UUCP Project and/or the Internet Network Information Center, and other long term tasks.

Because of these tasks, not all people should use a program such as UUPC/extended for general e-mail access. A good rule of thumb is if you do not receive more than one e-mail message a week or do not require e-mail access for more than six months, then you should consider a commercial service such CompuServe, MCI Mail, ATT Mail, or others over setting up UUPC/extended. This reduces the set-up work required on your part and avoids the problems associated with registering and de-registering your system, leaving the system running during absences, and the like.

UUPC/extended should also be avoided if your primary interest is in a server which allows downloading files to other personal computers which do **not** have UUPC/extended or some other UUCP program. UUPC/extended is not intended for interactive logins, the UUCP protocols are not compatible with the protocols (Xmodem, Kermit, etc.) included with most PC terminal emulators, and UUPC/extended security is oriented towards a pre-defined list of known systems calling in regularly. Use a BBS program instead for generic download functions and/or interactive access.

Finally, UUPC/extended should be avoided if you lack the resources, financial or otherwise, to support the program. Installing the program does require some experience in setting up complex systems or a willingness to learn via associates or books. Trying to set up UUPC/extended without experience and resources (such as the Nutshell handbooks discussed below) can cause pain and suffering for a very important person--you.

System Requirements

To install UUPC/extended, you'll need the following:

* A computer running MS-DOS, OS/2, or Windows NT. Under DOS, you need at least 512 KB of RAM and 2 megabytes of hard disk space (for executables, configuration files, documentation, and mail received). For OS/2, Windows 3.x, or Windows NT you need the minimum system configuration plus 2 megabytes of free hard disk space.

* A modem.

* The manual for the modem.

* A text editor. The MS-DOS editor, Windows Notepad, or OS/2 editor will work fine.

* A friend with a machine that does UUCP. This can be a UNIX system, another UUPC/extended or other UUCP clone running on a PC, or a VMS system running DECUS UUCP.

* A copy of PKUNZIP.EXE, version 2.04g or later, or a compatible utility. PKUNZIP is a shareware utility and can be found at almost all archive sites. Consult your local BBS, or get it from wuarchive.wustl.edu.

Required reading

Read **Installation**, page 15, now for installation and upgrade instructions. Users of previous versions of UUPC/extended should also read **Changes From Previous Versions**, page 133, for a summary of changes in the current release. Instructions on using the programs are in **UUPC/extended Command Reference**, page 35.

This document and its companions supplied with UUPC/extended only provide an overview of UUCP connections. The average person wishing to set up UUPC/extended will require a reference such as *Managing UUCP and Usenet*, part of the Nutshell Handbook series by O'Reilly and Associates.[1,2] This book, while not specifically addressing UUPC/extended, includes detailed information on:

Format of the SYSTEMS file
Format of the PERMISSN (Permissions) file
Information on debugging login scripts
Information on registering your site with various networks

For using UUPC/extended, the Nutshell Handbook *Using UUCP and Usenet* will be helpful. It includes topics which are not covered in detail in this documentation.

Special Notes

Previous versions of UUPC/extended also included a file called **simtel.inf** which documented a mail server for retrieving files via FTP at Princeton University. **This server is no longer available, and mail should not be sent to it.** Use listserv@kew.com instead.

Finally, previous versions of UUPC/extended documented an archive server on sun.soe.clarkson.edu. This server has been **replaced** by listserv@kew.com.

Mailing List

A electronic mailing list, uupc-info@kew.com, is open to those interested in UUPC/extended. To join it, send a command of the following format in the body of a e-mail message to listserv@kew.com:

subscribe uupc-info

The List Server also accepts the command:

help

To resign from the mailing list, send mail to the List Server of the following format:

signoff uupc-info

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[1]Kendra Electronic Wonderworks has no connection with O'Reilly and Associates. However, both of these books are on the bookshelf here.

[2]These are available from your local bookstore or software house, or call O'Reilly and Associates at 1-800-338-NUTS, or send them electronic mail at nuts@ora.com. They can also be ordered from Softpro Books. Call Softpro at (617) 273-2919, FAX them at (617) 273-2499, or send them mail at softpro@world.std.com. Kendra Electronic Wonderworks is a satisfied customer of Softpro, but we have no other connection with them, either.

Note: **DO NOT** send requests to be added or deleted to uupc-info@kew.com. Mail sent to this address is automatically forwarded to all users on the list. Questions of an administrative nature which require human attention should be directed to uupc-info-request@kew.com.

Since undeliverable addresses cause mail to be bounced to the list administrator, the administrator reserves the right to drop from the list any user for whom mail is rejected. In many cases, the user will not be notified, since the mail to notify the user will bounce for the same reason the address was deleted in the first place.

Registering

It is now possible to register UUPC/extended. See **How to Register UUPC/extended**, page 127, for the cost and benefits of registering.

Problems

Please report problems with this version of UUPC/extended via electronic mail to help@kew.com. If you are unable to reach Kendra Electronic Wonderworks via electronic mail, mail your problem report to:

Drew Derbyshire - UUPC/extended Help Desk
Kendra Electronic Wonderworks
Post Office Box 132
Arlington, MA 02174-0002 USA

Please include with your problem description listings of the files which apply, including:

UUPC.RC
[*userid*].RC
SYSTEMS
Directory of your UUPC configuration directory.
A log of the applicable program execution, if any. Both UUCICO and RMAIL automatically write logs into the UUPC/extended spool directory.

Note: Passwords and userids can and should be changed in the SYSTEMS file.

No claim is made that the problem will be corrected, or the person reporting the problem will be supplied a copy of the corrected code[3], but reasonable efforts will be made to correct the program. The Wonderworks does not provide telephone support to unregistered users.

PLEASE read the Nutshell handbooks before sending mail.

Questions and Answers

The following is a list of general questions and answers about UUPC/extended. For additional questions related to installing UUPC/extended and general trouble shooting, also see the Question and Answer section in **Installation**, page 15.

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[3]Registered users will be provided an update when a fix becomes available if they explicitly request it. See REGISTER.PRN for details.

