

## Changes From Previous Versions

### Appendix 3: Changes From Previous Versions

This file summarizes most changes made to UUPC/extended since release 1.11q. Please contact Drew Derbyshire, [help@kew.com](mailto:help@kew.com), for information on changes previous to the scope of this document or other questions.

#### Versions 1.12a through 1.12b Revision Summary

David M. Watt <[dmwatt@smersh.cambridge.ma.us](mailto:dmwatt@smersh.cambridge.ma.us)> tested many of the new functions in the release and provided numerous bug fixes, including all the Windows NT fixes. Kai Uwe Rommel <[rommel@ars.muc.de](mailto:rommel@ars.muc.de)> also provided many bug fixes, and keeps threatening us with more, especially for RNEWS. Special credit for 1.12a also goes to Robert Denny <[denny@alisa.com](mailto:denny@alisa.com)> for the Windows support discussed below.

#### Bug Fixes

The mail routing functions cheerfully routed mail to a non-local system by writing mail in an invalid spool directory if routing overrides existed for the target system. Corrected various interactions in file ADDRESS.C to clear up the improper routing and an associated problem with the non-detection of aliased systems.

RMAIL sometimes throws an internal error (reporting not enough mail delivered) after calling Bounce() to bounce mail. Corrected by insuring Bounce()'s deliveries are counted.

RMAIL would fail to bounce mail properly if the program had been renamed to other than RMAIL. Corrected by saving the program name for recursive invocations by Bounce().

The MAIL short help (?) command incorrectly reported that the minus sign (-) was an alias for the non-existent "previous" command when in fact it is an alias for the alive and well "up" command.

When running MAIL, users defined in the PASSWD file with no name would be entered into the local nickname table anyway, causing their name to appear as "?????" when replying to them. Changed LoadAlias() to suppress such addresses.

If the UUPC/extended configuration directory was the root directory of a drive, such as a network drive set aside for

UUPC/extended, then derived directory names were incorrectly made  
10/04/93 - 173 -

## UUPC/extended 1.12b Installation and User's Reference

relative directories by omitting the first slash (/) in the name. Corrected normalize() to not drop the required slash.

If the run time library fullpath() function failed to return the full path of a file, normalize() returned a NULL even though its callers did not check for this special value. Corrected normalize() to call panic() if the full path of a file could not be determined.

In version 1.11z **only**, if a file was transferred to other than the spool directory (normally using the UUCP command on the local or remote system), UUCICO changed directories for the transfer and then did not restore the original working directory. This resulted in files for mail and news being delivered to the Public directory rather than the Spool directory. Corrected in expand\_path() to pop all directory pushes.

If a file to be opened for reading was temporarily busy and the multitask flag was active, FOPEN() failed to wait for the file to become free. Corrected to spin for the same length of time as a file to be opened for writing.

Temporary files names were always generated starting with a sequence number of zero. This guaranteed extra overhead when multitasking because of duplicate file names. Corrected mktempname() to begin sequencing file names with the program's process id obtained from getpid().<sup>69</sup>

If the sequence file for the spool directory job identifier was unavailable, the job id generated was always 1; this could cause duplicate jobs to be generated in a multitasking system. Corrected getseq() to use the program's process id obtained from getpid() for the next sequence id if the sequence file was unavailable.

<sup>69</sup>This call actually works out to be the address of the program under DOS. However, this at least allows programs invoking one another (RMAIL from MAIL, for example) to use different sequence numbers.



## Changes From Previous Versions

A known host in the local domain was not recognized if the case of the host's domain did not match the local domain case. Made host comparison case insensitive in checkname().

Under Windows NT, the host status file was generated with a different format than under DOS. Corrected via MS C #pragma statement in HOSTABLE.H to pack data structures.

Under Windows NT, attempts to abort any UUPC/extended program which was trapping Ctrl-C, prompting for permission to abort, and which had its standard input redirected met with dismal failure. Corrected in SAFEIO.C and SAFEOUT.C by explicitly opening the console to ask permission to abort.

If a program could not open a log file, it reported this interesting fact with a NULL pointer for the file name. Corrected to use the real file name.

Under OS/2, over length invalid mailbox names could be generated if the **directory** option was set. Corrected by limiting the mailbox name to eight characters in mkmailbox().

Non-existent directories listed in the PERMISSN file caused security initialization to abort for UUCICO or UUXQT, even when those directories would be automatically created by UUCICO. Changed messages in InitDir() for such missing directories from errors to warnings.

The creation time of files was incorrectly reported by stater(), affecting when news files were expired after a restore of a directory under OS/2. Corrected stater() to return the last update time.

UUCICO prioritized outgoing packets over incoming acknowledgments, resulting in a possible backup of requests to resend data. gsendpkt() is corrected to always look for at least one acknowledgment. (Fix by Robert Denny.)

If invoked without a time to terminate, UUCICO printed a nonsense time for when it would exit. Corrected message in callin() to indicate UUCICO would run until explicitly killed.

UUSTAT loaded the host status file before processing its command line options, making it difficult to debug problems detected during the loading. Moved the host status load to after the options are parsed.

10/04/93

- 175 -

## UUPC/extended 1.12b Installation and User's Reference

The OS/2 version of UUCLEAN.COMD failed to age files if one or more generations of the file was under the length to age files. Corrected to merge larger files with the under length files.

The login script processor wrote to the communications driver layer one character at time. While this was as efficient as any other method with the DOS COMMFIFO driver, it requires additional system calls for blocked I/O drivers such as FOSSIL, OS/2 and Windows NT. It was highly inefficient for network communications drivers such as TCP/IP or named pipes. The script processor has been modified to buffer writes unless the user has requested a delay between each character.

Errors caused by multiple programs trying concurrently open the same log file were corrected.

Applied patch to Borland C++ 3.1 library to cause system stat() call to release memory after use. Also added new debugging information to ndir.c to assist tracing network related failures of UUXQT.

