

MAXMAIL

A message utility
for Maximus-CBCS

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Version 1.61

Dedicated to Scott Dudley
and all the other fine Maximus Sysops everywhere!

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Is This Program Free?

Absolutely! I have developed this program in the same spirit as Maximus was developed. For use by all Sysops everywhere. In fact I must insist that you place this program in a free download area if you run a fee-oriented bbs, like Maximus.

Source code for this program is distributed on the Fidonet SDSMAX section or you can filerequest it from me. My bbs is only 2400 baud though, for all you modem snobs. See details further in the docs for filerequesting details.

Program was written in Microsoft C 6.01 and uses an external public domain software library:

```
SWAP300 ---- Thanks to Marty Del Vecchio, especially
              for providing the source code! I use his
              routines for squeezing Maxmail to run in
              the tightest of memory space.
```

I also used source code from Doug Boone's SAVECHO program, which captures text to a file. Thanks to Doug for providing useful source code. I only wish other authors would do so as well! I am a firm believer in that concept, perhaps why I so admanantly support Maximus and Scott Dudley in his efforts.

This program is available on my local bbs. See details at end of documentation for location of my fabulous C programming bbs!

The rest of the code was original, developed through many long midnight hours pouring through all the Maximus source code and structure documentation.

Warranty

You must be joking!! I don't guarantee anything about this program except that it will take up disk space on the drive.

I have tested it to the best of my ability, both in single user and multi-user modes, under DesqView and Omniview, using the BNU, OpsuComm and X00 fossil. Also tested it under an 80386 machine and an 80286 machine environments. It works in the the author's home. Anything beyond that and you're just plain lucky!

I may respond back to email if you have problems or suggestions, but then I may not. Since this program was free and also source code is available, I really can't afford to support it much. I have beta tested it for 2 months on 7 different other machines with other sysops so I think it works at least sometimes!

All this effort, well over 3 man months, was simply to ease the usage of echomail reading on my own bbs. Its purely accidental that I released it to the rest of the Maximus sysops, but a good experiment in working with the Maximus structures.

Well if you have read this far by now, then you know what it all means... Enjoy it...

Features

MaxMail allows the bbs user to scan message areas and pack up all new messages into an archived file for direct downloading. This saves a tremendous amount of time and is much simpler for the user to handle than using other fancy offline readers. I have nothing against offline readers, I just think they are overkill for most users. too complicated to set up! Why not give users an additional choice? Besides that, MaxMail is compatible with users calling the bbs who may not be using an MS-DOS machine. Here is a quick overview of some of the features I have enabled so far.

BBS User features

- * User configurable message areas.
- * User configurable packer program.
- * Yell function. Will test and use same Yell schedule as in Maximus.
- * Simple short menu, allowing quickest download and exit back to bbs.
- * Last chance option, if packed file is large, user may opt not to download due to time, etc. Packed file will be held for same session, until user hangup or adds/deletes message areas.
- * Automatic tracking of user configuration from call to call. No need to reenter message areas, packer, unless desired.
- * User can change last message read #, dynamically, in order to recapture older messages, or skip some.
- * Dynamic add or delete message areas without changing full configuration. QWK users can do this remotely from reader.
- * Hangup after download option, totally enabled under Sysop's control. User can also turn it on automatically. Also a 10 second countdown occurs on autohangup, in case user changes his mind.
- * QWK support! Users can download packets in QWK format, popular on PcBoard bbs's and clones. Then they can use their favorite QWK readers to read and reply, uploading replies back to MaxMail which will automatically import them to Maximus message base.
- * Optional newfiles list inclusion. Sysop must create this externally.
- * Archive shelling is redirected to com port so user can confirm that program is still alive.
- * Quick goodbye function from MaxMail, no need to return to bbs.

Sysop features

- * Sysop chat function.
- * Sysop has total control over packer program choices.
- * Sysop has total control over protocol xfer program choices.
- * Sysop menu with statistics listing and user delete.
- * Maximum message count control.
- * Maximum daily packup count option.
- * Optional extensive logging file, compatible with Maximus.
- * Optional new user text help file.
- * Optional bulletin file on login. Will check date of file versus lastcall date of user.
- * Optional sign off message.
- * Optional skip message areas.
- * Optional forced message areas.
- * Complete error checking, especially carrier detect. MaxMail will always exit gracefully. (at least I hope so!)
- * Detects disk space in archive building directory and if below 500K will not execute.
- * Lastread message updating will *NOT* occur unless download is fully successful.
- * Semi-intelligent logic tracks available message areas, and if they are changed, will automatically force user to re-do msg configuration. Semi-intelligent logic to track changed available archive and protocol options, requiring user to re-do the configuration for THAT option only.
- * Sysop option to compensate time spent in Maxmail. Time spent would NOT be subtracted from bbs time, encourages echomail.
- * For QWK packets, sysop can include news,bulletin,welcome and signoff files of choice.
- * Accurate logging of QWK packet reply uploads.
- * Offline sysop maintenance mode for killing users, packing record file and user stats. Does not require com port usage.

Getting started

Place MaxMail.exe somewhere in your DOS path. I recommend placing it in your MaxMail root directory but that's really not required. Place Maxmail.cfg either in the directory where you will start MaxMail or in the same directory as MaxMail.exe. If it can't find it in either place it will tell you so. If you want to run MaxMail from another directory besides the Maximus root, you need to specify full pathname for the MAX.PRM file. See command line section for details.