Q. Does UUPC/extended support news?

A. In part. The RNEWS distributed with UUPC/extended now correctly decompresses and delivers local news to directories based on the news group name, but the news reader (a port of the UNIX program RN) is still in development.[4]

Q. UUPOLL takes over my entire system when it runs. Can I run it under DOS and still use the system?

A. No, but you can run it under MS-Windows 3.x in 386 enhanced mode, under OS/2, or under Windows NT. DESQView should also work. At the Wonderworks, kendra uses OS/2 2.1, and athena uses Windows 3.1.

Note: If you run UUPC/extended in the background, be sure to enable multitasking support by including "options = multitask" in your UUPC.RC file.

Q. It takes forever for the system to recognize a busy signal on the other end. What can I do?

A. Make sure your modem file includes the **NoConnect** variable to document the strings your modem uses to report failures in the dialing sequence. Consider enabling the option **CarrierDetect** in your modem file.

Q. Can UUPC/extended support multiple users on one system?

A. Yes. Each user should have an entry in the PASSWD file and a copy of [*userid*].RC under a unique name in the UUPC/extended configuration directory. A short command file similar to the sample SU.BAT file provided can be used to change the active user. UUPC/extended cannot prevent users from reading other users' mail or mail queued for another system. This is an MS-DOS restriction.

Q. UUPC/extended is wonderful, but it doesn't run on my (insert non-IBM or NT-compatible platform here).

A. While the original UUPC was targeted for both the Mac and Atari-ST in addition to the IBM, Kendra Electronic Wonderworks only supports the MS-DOS, Windows 3.x, OS/2, and Windows NT environments. Contact Dave Platt <dplatt@snulbug.mtview.ca.us>, on where to find his version of UUPC for the Macintosh. For Amiga systems, try anonymous FTP to wuarchive.wust1.edu. There are no known reliable sources for UUPC for the Atari-ST.

Q. Who is kendra?

A. Actually, that is correctly "What is kendra?" Kendra means "womanly knowledge" in Old English.

kendra originally was an 80286 based Epson Equity III+ running MS-DOS 5.0 and using a second 8088 system as a communications front end. During May of 1992, she was upgraded to a Northgate 386/40 running OS/2 2.1. Her sibling, our documentation system athena, is a Northgate 386/33.

Q. I want users to be able to login and read their mail on my system. Since I can't use COMMAND.COM, what shell should I specify for them?

A. Right idea, wrong question. UUPC/extended is not designed for remote user login. Rather, it is designed to allow routing mail among multiple peer sites, so set up each user as his/her own node. This gives each

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[4]The news support was originally promised for the end of 1991. We admit it, the schedule got blown.

user all the tools of his/her own system when composing mail, and UUPC/extended keeps the time spent on-line to a minimum.

Q. Why does Snuffles want Chocolate?

A. Because Chocolate is happy food. Snuffles is a very happy bear. However, ever since someone sent her 18 pounds of chocolate, she now looks for donations to the Chocolate Ice Cream Fund instead. This leaves us more room in the freezer for more mundane groceries.

Note: Snuffles does still accept[5] Girl Scout Thin Mints.

[5] 10/04/91 Thin Mints!!!--SPB

Installation

New UUPC/extended installations

Ingredients

The following assumes that you have never installed UUPC/extended before. If you are upgrading an existing UUPC/extended installation, skip to **Upgrading an existing UUPC/extended installation,** beginning on page 29.

> **Note:** If installing on Windows 3.x, first install the native DOS version and then add the Windows versions of the UUCICO and associated programs. This both allows debugging in a cleaner environment and provides the needed DOS foundation for running under Windows. See additional information on Windows 3.x on page 111.

Many thanks to David Watt and his sidekick Frederick Bear Watt for assisting with this section and providing the examples, and to Snuffles for reminding us to change the system names to protect the guilty.

To start sending and receiving mail on your system you'll need the following equipment and knowledge:

Equipment:

* A computer running MS-DOS, OS/2, or Windows NT. Under DOS, you need at least 512 KB of RAM and 2 megabytes of hard disk space (for executables, configuration files, documentation, and mail received). For OS/2, Windows 3.x, or Windows NT you need the minimum system configuration plus 2 megabytes of free hard disk space.

* A modem.

* The manual for the modem.

* A text editor. The MS-DOS editor, Windows Notepad, or OS/2 editor will work fine.

* A friend with a machine that does UUCP. This can be a UNIX system, another UUPC/extended or other UUCP clone running on a PC, or a VMS system running DECUS UUCP.

* A copy of PKUNZIP.EXE, version 2.04g or later, or a compatible utility. PKUNZIP is a shareware utility and can be found at almost all archive sites. Consult your local BBS, or get it from wuarchive.wustl.edu.

Knowledge:

* How to copy files.

* How to edit a text file.

Once you've got all of that, follow these steps to prepare for, install, configure, and test UUPC/extended.

Preparing for installation:

1. Review **General Information**, page 7, to make sure UUPC/extended is right for you.

2. Read these instructions.
3. Name your system.
4. Find a UUCP neighbor.
5. Choose your user name.
6. Backup your system.

Installing UUPC/extended on your system:

1. Get the UUPC/extended archives needed for your operating system
2. Make any required directories
3. Copy the UUPC/extended files onto your system.
4. Create the on-line help files for MAIL.

Configuring UUPC/extended process mail and call other systems:

1. Find your modem among the .MDM files.
2. Configure several files:
    1. UUPC.RC
    2. *[userid]*.RC
    3. *[modem]*.MDM
    4. SYSTEMS
    5. PASSWD
    6. PERMISSN
    7. CONFIG.SYS
    8. AUTOEXEC.BAT
    9. *[userid]*.SIG
3. Reboot your system.

Testing the new installation:

1. Check your configuration via UUNAME.
2. Check your PERMISSNS file via UUXQT.
3. Send mail to yourself.
4. Check the PC <--> modem connection
5. Check the PC <--> modem <--> modem <--> mail server connection
6. Send remote UUCP mail.

Then you'll be up and running! Each of the steps is discussed in more detail below.

Before you begin installing

1. **General Information**, page 7, contains important information explaining what UUPC/extended will and will not do. It also discusses the responsibilities inherent in running a UUCP site. Please read it before proceeding further.