UUX failed to format commands properly for execution on remote UNIX systems. Corrected by Richard H. Gumpertz, <rhg@cps.com>.

**Note:** For another UUPC/extended system to execute most UUX commands, UUXQT must perform additional processing which is not yet implemented. Thus, the UUX command remains unsupported.

### Enhancements

Katherine Derbyshire, Dave Watt, and Drew Derbyshire rewrote and expanded the documentation into a large manual. The simplified installation is documented with additional examples, various configuration file formats are documented in a new section, a new section on advanced configuration topics has been added, and the entire manual has been reorganized. Please send comments on the documentation to docs@kew.com.

Kai-Uwe Rommel supplied code to cause a 16 Bit OS/2 UUCICO listening on port to give up the port to either another UUCICO processing dialing out. The port can also be released and restored through a newly supplied utility program, UUPORT.

Dave Watt wrote TCP/IP support for Windows 3.x and Windows NT.

Ported OS/2 version to 32 bit API's using Borland C++ for OS/2. The 16 bit version continues to be available.

Added "t" protocol for TCP/IP connections.

Added OS/2 named pipe support.





## Changes From Previous Versions

Added support for Windows 3.x via Borland C++ 3.1 EasyWin environment provided by Robert C. Denny <denny@alisa.com>. Changes include native Windows communications driver for UUCICO, Windows external program invocation support, Windows directory search functions, Windows delay functions, and numerous small changes in support of these enhancements. Additional changes including required MAKEFILE support, isolating external program invocation, support for `Win16.` prefix in configuration files, and other minor clean up performed by Drew Derbyshire. Also added new Boolean option `windows`, which when used in Windows environment causes RMAIL and RNEWS to be invoked with file input (`-f`) flag to allow invoking without file redirection.

Added support for Universal Naming Convention (UNC) path names and Lantastic Networks. Specifically, `normalize()` is modified to allow double leading slashes indicating a UNC name and to pre-pend the logical UNC name as required to file names. In addition, various file opens are modified to revert slashes to backslashes for system and/or routines which cannot handle forward slashes in names.

Added new `-B` command option to UUPOLL. When used, the specified command is executed before each active poll out. If this command exits with a non-zero return code, UUPOLL itself immediately exits.

UUPC/extended distribution archives are now being packed with the public domain ZIP 1.9 program. Previously, the first generation PKZIP was used. Due to the explosion in the number of versions, the archives have also been renamed as documented in the revised HOWTOGET to include a letter identifying the environment each archive is for.

A new documentation archive with the documents pre-formatted for a PostScript printer now exists.

Long names are now better supported under OS/2 and Windows NT HPFS and NTFS file systems.

Added (actually further modified undocumented) supported for Universal Naming Convention (UNC) names.

### Version 1.11z Revision Summary

#### Bug Fixes

When UUSUB was invoked with the clear (`-c`) option, it wrote the cleared status file to the `SpoolDir` rather than the new directory for the file, the `ConfDir`. Corrected this oversight in `hostrset.c`. Also corrected reset of start of the collection time.

10/04/93

- 177 -

## UUPC/extended 1.12b Installation and User's Reference

RNEWS **snews** mode processing failed to process input files in binary mode. Corrected by forcing all input to be read in binary mode.

Corrected expand\_path() so that path names beginning with tilde (~) need not end with a slash (/). This mostly affects UUCP file transfers.

Corrected scrsize() to sanity check BIOS values for the screen size on systems running versions of DOS previous to DOS 4.0. Previously, invalid screen sizes were not trapped on such older systems, causing the internal pager to require input after every line.

Corrected address parser to include the percent sign (%) in an address as an indicator of a non-local address. Previously, such addresses were handled as invalid local users.

Corrected bounce() processing to not recursively deliver mail to an invalid address such as the local postmaster.

Corrected system alias processing to use configuration directory as current directory rather than a possibly invalid user home directory pointer. Also inserted altered system alias processing to call expand\_path() to allow using ~user syntax in system alias include files.

Correct RMAIL to not use a debug level less than zero when initializing, which caused configuration failure messages to be suppressed (resulting in RMAIL beeping and dying without offering a clue as to why).

Corrected bug in UUPOLL which caused the program to spin for one second spitting out messages about waiting for zero seconds before running the daily clean up command.

Bill Plummer provided fix to **COMMFIFO.ASM** serial port driver to provide delay after selected modem command operations to allow slow modems to respond.

Corrected bug in **syslog** processing which caused the file to be prematurely closed and never reopened if **multitask** was not set.

When UUX generated a command for a remote system, it requested the command file be sent before any data the command needed. Corrected this to sent the data first.

### Enhancements

Added -t option UUCICO to cause tracing of data received or sent

to various communications drivers to the file LINEDATA.LOG in the  
-178- 10/04/93

## Changes From Previous Versions

Spool directory. Previously, an undocumented feature would cause this tracing to be performed if the file already existed.

Added multiple parallel communications drivers support to UUCICO, and added new drivers for via FOSSIL and ArtiComm controlled ports under DOS. The FOSSIL support is enabled by installing a FOSSIL port driver (not supplied) and adding the keyword:

```
suite=fossil
```

To the modem (\*.MDM) file for the affected port. Likewise, an ARTICOMM supported port is enabled by providing a **suite=articomm** keyword in the modem file for the port.

Rewrote **syslog** processing to display requester of a file, the remote system involved, and host (UNIX format) name. The local (DOS) name is dropped from the log file. [Many thanks to Mark W. Schumann <mark@whizbang.wariat.org>, who provided the articomm driver.]

Added optional global keywords:

```
Systems=      and  
Passwd=
```

to UUPC.RC file. These keywords define non-default locations of **SYSTEMS** and **PASSWD** files. This allows unique (dummy) copies of these files to be used for client workstations without passwords on shared network environments. The default location for these files remain in the UUPC/extended configuration directory.

Added new option keywords **senddebug** and **honordebug**. In their default state, UUCICO neither transmits the current debug level to the remote system when calling, nor does it use the debug level sent by the remote system called.

**Note:** The previous behavior was to not send the current debugging level but to honor the remote system's debug level.

Renamed **hpfs** option to **longname**, which more accurately describes its (as yet unimplemented) processing in support of longer file names on any file system which supports them.

Added new UUPC.RC keywords **banner=** and **motd=**, which define files displayed to remote users by UUCICO. If defined, the file named as the **banner** is displayed before the login prompt. Likewise, if defined the file named as the **motd** (message of the day) is displayed after a successful login **only** if the login shell is not UUCICO.

Modified loading of the **PASSWD** file to use the configuration directory drive as the default when determining the drive letter for home directories. This allows omitting the drive letter

within the PASSWD file.  
10/04/93

- 179 -

## UUPC/extended 1.12b Installation and User's Reference

Added new OS/2 command file, `GETUUPC.COMD`, which is called by the other OS/2 scripts to determine UUPC/extended configuration information.

Made post-login startup message time out configurable.

### Version 1.11y Revision Summary

Bless Snuffles for she has sinned. She failed to keep track of all the contributors of bug fixes and enhancements for the 1.11y release. But you know who you are, bless you all ...

### Bug Fixes

Dropped the beta test port of RN 4.3. We're working on porting the newer RN 4.4, but neither source nor object for this is included in 1.11y.

Corrected bug in configuration processor which assumed all tables (i.e. the modem configuration table) were as long as the master configuration table.

Added specific error message for when local host name was improperly added to SYSTEMS file. Formerly, UUCICO died gloriously with a (incorrect) message about a memory shortage in `dcpsys.c`.

Corrected configuration processing to load UUCP spool related variables for RNEWS. Previously, RNEWS failed to load such information and thus ignored overrides of the default character set.

Modified directory search functions to support longer file names used by non-FAT (non-DOS) file systems and to return file time and size information to the caller. This implicitly fixes problems with programs such as EXPIRE running out of memory when running on network drives due to bugs in the Borland C++ `stat()`

call, which no longer has to be used as much.

Modified UUCICO status file processing to lock the status file to avoid overlapping updates. Previously, race conditions could cause the file to be reset by mistake.

Corrected `printmsg()` to use unique buffer for time stamp

information in log file. Formerly, the default static buffer used by various subroutines would be overwritten with the current time when logging.

Made return codes from RMAIL more unique to allow better debugging of failed mail.





## Changes From Previous Versions

In RNEWS, redid processing performed by SNEWS option to make it even dumber.

Rewrote RNEWS batched news processing to correctly process files under 512 bytes. Formerly, such articles and all articles following were dropped.

Upped maximum length of news group names in RNEWS to keep it from dying when brain dead lusers create news groups with excessive length names.

Corrected OS/2 WAITING command to load needed subroutine packages before using them.

Corrected UUPOLL bug which caused it to exit with a return code 0 no matter how it was terminated.

Corrected UUPOLL bug which caused it to not terminate at the correct time if both the -e and -f flags were specified.

Added fix to COMMFIFO.ASM from William Plummer to fix incorrect assembly of references to COMMFIFO error counts.

Modified UUCICO 'g' protocol processor to use FAR memory for packet buffers to reduce number of out of memory errors under 16 bit DOS and OS/2 compilers.

Modified UUCICO 'g' protocol processor to correctly negotiate packet sizes with remote systems, thus allowing the remote system to send the local system larger packet than the local system can send the remote. (Error pointed out by Ian Taylor.)

Corrected sample modem files to NOT enable VariablePacket processing by default.

Corrected UUCICO to not update host status if host information was not initialized during a passive poll.

Corrected **syslog** option to only set buffering once for the log file if not multi-tasking. This bug caused 1.11x to repeatedly report that SYSLOG file was not found when, in fact, it was fine.

Corrected UUCICO modem processing to flag that graceful shutdown was needed for OS/2 versions of UUCICO. Previously, it exited immediately without closing the serial port.

Corrected UUCICO modem processing to invoke carrier detect processing whenever the modem connects. This was previously missed for hot logins invoked using the UUCICO -w flag.

Corrected UUCICO carrier detection processing for OS/2 communications driver. It previously OR'ed modem status information rather than AND'ing it, allowing a half-ready modem to appear ready.

10/04/93

- 181 -

## UUPC/extended 1.12b Installation and User's Reference

Modified UUCICO to trap unique error code returned by SIO serial port driver under OS/2 when interrupted. Interruptions of the DosRead() system call are not really errors, and the default

error message alarmed Snuffles.

Corrected UUSTAT to not de-reference NULL pointers when killing queued jobs.

### Enhancements

Dave Watt <dmwatt@smersh.cambridge.ma.us>, with assistance from Evan Ross <evan@valentine.com>, made numerous additional changes to round out the Windows NT support. One visible change is that lines in UUPC.RC and [userid].RC can be prefixed with WIN32. to cause the line to take effect only under Windows NT.

The **ConfDir** variable is now optional. If the **ConfDir** is omitted from UUPC.RC, its value is taken from the directory for the UUPC.RC file specified in the UUPCSYSRC environment variable.

The directories (except the user's home directory) in the UUPC.RC and [userid].RC file can now be omitted or made relative to the **ConfDir**. If omitted, they are assumed be sub-directories of the **ConfDir** with default names. The user's home directory may be relative to the **ConfDir**, but it must not be omitted.

Added new configuration variables **OS2.priority** and **OS2.prioritydelta**. These specify the OS/2 priority of UUCICO when connected in the range 1 through 4, and a sub-priority of 0 through 62.

Added new Boolean option **bounce**. When enabled, this causes undeliverable mail to be returned to the sender (as determined by UUXQT and/or by the UUCP From line) with a copy to the local Postmaster.