2. Read all of these instructions before doing anything. Trust us, you'll be glad you did.

3. Your machine needs a name. The name should be all lowercase, since many operating systems are not case-sensitive. If you plan to connect to the outside world, the first six characters of the name need to be unique over all of Usenet. This isn't precisely true, but it's close enough, and the truth is more complicated -- if you're interested in the details, buy a copy of *Managing UUCP and Usenet*, published by O'Reilly and Associates. Actually, go buy it anyway, and please read it before asking questions. **General Information**, page 7, has some suggestions on where to find this and other useful books. See **RFC1178.TXT** for some considerations to keep in mind when choosing a system name.

   Example: Fred chose the name "toscis" for his machine, in honor of Snuffles' favorite ice cream.

4. Find a friend who has a machine which supports sending and receiving UUCP news and mail. Your friend must also be pals with the system administrator of the machine, or someone else who has the power to add accounts to the remote system.[6] They will have to add an account for your system and configure the remote UUCP to acknowledge its existence and permit your system to log in and exchange mail.

If you're looking for a UUCP system to connect your machine to, you might try local universities and local software companies for friendly volunteers. The connection at the Wonderworks, for instance, is provided courtesy of a machine belonging to the EE department at a local university. If you have Usenet access, you might peruse comp.mail.maps for the names of local systems and their administrators who might be willing to give you a feed.

If you are willing to pay money, there are a variety of commercial organizations willing to take it from you. One to try is Performance Systems International. Send mail to info@uu.psi.com.

   Example: Fred uses a feed from Kendra Electronic Wonderworks, which is known in the UUCP world as kewgate. Snuffles assigned toscis an account on kewgate called "Utoscis". The name is conventional -- Ukewgate, Uflopsie, and Uzzyzyx are several accounts on Fred's machine, for some of his neighbors to log onto his system.

5. You need to choose a user name for yourself. This name does not have to be unique or anything, but you will need it for some of the configuration of UUPC/extended yet to come. It should be composed only of valid DOS file name characters and should have eight characters or less.

   Example: Fred's user name on toscis is fbwatt. Our resident Plush Platinum Programming Polar Bear's[7] user name on kewgate is snuffles.

6. Backup your system. If you do not regularly backup your system, this is an excellent time to start. Again, trust us.

---

[6] Specifically, someone has to have the power to add **legal** accounts to the remote system and to configure their mailer to recognize you. This is not the time for knowing people in low places.

[7] And I'm cute, too!! [S.P.B.]

Copying UUPC/extended files onto your system.

1. To install UUPC/extended, you need to get the specific archives needed for your system, as outlined in the table below.

UUPC/extended includes nearly two dozen executable files for each operating system. The files should be placed in their own directory to allow easy upgrades. This directory should then be added to your MS-DOS, OS/2, or Windows NT PATH variable. The program will assume that you have used the following standard directories for the binaries:

Operating System	Standard directory name for executable files.	Archives Need To Install [8]
DOS	\UUPC\BIN	upc12bd1.zip upc12bd2.zip upc12bd3.zip upc12bad.zip
Windows 3.x	\UUPC\WINBIN	upc12bw1.zip upc12bw2.zip upc12bw3.zip upc12bad.zip
OS/2 16 bit (for OS/2 1.x)	\UUPC\OS2BIN	upc12b11.zip upc12b12.zip upc12b13.zip upc12bad.zip
OS/2 32 bit (for OS/2 2.x)	\UUPC\OS2BIN	upc12b21.zip upc12b22.zip upc12b23.zip upc12bad.zip
Windows NT	\UUPC\NTBIN	upc12bn1.zip upc12bn2.zip upc12bn3.zip upc12bad.zip

2. Make directories for the UUPC/extended files. You need to make the base directory (\UUPC)[9], a directory for the sample files (\UUPC\SAMPLES), if you have not unpacked them elsewhere already, a directory for the binary files, and a public directory (\UUPC\PUBLIC)[10].

Example: kewgate has both OS/2 (16 or 32 bit) and DOS versions of UUPC/extended installed. The DOS files are in E:\UUPC\BIN and the OS/2 files are in E:\UUPC\OS2BIN.

Example: Toscis runs the MS-DOS and Windows NT operating systems. Fred put the UUPC/extended DOS executables in C:\UUPC\BIN, the Windows NT executables in C:\UUPC\NTBIN and the documentation in C:\UUPC\SAMPLES. He built the directories at the C:\> prompt this way:

---

[8]The archives upc12ad3.zip, upc12aw3.zip, upc12a13.zip, upc12a23.zip, and/or upc12an3.zip can be omitted if you do not require the ability to receive and expire news from remote systems.

[9]You can actually use different directory names for the configuration and other directories through out this installation procedure, and not all the directories even need to be on same hard drive. However, this makes installation more complicated, and you can change it later after it works.

[10]The public directory is where your UUCP neighbors would send you files via the UUCP command. The directory must exist because UUCICO and UUXQT's initialization of internal security tables will otherwise print warning messages.

```
C:\> mkdir \uupc
C:\> mkdir \uupc\bin
C:\> mkdir \uupc\ntbin
C:\> mkdir \uupc\samples
C:\> mkdir \uupc\public
```

3. Unzip the archives. (Type "pkunzip" at the DOS prompt for instructions on how to unzip files.)

Example: To uncompress the documentation archive and program archives for MS-DOS and Windows NT, here's what Fred did:

```
C:\> pkunzip upc12bad.zip \uupc\samples *.*

C:\> pkunzip upc12bd1.zip \uupc\bin *.*
C:\> pkunzip upc12bd2.zip \uupc\bin *.*
C:\> pkunzip upc12bd3.zip \uupc\bin *.*

C:\> pkunzip upc12bn1.zip \uupc\ntbin *.*
C:\> pkunzip upc12bn2.zip \uupc\ntbin *.*
C:\> pkunzip upc12bn3.zip \uupc\ntbin *.*
```

4. Convert the printed formatted documentation for mail to on-line help files. This requires running the program NOVRSTRK against the MAIL.PRN and TILDE.PRN.

Example: Fred ran NOVRSTRK on both of the files:

```
C:\> \uupc\bin\novrstrk \uupc\samples\mail.prn \uupc\mail.hlp
C:\> \uupc\bin\novrstrk \uupc\samples\tilde.prn \uupc\tidle.hlp
```

All the files you need are now on your system.