William Plummer <plummer@theme.com> made various additional changes to the test driver for DOS COMMFIFO package.

Per request of Katherine Derbyshire <docs@kew.com>, modified GENSIG to print out a more useful message about the quote selected, specifically including the output file name.

## Versions 1.11w through 1.11x Revision Summary

### Bug Fixes

Corrected bug in local delivery routine which failed to detect a letter followed by a colon in a FORWARD file was the beginning of a path name. This fix was supplied by Russ Nelson.



## Changes From Previous Versions

Modified internal pager to not scroll top line off the screen when the display is aborted.

Corrected **RMAIL** usage message to display all the operands allowed by the command's rich syntax. Fix supplied by Russ Nelson.

Modified chdir() to attempt directory change before invoking mkdir() to build the directory to change to. This should be faster, since a directory will always exist after the first chdir() to it.

import\_path() mangled valid paths under certain conditions.

Modified the routine to properly convert path names with a single character in the path and/or terminated by a slash.

Corrected import\_newsgroup() to not pad the numbers generated as part of names of DOS news articles. Fix provided by Kai-Uwe Rommel.

Corrected via spool directory search routines to correctly handle interrupted searches when a connection to a host is lost. Previously, if a search was not determined to be interrupted, export\_path() would catch the bad file name and abort the program ... usually.

Corrected included strlwr() function to lower case the string, not upper case it. This problem only affected users using unsupported compilers which lacked this function in their run time library.

Modified RNEWS to not shadow or otherwise process an empty compressed input file. Also corrected the file name in various error messages related to uncompress processing.

Modified RNEWS to report when it has to delete an article, and to summarize number of articles dropped.

Modified RNEWS to report specific error messages via prnterr() when it is unable to process a file.

Modified RNEWS to write news in the proper news directory when the **snews** flag is set. Fix supplied by Kai-Uwe Rommel.

Applied numerous minor fixes to RNEWS supplied by Kai-Uwe Rommel.

Corrected EXPIRE to properly expire one news group via the -n

flag. Fix supplied by Kai-Uwe Rommel.  
10/04/93 - 183 -

## UUPC/extended 1.12b Installation and User's Reference

UUPOLL would be confused by 25 hour days caused by the end of Daylight Savings Time and attempt to poll continuously during the last hour of such a day. Corrected UUPOLL to realize not all days are created equal, and to correctly compute the next poll as the first poll of the following day.

Altered numerous files to be unbuffered, saving on memory and reducing memory to memory copying of data.

Deleting extra lock files was a major performance hit under OS/2 with UNDELETE processing enabled. Corrected UUCICO and UUXQT lock processing to not lock systems without reason.

Suppressed closing UUCICO warning message about unable to connect to remote when the program was only answering the phone.

Made UUCICO 'G' protocol use packets of fixed size to be more compatible with System V Release 4 UUCP.

Made unique entries in the modem (\*.MDM) file for entries for the 'g', "G", and "v" protocol options. Also added **largepacket** modem file option for "g" protocol to enable large packet processing under this protocol.

Added new UUCICO 'v' protocol, which is 'g' protocol with optionally large (512) byte variable length packets. This protocol is only supported by other UUPC/extended systems.

Corrected two problem with 'g' protocol start-up, from problem descriptions provided by Ian Lance Taylor, author of Taylor UUCP. Both fixes provide for insuring one system does not get ahead of the other, that is one system thinks it has initialized the connection when the other has not.

Corrected UUCICO to not abort when fields are missing from the SYSTEMS file. This was based on an original fix by Eugene Nesterenko, Moscow, Russia.

Corrected various UUCICO start-up error messages to display at debug level 0, not 1. Thanks to Bill Plummer for pointing this out.

UUCICO would previously reject anonymous UUCP connections if the local system was running a high debug level. Corrected UUCICO to not confuse local and remote debug levels.

Modified UUCICO to use a single data transfer buffer for data input and output as well as a command buffer, thus allowing this buffer to be bigger.

Modified UUNAME to accept the debug level (-x) option. This was embarrassing since the upgrade instructions specifically said to use this option to determine obsolete keywords in the UUPC.RC file.





## Changes From Previous Versions

Corrected UUXQT to send mail to the originator of a UUX job, not the local postmaster. Also corrected UUXQT to not mangle the dummy input file name NUL and then be unable to open the mangled name. Fixes supplied by Charles R. (C. R.) Oldham of Arizona State University.

Corrected UUSUB to reset the starting time of statistics collection when clearing all totals.

Corrected UUXQT to report **why** RMAIL dies, not just that it failed.

Corrected RMAIL to not close its own log file, instead leaving this task to the common logging functions.

## Enhancements

Dave Watt ported the entire source to Windows NT. Note this platform has been not been tested, and executables are not supplied at this time. Problems are specifically known to exist in creation of the HOSTSTATUS file.

Dave Watt also wrote DESQView support. UUPOLL and UUCICO give up the CPU when idle.

Added a number of new sample configuration sample files, including a sample PERMISSN file and copies of several files used on kendra.

Modified configuration file routines and expand\_path() to use run time library supplied functions to normalize directory paths. This allows determining the path on drives other than the current drive.

**Note:** Because of this change, placing floppy diskette drive letters in the PERMISSN file can cause the system to hang when it attempts to determine the current directory on the drive.

Rewrote the OS/2 versions of UIIO, UUCLEAN and WAITING commands into REXX, made enhancements including using the UUPC/extended environment variables and aging files based on size.

Added MAILCHEK command from Evan Champion <evanc@uuisis.isis.org> to provide running report of mail waiting in an OS/2 window using Visual REXX. (This command does not exist under DOS.)

Modified FOPEN() to automatically retry failed file opens for 20 seconds if the error is a sharing violation. Also modified openline() and lock\_system() to not use this retry processing.

10/04/93

- 185 -

## UUPC/extended 1.12b Installation and User's Reference

Moved **HOSTATUS** file from spool directory to configuration directory, and moved news **ACTIVE** file from news directory to configuration directory. This allows easily backing up these files without backing up the news or spool directories.

Modified majority of permanent string allocations to use newly written routine strpool(), which allocates memory in larger

blocks, thus bypassing malloc() space overhead. Routine also

searches duplicates in strings to avoid allocating the same string twice. If running at debug level 2 or above, a summary message of the memory used (and saved) is printed. Also, added new boolean option **SpeedOverMemory** to bypass the duplicate string scan on slower systems.

Wrote support for a system wide user aliases file. This file, used only by **RMAIL**, allows forwarding for users and/or mailing lists to be defined without adding the local address to the **PASSWD** file, resulting in improved efficiency for other programs which use the **PASSWD** file such as **MAIL** and **UUCICO**. Use of the system wide alias file also eliminates the need for dummy home directories containing forward files, resulting in 4 kilobytes disk savings per forwarded user. This support was based on a prototype supplied by Russ Nelson.

Modified **MAIL** to print the numbers of items deleted by the **delete** command on one line to keep the screen from scrolling madly. Also, items previously deleted are not listed a second time.

Added number items in the mailbox to the **MAIL status** command.

Added "**Path:**", "**Lines:**", and "**References:**" to the list of items ignored by the internal mail pager used by the **print** command.

Under **OS/2** and **DOS 4.0** or above, the internal pager now uses the true screen size to determine the number of lines to scroll. This allows exploiting 50 line **VGA** screens or odd-sized **OS/2** windows.

Modified loading of **ACTIVE** file by news processing to not build directories for empty news groups. So long as the target directories are built by the routine posting news (i.e. **RNEWS** uses fopen()), then the directories will be created on demand.

Enhanced **EXPIRE** to report bytes and articles processed, including totals for data purged, moved, or left eating disk space. Running **EXPIRE** at debug level 2 (**-x 2**) will report this information on a per group level.

Modified **UUPOLL** to report when the **UUCLEAN** command is scheduled to next run at startup.



## Changes From Previous Versions

Modified UUCICO processing enabled by the `syslog` option to work with the `multitask` option. Specifically, the SYSLOG is only opened when needed in multitasking mode and closed immediately.

Modified OS/2 communications support to show communications port errors in English. Also added a `ShowModem()` function to OS/2

communications support to show modem status in English.

Under OS/2, increased modem recover time from 0.5 seconds to 2.0 seconds after hanging up the telephone.

## Versions 1.11u through 1.11v Revision Summary

### Bug Fixes

Modified `ImportNewsGroup()` import articles by number rather than name.

Corrected internal copyright statement displayed at program startup. Also changed protected mode program start up message to report protected mode rather than include Big Blue's registered trademark.

Modified RMAIL to better hide sites which put their full domain address on their UUCP From line.

Modified RMAIL to use the domain name and not the UUCP name for requester name when generating requests to remote systems.

Corrected standard FOPEN processing to use correct sharing flags. Previously, it allowed multiple writes to the same file.

Corrected default choice of the `LocalDomain` variable to use at least two levels in the domain, that is if the system domain name is "kew.com", don't use "com" for the `LocalDomain`.

Changed protected mode linkage editor from LINK386 to LINK, as some people reported problems running on older versions of OS/2, and DOS systems don't have a LINK386.

### Enhancements

Modified option `multitask` to also enable locking of systems for UUCICO and UUXQT, preventing multiple calls to the same system at once, and to log into temporary files, merging these files into the master logs at the end of program execution.

Mike McLagan <mmclagan@invlogic.com> contributed call grading support for UUCICO via Systems file and calling grading option (-

g). See Managing UUCP and Usenet for use of call grading. The  
10/04/93 - 187 -

## UUPC/extended 1.12b Installation and User's Reference

changes made by the Wonderworks have not (alas) been fully tested. Also added option **symmetricgrades** to request grade specified on command line be transmitted to remote system when actively polling, an option which is not in Managing UUCP and Usenet.

Changed **UUCICO** to accept a time to run (-d hhmm) rather than the older poll interval (-u) option. This allowed shortening the code required to compute the time to answer the telephone and made it more reliable.

Modified **EXPIRE** to report number of files and bytes purged.

Modified **MAIL** alias command to report routing of addresses fed it.

Translated OS/2 error number for sharing violation to English "Port in use message" in OS/2 communications library.

Added **noundelete** option to disable OS/2 highly inefficient undelete processing for programs running under UUPOLL.

## Version 1.11t Revision Summary

### Bug Fixes

Added new global option **multitask**. This option enables the following:

When **MAIL** is invoked to read the system mailbox for a user, the mail is automatically merged into a private mailbox for the user in the user's home directory. This reduces the possibility of updates to the system mailbox while the user is reading mail.

**UUCICO** updates the status file used by **UUSTAT** whenever the status of a call is updated.

Changed standard file open function **FOPEN()** to use shared open under both DOS and OS/2. All read only files (such as the systems file) can be read by multiple programs this way.

Modified **expand\_path()** to support expanding relative paths on non-default drives via standard library calls.

Modified mailbox routines to truncate mailbox names to eight characters to prevent file open errors under OS/2.

Corrected bug in OS/2 directory search routines to not double append slashes to directory names.





## Changes From Previous Versions

Modified printmsg() to use standard output if logfile stream is closed for an unexpected reason.

Corrected bug in **ValidateCommand** to correctly validate when a user is allowed access to all commands on a host.

Modified ddelay() to force enabling interrupts under DOS; this is a work around for a bug not in UUPC/extended, but rather in the DOS **mirror** command which sometimes appears to not enable interrupts after saving the location of a deleted file.

Added traps in MAIL for over length addresses, which formerly caused UUXQT and/or RMAIL to fail in unexpected ways.