Configuring UUPC/extended after installation

Here's where you earn your daily chocolate by configuring the system for basic local mail and dialing out to other systems.[11] The chart below summarize the files to be updated and their functions. All of the files must copied from the samples directory (\UUPC\SAMPLES) to their permanent happy home in the UUPC/extended configuration directory (\UUPC) except as noted.

File name	Function
UUPC.RC	System UUPC/extended configuration file, it defines both required and optional information which is the same for all users of the local system, and default values for individual users. This includes the local system name, the name of its mail server, directory names (if you are not using the defaults), and selected performance parameters.

[11] UUPC/extended can also be configured to accept incoming calls, to process Usenet news, and to tap dance, but we're trying not to confuse the issue here. All large software systems that work start from small systems that work. See ADVANCE.PRN for further information on more complex configurations.

[userid].RC	User UUPC/extended configuration file, it defines both required and optional information for one user. A customized copy of this file exists under a unique name for each user of the system. This file is sometimes referred as the PERSONAL.RC file.
[modem].MDM	Defines the command strings used to initialize, dial, and answer with your modem. It also contains selected protocol information for UUCP connections made using the modem. The file is referenced by entries in the SYSTEMS file. **Note:** You may need more than one modem file if you use your modem to connect to more than one type of remote modem.
SYSTEMS	This file defines the system names, times to call, device (modem file) to call with, phone number, and login script to use when calling other systems.
PASSWD	This file defines the user ids, names, and home directories of the users of your system.
PERMISSN	This file defines the access remote systems have to your disk and what programs a remote systems may direct UUXQT to run on its behalf.
AUTOEXEC.BAT	Under DOS and Windows NT, this sets environment variables for your PATH (where to find programs), the location of the UUPC.RC file, the location of the *[userid]*.RC file, and the local time zone. **Note:** This file resides in the root directory of your hard drive.
CONFIG.SYS	Under DOS, this file is used to define how many files can be open at once; under OS/2, this is used in place of AUTOEXEC.BAT to define the environment information listed above. **Note:** This file resides in the root directory of your hard drive.
[userid].SIG	This file is included automatically at the end of each piece of mail you send, providing return address information. **Note:** This file resides in your home directory, defined by the variable **Home** in your [*userid*].RC file. See step **2**, page 21, for further information.

1. The first file to copy and edit is UUPC.RC, the UUPC/extended system configuration file. This file defines the system name and associated parameters which make your system unique.

The fields are described in the sample UUPC.RC file itself, and additional optional fields are documented in a second sample file, UUPCBIG.RC.[12] Their uses are summarized below, along with the settings for toscis. You must set the fields described below. All other fields in the sample UUPC.RC file, such as the **options=** lines, can be left alone.

---

[12] A third sample configuration file, UUPC.KEW, is the live configuration file for kendra.kew.com.

Field name	Description	Example
Nodename	The simple nodename you chose for your machine.	toscis
Domain	The fully qualified domain name for your machine. If you are just starting out, this will be your machine name, with the suffix ".UUCP".	toscis.cambridge.ma.us[13]
Mailserv	This is the name of the machine to which your outbound mail gets sent. This will be the name of the machine belonging to the friend you found up in step 2.	kewgate

Here is toscis's completed UUPC.RC file, provided as an example.

```
Nodename=toscis
Domain=toscis.cambridge.ma.us
postmaster=fbwatt
Mailserv=kewgate
MailExt=SPB
InModem=TB2500
options=nobang nodirectory multiqueue dot multitask
```

Note: toscis has some additional fields defined in its UUPC.RC. We left them in this example to remind you that UUPC/extended configuration can be made more complicated if you choose to.

2. The second file to edit is the *[userid]*.RC file, defining personal configuration options.

The *[userid]*.RC files are used to configure UUPC/extended for individual users. To configure your own *[userid]*.RC file, copy the file \UUPC\SAMPLES\PERSONAL.RC to \UUPC*[userid]*.RC, where [*userid*] is your user name.

Example: Fred's personal configuration file is called FBWATT.RC, and is located in C:/UUPC on toscis.

Edit the following fields in the *[userid]*.RC file:

Field name	Description	Example
Mailbox	Your user id.	Mailbox=fbwatt
Name	Your real name	Name=Frederick B. Watt
FileSent	Name of a file which all outgoing mail is to be logged.	FileSent=Outgoing
Signature	Name of a file which will be appended to each message sent.	Signature=fbwatt.sig

---

[13]Fred registered his domain with the .US domain mapping project, which is discussed in UUNETDOM.INF.

Home	The default directory UUPC/extended uses for files (including the FileSent and Signature Files) for your user id.	Home=C:\fbwatt

The descriptions in the sample PERSONAL.RC file explain these fields. If you include a Signature (*highly* recommended) and an Alias file, you will need to create these files as well. See step **9** on page 26 of this section for information on creating a signature file. See **The User Alias File**, page 104, for a discussion of alias files.

If multiple users are to share the same system, create multiple customized copies of the *[userid]*.RC in \UUPC, each with a unique name such as "TOM.RC", "DICK.RC" or "HARRY.RC".

Example: Fred's completed FBWATT.RC file looks like this:

```
editor=emacs %s
FileSent=Outgoing
Home=c:/fbwatt
Mailbox=fbwatt
Name=Frederick B. Watt
options=autoedit
Signature=fbwatt.sig
```

3. You must next decide which modem configuration file (*[modem]*.MDM file) best describes your modem, or write one. See MODEM.TXT for a complete list of supplied modem files.

Copy the modem file for your modem from the \UUPC\SAMPLES directory to the \UUPC directory.

Note: If none of the supplied samples is appropriate, then you will have to start with one of them, or with the sample modem configuration file (SAMPLE.MDM), and customize it for your modem. We explain how to customize modem files in **Modem ([modem].MDM) Files**, page 87, and in **The Fine Art of Chat Scripts**, on page 29.

Once you copy the *[modem]*.MDM file, replace the port listed on the "Device=" with the communications port to which you connected your modem.

Note: If using a modem on DOS and your modem is on port COM3 or COM4, you may need to run the COMM34 utility. Refer to the description of COMM34 in **UUPC/extended Command Reference**, page 36, for details.

4. You must copy and edit the sample SYSTEMS file, which defines the system names and when to call out to them. The file is described in detail in **The UUPC/extended SYSTEMS file**, page 96. It must be copied from \UUPC\SAMPLES directory to the \UUPC directory. Delete all the entries you do not need.

A typical line in the SYSTEMS file contains these fields, defined in more detail by the table:

system Time MODEM speed telephone protocol script

Field name	Description	Example

system	Name of the system to call. Any system you call or are called by must be listed at least once in this file. You may include the same system more than once if you have multiple phone numbers for it.	kewgate
Time	When to call. "Any" is what it says, "Night" and "Evening" refer to night and evening phone rates[14] respectively. "Never" is used for a system which only calls you. **Note:** See the Nutshell handbooks for a further explanation.	Any
MODEM	Name of the modem file (without the .MDM extension) used to call this system.	TB2500
Telephone	Telephone number to call	1-617-641-4817
p (protocol)	Protocol to use when calling. If you don't know what these are, then leave the "g" alone if your mail server does not run UUPC/extended 1.11x or above, or change it to "v" if it does. The "g" protocol is widely supported, "v" is faster but only supported by newer UUPC/extended systems.	g
script	Login script for the system.	gin:--gin: Utoscis ssword:--ssword: AppleJuice

Example: Toscis's SYSTEMS file entry for kewgate looks like this:

kewgate Any TB2500 19200 1-617-641-4817 g gin:--gin: Utoscis ssword:--ssword: AppleJuice

Copy this line into your SYSTEMS file, and do the following:

* Replace "kewgate" with the name of your mail server.
* Replace "Any" with the time to call.
* Replace "TB2500" with the name of the modem configuration file (.MDM file) you are using.
* Replace "1-617-641-4817" with the phone number of the mail server you arranged a feed from in step **4** of **Before you begin installing**, page 17.
* Replace "g" with the letter(s) of the UUCP protocols your mail server supports.

---

[14] Specifically, the AT&T night rate is in effect from 11 PM to 8 AM every day, and from 11 PM Friday to Sunday at 5 PM. The UUCICO definition for Evening includes the times allowed for Night plus 5 PM to 11 PM everyday.

* Replace "Utoscis" with the name your friend in step **4** of **Before you begin installing**, page 17, gave you for use on their system. Replace "AppleJuice" with the password your friend gave you.

For simple connections, these should be all of the changes you need to make to this file. For more complex connections, refer to **The Fine Art of Chat Scripts**, page 29, below.

5. You must also create a \UUPC\PASSWD file, which defines the local users. This file is nearly identical in format to the /etc/passwd file used on UNIX systems.

The PASSWD file serves two purposes. If you have several people reading mail on your system, it is used to assign them default directories and mail files. Entries in the PASSWD file also control whether remote machines can log in to your system to send and receive mail themselves.

> **Note:** The home directories and user names in the PASSWD file must match the same entries in the *[userid]*.RC files.

Copy the PASSWD file to the \UUPC directory, and then replace the sample users with your local users. This file defines the name and home directory of each local user, and the user id and password for remote users (systems) logging in using the following format:

mailbox:password:*special*:group:name:home:shell

More specifically:

Field name	Description	Examples
mailbox	User id to receive mail locally or login remotely. This should be from 1 to 8 valid DOS characters. For local users, this should be the same as the mailbox field(s) of the [*userid*].RC file(s).	fbwatt postmast
password	Ye ole security field. A * in this field means that no remote logins are allowed for that user. For instance, a local user is not able to login via phone lines.	* AppleJuice
special	This field contains the user id number on UNIX systems. UUPC/extended uses it to play music or otherwise make noise to announce incoming mail from remote systems if desired. The format of the field is tone1, length1, tone2, length2, and so on, where "tone" is the frequency in hertz and "length" is the time the tone is to sound in milliseconds. If the final length is omitted, the final tone will sound for 500 milliseconds. A special tone is 0, for silence.	*(empty)* 2000,250,1000,250
group	This field is the group id on UNIX systems, but is not used by UUPC/extended.	*(empty)*
name	The real human name of the user. For local users, this field is included in mail headers if no other name for the user is known.	Frederick B. Watt

home	Home directory for this user. Used only for local users. Default is /UUPC/PUBLIC, which is a lousy choice. **Note:** This field should match the **Home=** field for the user in his *[userid]*.RC file.	/u/fbwatt
shell	Login shell for remote users. The default is to perform normal UUCP processing. **Note:** Use of shells other than UUCICO is beyond the scope of this document.	*(empty)*

At first, you should need only two lines in your PASSWD file. The following example can serve as models.

Example: tosci's PASSWD file looks like this, with entries for Fred himself and the postmaster:

```
fbwatt:*:::Frederick Watt:c:/u/fbwatt
postmast:*:::Postmaster:c:/u/postmast
```

Replace fbwatt with your user name, and "Frederick Watt" with your name. Replace "c:/u/fbwatt" with the Home directory given in your *[userid]*.RC file. Leave the postmaster entry in the file (you can choose a new home directory), it exists to catch any failed mail.

6. The \UUPC\PERMISSN file is identical in format to a file called Permissions available on some UNIX UUCP systems. The file format is explained in detail in *Managing UUCP and Usenet*.

The PERMISSN file is used to control where remote systems are permitted to read and write files on your system. For a simple configuration where you only call a mailserver and no machines call your system, your PERMISSN file should look like this:

```
MACHINE=kewgate SENDFILES=yes REQUEST=yes
```

Replace "kewgate" with the name of your mail server, managed by your friend in step **4** on page 17.

For more complex configurations refer to the section **Permissions (PERMISSN) Files**, on page 31.

7. Under DOS, you need only update CONFIG.SYS if it does not exist, exists but does not have a FILES= line in it, or the FILES= is less than 20. In any of these cases, add or replace the following line to your CONFIG.SYS, or create a CONFIG.SYS in the root directory of your boot disk or diskette if you currently do not have one:

```
FILES=20
```

Note: If you already have a FILES= line in your CONFIG.SYS, it should read at least 10 and should be raised to 20. If the number is greater than 20, then do not lower it.

If you are using OS/2, then you must update CONFIG.SYS in the same way you would update AUTOEXEC.BAT under DOS. Under Windows NT, you don't need to modify CONFIG.SYS at all.