Modified alias functions to build local aliases via the local **FromDomain** name used in return addresses, not the local real domain address.

Corrected "Purging news message" to correctly report RNEWS was purging news, not archiving it.

Added trap to checktime() to check over length time fields in the Systems file.

Dropped attempts by 'g' protocol module in UUCICO to close and reopen port if no activity occurs on port for specified time. (This action had caused COMMFIFO to drop carrier.)

Corrected UUCICO login prompt to display the OS/2 version number as "2.0" and not "20.0".

Modified rmsg() to not zap the 59th byte of a 50 byte buffer;

this caused logins to fail under OS/2 with 1.11s. Instead, the actual buffer length is now passed in to the program.

Corrected UUCICO transfer engine to use internal temporary file name generation rather than standard library routine, which sometimes generated files in the root directory.

## Enhancements

Added support DOS. and OS2. prefixes to options in the configuration files. Thus, editors and other options can be set differently for DOS and OS/2 environments on same system.

Added ability to define obsolete keywords in the UUPC.RC file, which keeps the configuration routines from complaining when testing new releases. Obsolete keywords are reported as obsolete at debug level 2 and higher.

10/04/93

- 189 -

## UUPC/extended 1.12b Installation and User's Reference

Added additional status flags to hostable and associated status messages for UUSUB and UUSTAT. The full list of possible status reported by UUSTAT are now:

- (invalid - entry not properly initialized)
- (local host system)
- (host for gateway purposes only)
- Never called
- Dialing now
- Invalid device or speed in SYSTEMS file
- Device not available
- Conversation start-up failed
- Talking
- Callback required
- Modem initialization script failed
- Dial failed
- Script failed
- Max retry reached
- Retry time not reached
- Call succeeded
- Wrong machine name
- Unknown host
- Failed
- Wrong time to call
- (call succeeded, entry not reset)

Modified UUCICO to not prompt for confirmation of shutdown if it is not doing anything. (I.e., it is waiting for phone to ring.)

Added global option **collect**, which causes RMAIL to report size of mail items delivered.

Altered RNEWS default archive period of seven days to zero days. News is thus completely purged after seven days.

Added new variable to configuration files, **Uncompress**, to define program to run to decompress news. Normal usage would be:

```
Uncompress=compress -d %s
```

Which runs a standard compress program in uncompress mode against the file name specified.

**Note:** Compress is not included with UUPC/extended.

Corrected name of file that compressed news reports to have been copied to in RNEWS.

Added kludge to RNEWS to allow copying of ALL compressed news received to a second system. By setting the DOS or OS/2 environment variable **UUPCSHADOWS** to a list of locally known systems, the compressed input to RNEWS is queued for the second system as well.



## Changes From Previous Versions

**Note:** This "feature" will be removed in the next real release of UUPC/extended when real news support is added.

Modified GENSIG to maintain a list of recently used quotes and not repeat them until 90% of the available quotes have been used.

Added new alternative log file name flag (`-l logname`) to change name of log file used by UUCICO. Simple file names are written in the UUPC spool directory, and files with path names are written as specified.

**Note:** The special name NUL will suppress logging to a file. Because the spool directory contains sub-directories for each remote system, the alternative log file name MUST NOT be simply the name of a remote system.

Added new alternative input device flag (`-m modemname`) to override name of modem file used by UUCICO to initialize passive polling.

Also added alternative input device flag (`-m modemname`) and alternative log file name flag (`-l logname`) to UUPOLL. These flags are passed to UUCICO as-is.

Added support for automatic invocation of UUCLEAN by UUPOLL to purge news and spool log files. Automatic clean time (`-c hhmm`) specifies the time for UUCLEAN to run daily; the default is do not run UUCLEAN. The automatic flag command name flag (`-C command`) specifies the command to run daily; the default is UUCLEAN. Note that the command is run once every 24 hours.

Moved debugging trace for login and initial messages from various modules to `rmsg()` and `wmsg()`. Specific errors are still reported in various modules.

Modified `rmsg()` to support backspace and delete characters when entering user id and password during login.

## Version 1.11s Revision Summary

### Bug Fixes

Previously, the MS C version of UUCICO would not reset stolen interrupts if canceled. Rewrote Ctrl-Break handler in UUCICO to be compatible with both Borland C and MS C; the handler will now prompt before aborting, and will also attempt to gracefully close any active connection. In addition, added new boolean option **escape**, which enables the ESC key as abort key during processing. Added same Ctrl-Break handler to RMAIL, and a modified version (without the prompt) to UUPOLL.

10/04/93

- 191 -

## UUPC/extended 1.12b Installation and User's Reference

Altered definition of a successful call by UUCICO to a call which processes all the way through a graceful shutdown of UUCICO. This means a call which is interrupted during file transfer will be retried if the host appears more than once in the SYSTEMS file. Also deleted didcall() and calledhost() subroutines, which were made redundant by the status flags used for the HOSTSTATUS file.

Modified 'g' protocol module to dynamically allocate buffers on demand rather than using fixed buffers. This reduces memory requirements when less than seven buffers are used.

Added line pacing to ulib.c to prevent buffer overruns by the UUCP 'f' protocol. The 'f' protocol now works ... sometimes.

Corrected various connection abort routines in dcpxfcr.c to reset the xfer\_stream variable after closing the file being transferred.

Deleted parse of user name on incoming UUCICO command line sent from other systems. Excessive name lengths caused unpredictable storage overlays in dcpxfcr.c.

Deleted redundant debugging messages from dcpxfcr.c.

Moved default setting of speed for hot logins to UUCICO (using the -w and -z options). Formerly, the modem speed could be set to zero, causing a divide exception in the communications package.

Corrected GetGPacketSize() to only return valid package sizes (which are all powers of 2).

Clarified various error messages in UUCP. Also reformatted source of uucp.c to personal taste.