8. AUTOEXEC.BAT is executed by MS-DOS whenever you reboot your system and by Windows NT at login. UUPC/extended needs three environment variables set, which is best done by adding some commands to your

AUTOEXEC.BAT file. At the bottom of your AUTOEXEC.BAT file, add the following lines. If you are running OS/2, add the same lines to your CONFIG.SYS file.

```
set UUPCSYSRC=c:\uupc\uupc.rc
set UUPCUSRRC=[userid].RC
```

But instead of writing [*userid*] on the second line, use your user name, the same as in the *[userid].*RC file you wrote above. You'll also need to set TZ, your local time zone. Sample TZ variable SET commands are as follows:

SET TZ=CST6CDT	Central Standard Time, 6 hours behind GMT, with daylight savings
SET TZ=EST5EDT	Eastern Standard Time, 5 hours behind GMT, with daylight savings
SET TZ=EST5	Eastern Standard Time, but no daylight savings change
SET TZ=GMT0	Greenwich Mean Time, no offset, no daylight savings
SET TZ=MST-3	Moscow Standard Time, 3 hours ahead of GMT, no daylight savings
SET TZ=MST7MDT	US Mountain Standard Time, 7 hours behind GMT, with daylight savings
SET TZ=PST8PDT	US Pacific Standard Time, 8 hours behind GMT

Your mileage and time zone may vary. Note that time zones ahead of GMT use a minus sign in front of the hours offset.

You'll also need to edit your path variable. Fred, who put his UUPC/extended files in C:\UUPC\BIN, added the line:

```
PATH=%path%;C:\UUPC\BIN
```

at the bottom of the file. In DOS, you must make sure the path does not exceed 128 characters. Under OS/2, the file you need to edit is CONFIG.SYS. There is no path size limit under OS/2, but the path must be on one line and cannot use variables. Under OS/2, Fred would simply append ";C:\UUPC\OS2BIN" to his existing path.

> **Note:** Several of the programs, including UUCICO and UUXQT, change directories as required to search for spool files. Because of this, programs such as RMAIL and (if used) RNEWS must be in your path. Having them in the current directory is not sufficient.

9. For each user, customize the *[userid].*SIG file, and copy it to the 'Home' directory defined in *[userid].*RC for that user. This file is appended to all outgoing mail for the user to provide a boiler-plate signature with the user's reply address. If this file is not installed, then the line in the *[userid].*RC file describing it must be commented out with a pound sign (#) in column 1.

> **Note:** Especially for users of new systems, it is strongly advised that you do create a signature file and include in it your name, electronic mail address, snail mail address, and telephone number.

This extra information is needed for a person to contact you if your electronic mail address cannot be replied to.[15]

Example: Here's a typical (boring) signature:

Fred Watt -- N1HMB — Home: 617-555-9956
fbwatt@toscis.cambridge.ma.us — Work: 617-555-4330

10. Reboot your system. This allows your changes to your AUTOEXEC.BAT/CONFIG.SYS to take effect.

Congratulations! If you've done all of these things, you're ready to start using your UUPC/extended configuration.

Testing

1. Begin testing by running the UUNAME program.

Just type uuname at a system prompt to prove your configuration is valid. This will a) die gloriously or b) display a list of known systems (the remote systems you listed in your SYSTEMS file). If it dies, the error message you get should provide some clues. Check the necessary configuration files and try again.

2. Run UUXQT to check the PERMISSNS file information.

Type uuxqt at a system prompt. This will a) die or b) print a copyright message and exit. If it dies, there is a problem with your PERMISSNS file and the error message you get should provide some clues. See **Permissions (PERMISSN) Files**, page 31, for more information about PERMISSNS files.

3. Send mail to yourself.

Perform this test to convince yourself that UUPC/extended can send mail. At the system prompt, type:

```
C:\> mail -s "Test message" postmaster
? Test
? .
Abort, Continue, Edit, List, or Send? Send
```

Note: The "." only works as a message terminator if the "dot" option is set in your UUPC.RC file. Otherwise, you have to use Ctrl-Z.

You should then receive the message:

Delivering mail from [username] to postmaster

If you don't, the error messages should provide some clues as to why UUPC/extended was unable to deliver the message. Correct the necessary configuration files and try again.

3. Test the PC <-> modem connection.

---

[15]Recently, help@kew.com was sent the same query multiple times by a user with an invalid return address. He failed to include his telephone number or other address in his note. Thus, neither his original query nor the follow-up letters asking why the original query was not answered could be replied to.

Perform this test to convince yourself that your modem responds to commands. Using a telecommunications program such as Kermit, send some commands to the modem. Just sending AT (attention) to the modem, and getting "OK" back,[16] is good enough.

4. Test the PC <-> modem <-> modem <-> mail server connection.

Perform this test to convince yourself that your computer can talk to your mail server, and that you can log in to the mail server using the user name and password your friend back in "**Before you begin installing**", step **4**, on page 17, gave you. Using a telecommunications program like Kermit, dial up the remote system and try to log in. The remote system should give you a message like "Shere=[*mailserv*]". If you succeed, hang up[17] and go on to the final step. If the remote system does not recognize your account for some reason, talk to the friend who gave you the account and find out why.

5. Try sending remote UUCP mail.

If you succeed at this, your system is able to properly receive and send electronic mail. At the system prompt, type the following:

```
C:\> mail -s "Test message" postmaster@[mailserv].UUCP
? This is my first message.  When you receive it, please reply.
? .
Abort, Continue, Edit, List, or Send? Send
Delivering mail from [userid] to postmaster via [mailserv]
```

but instead of typing "[*mailserv*]," on the first line, substitute the name of your mail server, exactly as you entered it on the "MailServ=" line in your UUPC.RC file.

> **Note:** For full instructions on using the mail program, see the description of MAIL in **UUPC/extended Command Reference**, page 40.

If all goes well, you should be able to enter a message and send it off, with the UUPC/extended mail program giving you messages like those above.

Then, dial out to the remote system:

```
C:\> uuio -s all
```

And watch the connection. With luck, you will have just sent your first UUCP mail message. Welcome!

---

[16] This assumes your modem is a Hayes Smartmodem compatible. If it's not, you already knew this since you long ago discovered numerous programs only work with Hayes modems and clones, and know better than to type AT to wake up your modem.

[17] If you want to drive the Sysadmin nuts, type (with no spaces):

```
Ctrl-P S snuffles Ctrl-Shift-@ Enter
```

which will tell the remote system your system is snuffles (and make it hang up since it doesn't know you). Otherwise, just make the modem hangup via a terminal emulator command or the Big White Switch, since the remote system won't let you logout without answering the prompt.

Upgrading an existing UUPC/extended installation

Follow these steps to upgrade.

1. If upgrading from a release of UUPC/extended prior to 1.11a, you must clear your spool directories of files before installing the new release. In general, this is done by invoking UUIO for the previous release to deliver any queued files to other sites.

2. If upgrading from MS-DOS to Windows 3.x, OS/2, or Windows NT, create new directories for the new operating environment binaries.

3. Uncompress the new executables and documents. Be careful not to overwrite your customized configuration and batch files with the supplied sample files. See page 18 for the list of files to uncompress for your operating system.

4. Read **Changes From Previous Versions**, page 133, for changes related to the newest release. In many cases, **Changes From Previous Versions** includes documentation of new options and configuration file variables before any other documents.

5. Earlier versions of UUPC/extended have different user-customizable variables. Type "uuname -x 2" to see a list of missing or obsolete variables in your configuration files.[18] Update as needed. Look at **UUPC/extended Configuration Files**, page 133, to see what the new variables do.

6. If you are upgrading from a release of UUPC/extended previous to 1.10a, delete the old communications module, UUIO.EXE; this has been replaced by UUIO.BAT, UUCICO.EXE and UUXQT.EXE.

7. If you are converting from a release previous to 1.10a, you must update the SYSTEMS file to the newer format. You must also write a PERMISSN file. See the sample files for details.

8. If you are upgrading from a release of UUPC/extended prior to 1.11s, delete the old version of UUPOLL, UUPOLL.COM. This has been replaced by UUPOLL.EXE.

9. If you are upgrading from a release of UUPC/extended prior to 1.11p, delete the old version of UUXQT, UUXQT.COM. This has been replaced by UUXQT.EXE.

10. If upgrading from a release previous 1.12a, see the new section Modem *([modem].MDM)* Files beginning on page 1 to determine if you should update your modem file(s).

11. If running Windows on top of DOS, you may optionally install the Windows version of UUPOLL, and UUCICO and UUPOLL. See 111 for additional Windows information.

12. Based on **Changes From Previous Versions**, page 133, and other documentation, update your configuration to exploit any new features of UUPC/extended you find useful. In particular, if using the OS/2 version of UUPC/extended, consider setting the **undelete** option in your UUPC.RC file.

The Fine Art of Chat Scripts

Setting up the chat scripts used in the SYSTEMS and modem [*.MDM] files is the hardest part of setting up UUPC/extended. The easiest way to think of chat scripts is as a dialogue between the local system running

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[18] We know 1.11v didn't work with this option. We fixed this, honest.

UUPC/extended and a modem or remote system. The script consists of a series of strings sent to the modem/remote system alternating with the expected response to those strings.

For example, a modem file needs to contain an initialization sequence, which will look something like this:

```
"" "" "" \pATZ OK \dATX4&D2 OK
```

Since that line looks awfully intimidating at first, we'll break it down into its component parts.

"" An empty string. The first one is a flag marking the start of the script and showing that nothing is expected from the modem.

"" The second empty string sends nothing followed by an automatically appended carriage return so that the following statements will start on a new line.

"" The third empty string indicates that no response to the second one is expected.

\p Wait 0.4 seconds to allow the modem to catch up.

ATZ This command resets a Hayes-compatible modem to its stored profile. Again the carriage return is appended.

OK The response from the modem showing that it has been reset.

\d An escape sequence which produces a two second delay to give the modem time to recover from the previous input.

ATX4&D2 A modem initialization string. Contents of this string depend on your modem and desired options. As always, a carriage return is appended.

OK The modem responds that it has been initialized and is ready to dial.

The complete list of escape sequences supported by UUPC/extended follows. The empty string ("") is used on input. All other strings are recognized on output only. Quotation marks may be used on input or output to enclose a string which includes whitespace. The list includes:

""	Expect a NULL string. May also enclose a string which includes whitespace.
BREAK	Send BREAK
\b \B	Insert Backspace
\d \D	Delay two seconds.
\c \C	Omit carriage return at end of string
\m \M \r \R	Insert carriage return
\n	Insert newline
\p \P	Delay four tenths of a second
\t \T	Insert tab character

\s \S	Insert space character
\Znnnn	Set serial port speed to nnnn in the range 300 to 38400[19]
\nnn	Convert the numeric octal string nnn to a single character and transmit it
\\	Insert a backslash (\)

One other special syntax exists. To allow for alternate output when an expected string is not received, hyphens in an expect string delimit alternate output to be sent, such as:

"" "" ogin:--ogin:--ogin:

If a login prompt (ogin:) is not received by the standard time-out period (generally, 30 seconds, but configurable in the modem file), the string between the hyphens (nothing, followed by the appended carriage return) is sent; if no response is received, the sequence is repeated one more time.

If your chat script doesn't work, check and make sure that you have allowed delays between transmissions to allow the modem to recover. Failure to include needed delays can cause dropped characters and is one of the most common mistakes made by new chat script writers.

Permissions (PERMISSN) Files

Each system you contact must be defined in a PERMISSN file located in the UUPC/extended configuration directory. In the permissions file, systems can be classified by whether they are called out to, dial in to the local system, or both. Permissions files define which directories and commands are accessible to the remote system. They are discussed in more detail in *Managing UUCP and USENET*.

For your own protection, think carefully before giving a remote system read or write access outside of the default (\uupc\public, \uupc\spool) directories. Think *very* carefully before giving write access to anonymous logins.

Systems you call out to must have a MACHINE entry, such as

MACHINE=pandora

This defines the existence of the machine "pandora", and grants it default permissions. These permissions include the ability to execute RMAIL and RNEWS, and the ability to send files to the spool directory. If the additional keyword REQUEST=yes is added to the MACHINE statement, then the remote system may also read and write files in your public directory, which defaults to \uupc\public or can be redefined by the variable **PubDir** in the UUPC.RC file.

Systems which dial into you must have a LOGNAME entry, such as:

LOGNAME=userid VALIDATE=system SENDFILES=YES

---

[19] the maximum port speed is 57600 under Windows NT and 32 bit OS/2.