Added detection of invalid or duplicate system names on the UUSTAT command line.

Modified UUSTAT to always generate job 000 as the dummy job for the poll (-P) option.

Corrected various error messages in UUX to give the user some idea of why the program died.

Modified dcpsys.c to generate a dynamic list of available protocols rather than using a fixed list which was prone to fall out of date as protocols were added.

Altered timeout processing for scripts to not reset the timeout period when a character is received. Formerly, the time out was always reset after each character received, resulting the modem

not timing out until after the modem had been silent for the  
-192- 10/04/93



## Changes From Previous Versions

timeout period (usually after it had already hung up and reported so.)

Restructured definitions of program flags in lib.h to avoid multiple programs using the same flags when calling configuration file processing.

Clarified the error message issued by ExportPath() after a name conversion failure.

Deleted original support for site-hiding via the HOSTPATH file. Sites wishing to hide behind another host \*must\* use the **Domain** and **FromDomain** keywords in the UUPC.RC file.

Altered UUXQT to delete command files after a -1 (spawn failed) return code.

Modified conversion of UNIX to DOS names as follows:

Broke out the conversion of a simple name to DOS into a new routine ImportName()

Modified ImportPath() to convert the entire path passed to a valid DOS path, rather than just the trailing name and extension.

Also corrected mapping of a UNIX name with multiple periods.

Rather than mapping all invalid characters in name with a path to the underscore (\_), invalid characters are now mapped to a semi-unique character in the valid character.

**Note:** Because valid characters in names with paths are not remapped, collisions can occur.

Fixed bug in ValidDOSName() to use default character set if none was provided.

Corrected ValidDOSName() to not reject valid DOS names with lengths greater than 72.

Barry Schwartz <trashman@crud.hawkmoon.mn.org> rewrote the MS C version of getdta() function as in-line assembler; it now

properly loads the ES segment register. Failure to do so previously caused various improper behavior.

Disabled stack checking in most of the programs to reduce program size and improve speed. Stack checking is explicitly enabled for

10/04/93

- 193 -

## UUPC/extended 1.12b Installation and User's Reference

printmsg() under both MS C and Borland C++, so this central routine should catch any serious problems. We hope.

Corrected banner routine to report time stamp of program when output is to the console, as opposed to the previous test for the input being from the console. This means that RMAIL's banner will now display when run from MAIL.

Added Mitch Mitchell's quicky UUNAME program to make it look like we've been busy.

Deleted UUPC.RC configuration variables `rmail` and `rnews`. These programs are now located via the path.

**Note:** The current directory is changed during the execution of UUXQT, so placing these programs in the current directory is not sufficient.

Modified address at node() parser to process explicit RFC-822 paths in a more robust fashion.

Modified RMAIL to use more unique characters when creating spooling file names for other hosts.

Altered MAIL command line parser to reject such syntax as a subject with no addressee.

Corrected prompt in MAIL sub-shells to only show the message "Enter EXIT to return to MAIL" once.

The documented but disabled process and delete file option (-F) in RMAIL was re-enabled. Also added check to UUXQT to insure a remote system does not use this option to delete COMMAND.COM.

### Enhancements

Numerous changes were made to the COMMFIFO.ASM routines by William W. Plummer (Plummer@wang.com); as a result, the program now provides a superset of the previous COMM.ASM functions for both FIFO and non-FIFO UARTS, and is part of the default UUCICO.EXE.

**Note:** For a detailed list of changes to COMMFIFO.ASM, see the top of the source file.

**Note:** Because the changes to COMMFIFO moved various buffers out of the C data area, larger `TransferBuffer` sizes are now possible.



## Changes From Previous Versions

Modified dcpgpkt.c to report at debug level 2 and higher the amount of available storage after data packet storage has been allocated.

Added support to UUXQT to detect and process internal MS-DOS commands. As part of this support, added new variable **InternalCommands** to define what commands are internal to the MS-DOS. The default list of internal commands includes:

break	cd	chdir	copy
ctty	date	del	dir
echo	erase	for	md
mkdir	rd	rem	ren
rename	rmdir	time	ver
verify	vol		

In the better late than never department, added display of a copyright notice to configuration file processing. Also added new boolean option **suppresscopyright** to turn off the message (but not the responsibility).

Enhanced 'g' protocol processing to support long (512 bytes) and short packets (32 bytes). Also modified 'g' protocol module to dynamically allocate buffers on demand rather than using fixed buffers.

**Note:** This support is not exploited unless either the protocol in the systems file is specified as upper-case G, or if the new boolean option **variablepacket** is enabled in the modem configuration file.

**Note:** The standard 'g' protocol should be used for Telebit TrailBlazers and the like in PEP mode, for most unmodified UNIX systems.

Altered script processing to not print expected strings at debug level one unless an error occurs.

Modified ulib.c to display modem status in English (or at least words) in addition to hexadecimal.

Added support to UUPOLL to exit at a specific time via the new **-e hhmm** option.

Modified UUSUB to allow clearing stats for one or more systems without losing call status or host data. Change contributed (I hope) by Mitch Mitchell.

Modified dcpsys.c to disallow large debug levels with anonymous UUCP.

10/04/93

- 195 -

## UUPC/extended 1.12b Installation and User's Reference

Added new modem boolean option `carrierdetect` to enable checking of the modem Dataset Ready (DSR) and Data Carrier Detect (DCD) lines. With `carrierdetect` enabled, if DSR is lost at any time, or DCD is lost after the modem reports connected to the remote host, then the connection is immediately aborted to the remote host.

Added new modem variable `NoConnect`, which defines various strings which denote the modem has failed to connect; when any of these strings are received during login script processing. A typical example for a Hayes modem would be:

```
NoConnect="NO DIALTONE" "BUSY" "NO CARRIER" "NO ANSWER"
```

Modified configuration file processing to accept selected variables from the DOS environment. All such variables will be overridden by the same variables in the configuration file. These DOS variables, and the UUPC/extended variables they set, are:

DOS variable	UUPC/extended variable
EDITOR	EDITOR
MAILBOX	MAILBOX
NAME	NAME
TEMP	TEMPDIR
TMP	TEMPDIR

Modified host table processing to support rerouting the local host to a gateway.

Moved port and packet related variables from the main configuration file to the modem configuration files, and in addition defined unique "f" protocol time out variables. The new modem variables include:

```
fpacketsize
fpackettimeout
gpacketsize
gpackettimeout
gwindow size
porttimeout
transferbuffer
```

Added a magic word display to the MAIL status command as suggested by KEW.

Added mailbox name to summary of header lines in MAIL.

The display of aliases by the `alias` command now shows the routing for the address.

Added new RNEWS program contributed by Mike Lipsie, and wrote a new news EXPIRE program based on Mike's EXPIRE program.





## Changes From Previous Versions

Modified UUSTAT to generate dummy jobs for all valid systems if requested via `-Pall`.

### Version 1.11r Revision Summary

#### Bug Fixes

The various configuration file variables which controlled error processing and other tuning parameters were global to the system rather than to a single device or system. Corrected by moving the following variables from the master configuration table to the modem configuration table:

- MaxmimumErrors
- PacketTimeout
- PortTimeOut
- TransferBuffer

With the security provided by the PERMISSIONS file and the function provided by new UUXQT program provided by Mitch Mitchell and the associated `PATH=` variable, there is no need to specify the names of the RMAIL and RNEWS programs; these can be located via the default or explicit `PATH`.

Blank lines (as opposed to empty lines) were flagged as errors in the `UUPC.RC` and `[userid].RC` files. Corrected parsing of configuration files to delete leading blanks from all lines.

Several people pointed out the need to support the `"-` option to have UUX read files from `stdin`. `getopt()` could not process a minus sign (`-`) as a stand-alone flag; modified to do so by Mitch Mitchell for UUX.

If the local host supported both unvalidated and validated logins, a host with a validated user id could also be logged on a host for access was not validated. This provided a security exposure for systems which publicized anonymous login access. Corrected by not allowing hosts which appear in a `VALIDATE=` clause in the `PERMISSN` file to login on unvalidated users id..

MAIL still had hard-coded `assert()` statements which failed the program without explaining the error in question. Modified MAIL to use `prnterr()` and `panic()` rather than `assert()`. Also modified `prnterr()` to print the location of the failure if debugging is enabled and to print the extended MS-DOS error information when using Borland C++ under DOS.

10/04/93

- 197 -

## UUPC/extended 1.12b Installation and User's Reference

Bill Plummer's (plummer@wang.com) enhanced communication driver (COMMFIFO.ASM) had various problems due to minor bugs. Corrected by Bill.

The routine ssleep() didn't work properly in some intermediate levels of 1.11r; corrected by doing ddelay() for maximum allowable time.

If an explicit RFC-822 route of was imbedded in an UUCP style address, such as:

```
node1!node2!@node.domain:user
```

then the address parser was confused. Corrected User at node()

to examine UUCP addresses for such constructs, although due to problems with the order of the host names the resulting address may or may not be correct.

David Friedlander (df@iochom.UUCP) provided changes to UUX to enable forwarding; two fixed obvious bugs and are implemented.

Andrew Lindh (lindh@uhasun.hartford.edu) discovered the bug in UUX that corrupted up binary files read from stdin. A call to fgets() should have been a call to fread(), and a call to fputs() should have been a call to fwrite(); both are fixed now.

Tubby Turtle (tubby@charlie.lonestar.org) fixed a bug in UUXQT that caused problems with redirecting output of commands executed locally. A subtle difference in meaning was attributed to flag xflag[X\_OUTPUT] when it was read than was intended when it was set.

Mitch Mitchell (mitch@charlie.lonestar.org) supervised and applied all the fixes to UUXQT and UUX, and has been busy trying to avoid being called "Tubby Mitch".70

UUPOLL always had the auto-forward (-a) option enabled by default. Corrected initialization of variable to FALSE.

Changed various assert() statements in UUPOLL to panic() statements to provide better diagnostics.

70Broadcasting a name a person doesn't want to be called is counter-productive. We document all the wrong things around here!



## Changes From Previous Versions

When UUCP connections failed for various reasons, various status programs still listed the last call as successful. Modified **UUSUB** and **UUSTAT** to report a new status, "FAILED", when a call failed after connecting to the remote system.

If an excessively long user name was included in the command line in a call (C.\*) file, the file transfer would fail because of storage overlays. Modified both in-bound and out-bound command parsing in dcp~~x~~fer.c to ignore the user id.

Purged this revision summary for changes previous to release 1.11g.

### Enhancements

Directories listed in the access lists for hosts in the **PERMISSN** file are now verified to exist.

**Note:** Some people may not view this as a feature.

Added percent of mailbox read message to the status update displayed while reading the user mailbox in **MAIL**.

Added support to **UUCICO** for long packets of up to 1024 bytes, including changing various communications buffers to be dynamically allocated for required lengths, lengthened outbound buffers in **COMM.ASM** and **COMMFIFO.ASM** to 4096 bytes. Also added support for new modem file keywords **GWindowSize** and **GPacketSize**.

**Note:** For compatibility with previous releases and UUCP programs which do not correctly long packets, the default packet size is the "standard" UUCP packet size of 64 unless short packets are enabled via the **SmartPacket** option (changed to **VariablePacket** in version 1.11t).

Also added support for packets shorter than the negotiated maximum for faster processing of short data streams. This support is enabled by the new modem file boolean option **SmartPacket** (changed to **VariablePacket** in version 1.11t).

**Note:** Not all UNIX systems support packets shorter than the negotiated maximum; DECUS UUCP and FSUUCP do.

10/04/93

- 199 -