This allows host "system" to login as user id "userid" with the same default permissions as described above. It further allows your system to transmit files to the other system even though it called you (SENDFILES=YES)[20]. However, to run UUXQT they must also have a MACHINE entry, because UUXQT does not look at LOGIN entries.[21] Thus, to handle the general case of a system calling you to deliver mail, both of the above entries must exist in the permissions file, but they can be combined:

```
LOGNAME=userid VALIDATE=system MACHINE=system SENDFILES=YES
```

The remote system can be granted access to additional directories and programs through the use of additional parameters on the LOGNAME and MACHINE statements; these are documented in *Managing UUCP and Usenet.*

If you allow anonymous logins, an entry should also be placed in the PERMISSN file for the system "*anonymous". Such an entry might look like this:

```
LOGNAME=nuucp MACHINE=*anonymous REQUEST=yes READ=~/ NOWRITE=~/
```

This allows anonymous UUCP systems to login as nuucp (provided nuucp has an entry in your PASSWD file), and to read but not write to your **PubDir.**

> **Note:** One difference between the PERMISSIONS file as defined in the Nutshell Handbooks and as implemented in UUPC/extended is that only one user id may be specified per LOGNAME entry in UUPC/extended. This restriction is a security feature to prevent one system from logging in as another.

PERMISSN files can be difficult to set up and use, so don't be alarmed if you have some trouble at first.

When Things Go Wrong

If you have difficulty getting a connection to your mail feed working the first time, don't worry. Almost everyone has to spend a bit of time ironing out the crinkles in a new connection. You may wind up spending time on the phone with your mail server system operator trying to get things to work. Don't worry.[22] UUCP is just like that sometimes. There are several places in UUPC/extended where problems can crop up.

Here is a list of some symptoms you might see, and where to look for solutions:

Q. UUCP on your remote host keeps sending you messages about RNEWS exiting normally, and you want the messages to go away.

A. The sending host should set the -n flag for the UUX command which generates the RNEWS command for you.

Q. A mail message created in the editor is sent, but the signature is not appended.

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[20]The default, carried over from UNIX, is that files are only transmitted when you are the calling system. This means that SENDFILES=YES is not needed on a MACHINE statement.

[21]This is because UUXQT runs and processes eXecute files after UUCICO has terminated. As UUCICO has terminated, there is no way to tell if the file were delivered by an outbound or inbound telephone call, so UUXQT treats the file as if it were from an outbound call.

[22]Well, actually, you can worry, but try not to panic. "Calm down, it's only 1's and 0's".

A. Your editor is appending a Ctrl-Z to the file before the signature is appended. Disable that "feature," or use a different editor.

Q. When you start a UUPC/extended application, it displays a message like "environment variable UUPCSYSRC must be specified," or "User configuration parameter "mailbox" must be set, "then exits.

A. You need to set the UUPCSYSRC and UUPCUSRRC environment variables. See step **8**, page 25, under **Configuring** UUPC/extended **after installation**, above.

Q. When you start up UUCICO, it displays a message like: "Invalid host id in c:/uupc/permissn, MACHINE=[name]; Unable to initialize security," then exits.

A. The PERMISSN file and your SYSTEMS file are inconsistent. There is an entry in your PERMISSN file which does not match a corresponding system in the SYSTEMS file, a userid which does not appear in PASSWD, or a directory does not exist. See steps **4**, **5**, and **6** in **Configuring** UUPC/extended **after installation**, page 19, above.

Q. When you start up UUCICO, it displays a message like: wanted "OK" got ??? "ERROR????" then exits.

A. You have a problem with your modem file. Check your UUPC.RC file (for incoming calls) or SYSTEMS file (for outgoing calls) to make sure you're using the .MDM file you think you are, then check the lines in the file to find the one that gives your modem problems. Try "uucico -x 4" to see more information as UUCICO processes the script. Also, try using a FOSSIL driver to reduce the chance of lost connections. See also **The Fine Art of Chat Scripts**, page 29.

Q. When you try to connect to the remote machine, it refuses the connection, even though you were able to dial in with another telecommunications program.

A. This could be one of several things, most of which could be due to errors in the entry in your SYSTEMS file for your mail server. See part **4** in **Configuring** UUPC/extended **after installation**, page 22. Or, you could have given your system a different name in your UUPC.RC file than the mail server expected. See part **1.** in **Configuring** UUPC/extended **after installation**, page 20.

Q. UUPC/extended will connect but will not exchange data with another system, What's wrong?

A. Any number of things, which is why you should seek additional information from either a UNIX guru or the Nutshell Handbooks. However, one hint is that any programs communicating via the UUCP "g" protocol must have a clean eight bit connection. A seven bit even parity connection or a connection with software (X-ON/X-OFF) flow control will ruin your whole day. If you can login as a normal user to the remote system, you can use the STTY command to determine the parity and flow control settings. Also, make sure the **variablepacket** option does **not** appear in your modem file. Q. After UUPC/extended picks up my mail, UUXQT tries to deliver it and fails with a message "PERMISSION DENIED". What's wrong?

A. A good chance is that UUXQT cannot find RMAIL. Any program invoked by UUXQT must be in the path. Placing a command in the directory UUXQT is invoked from is not enough, because UUXQT changes directories as it runs.

Q. When UUPC/extended logins the remote system, the remote delivers **Shere** as the first message and then **RLOGIN** as the second message. Why doesn't UUPC/extended like this second message?

A. The full answer (or at least the full list of the possible error responses to the second message sent to the remote host) is listed in *Managing UUCP and USENET***.** Suffice to say the **RLOGIN** means that the

remote system does not know your system. This is caused by your system being missing from the remote's **USERFILE**, **L.sys**, **Systems**, or **Permissions**[23] files.

Q. I get dropped characters in the login script when running the DOS version of UUPC/extended under OS/2. How can I fix that?

A. Run the OS/2 version or use an OS/2 FOSSIL driver. The DOS version doesn't handle it well when a multi-tasking operating system steals its time slice. The problem also occurs when running the DOS versions under Windows, and can be corrected by using the Windows version of UUPC/extended instead.

[23] A single system will not have all these files. For example, a UUPC/extended system or a system running the BNU version of UUCP will have **Permissions** and ~~Systems~~.