First thing is to edit the MaxMail cfg file. Its a basic text file like so many others you have seen. It is heavily commented so you should easily be able to figure things out. Just be sure that any packers and protocol programs you enable are on the DOS path. I also describe the configuration parameters in this document, in case you inadvertently delete the comments from the config file.

Alas, I have not been able to get DSZ.COM to work correctly with MaxMail. I think it may have something to do with using the fossil. I am using PCZ, the public domain zmodem program here. However some users have been able to get DSZ working, so in the default MaxMail.cfg file distributed I have given a possible example of using DSZ. Good luck! PCZ fully supports the fossil and works well even at high locked baud rates so I recommend it.

The protocol fields are flexible so you can try out any protocol engine you want. Be mindful that the protocol program will be working under the fossil, so that may affect things.

After you have the config file set up you probably should test the program. Log onto Maximus locally and then exit quickly. This is done just to create the LasterUser.bbs file in your name. Then log onto MaxMail locally. Here's how:

```
"Maxmail /L /U /N"
```

Hey, there are command line switches! You bet! You can type "MaxMail /?" at the dos prompt to see all the switches. The case is not significant nor is the order. Just put a blank between them. See separate section on command line parms for details. Anyhow, the "/L" says you are in local mode (it won't shell the protocol program) and "/U" won't update the lastread pointers (useful ONLY for testing). "/N" will save the archive upon exit. You must answer "Y"es at download prompt of course. Now go ahead and select some areas. Since MaxMail is new and has to create the User configuration file, it will obviously log you on as a new user. If you have the newuser text file enabled, that will get displayed first, then you'll be in the configuration menu. Just select some message areas, packer program and protocol. Then press "s" or hit return at main menu to scan. Watching the screen will tell you what its doing. Even the command line to call the packer program is displayed, useful for debugging your packer command lines. I use standard DOS console i/o calls so it should work, even under a multitasker.

Walk through the program, trying out all the commands. Since the user file is new, the "Z"sysop function won't work well or at all. This is more useful when MaxMail becomes more active. After selecting some message areas to scan, pack up an archive. If necessary, use the handy "R"reset msg pointer and force new messages for at least 1 area you have selected.

If everything goes right, and you have new messages to pack up, you'll see the packer program called. After archive is packed up, it will also likely display the archive stats to console using packer view function. This is handy for confirming things. One odd thing I have yet been able to figure out, when calling remotely and the packer view function is enabled, the last line is repeated again. I don't know why and it has some sort of anomaly due to the fact I use DOS redirection to a file. Some user may inform of this quirk. Someday I may figure it out but I don't think it will be much of an annoyance. After the packer is called, you will be asked if you really want to download it, and the packed file size is displayed.

If you say 'y' or 'yes' or anything beginning with 'y', the program will sign off, with any additional sign off message you added. Anything else will simply revert back to menu. This allows the user to have a last chance option to download, inspecting the size of the packet. I calculate the remaining time the user has into account when computing maximum messages, so he can't download anything bigger than time allows. It's a fairly rough guess, but seems to work all right in most cases.

After signing off, you will be back at DOS prompt. The packed file was automatically deleted, (Unless you add the "/N"switch to the command line) so you can't see what it looks like unless you call in remotely. Go ahead and glance at your log file that MaxMail writes to, if enabled. This log file could either be a separate one just for MaxMail or it can share the use of the standard Max log file, it's totally compatible with it. Currently, I am pretty verbose in the logging, I have tried hard to make it VERY compatible with the Maximus format.

Now that you have tested out MaxMail locally and you're convinced it's the best darned Maximus utility out there, you should now set it up for running under Maximus. MaxMail doesn't care how you call it, and it won't chain to anything else. Best way to call it is usually through an errorlevel call. You can call it as an xtern_run function if you have enough memory. Remember that MaxMail will need enough memory to shell out the packer program and the protocol program. Usually that requires about 250K or so. MaxMail itself is swapped out to disk, EMS or XMS memory when it shells the packer and protocol programs so it will never get in the way no matter how big I make it! My tests show it works just fine in a tight 250K memory partition under multitaskers. Any more than that doesn't make much difference. On my bbs I run Max in 250K partition and exit via errorlevel to MaxMail as follows on next page:

In Menus.ctl: (I put this at main menu AND my message menus)

UsrRemote Xtern_Erlvl 67

Disgrace "Zip Mail"

In Runbbs.bat:

```
max -p%2 -b%1 -t%3
:dolevels
if errorlevel 82 goto Slu

if errorlevel 81 goto PeekTest
if errorlevel 80 goto SluCtty
if errorlevel 67 goto MaxMail <----- Look here!
if errorlevel 66 goto Maxmail
if errorlevel 65 goto Dosctty
if errorlevel 1 goto end
goto end

:MaxMail <--- Further down in batch file
maxmail (switches) <--- Add any options (Usually none)
if errorlevel 7 goto ArcSave <--- Archive file was saved
if errorlevel 6 goto Export <--- A REP packet was uploaded
if errorlevel 5 goto Hangup <--- User hangup from download,no error
if errorlevel 4 goto MaxRedo <--- A file error occured
if errorlevel 3 goto MaxRedo <--- User dropped carrier or idle
if errorlevel 2 goto MaxRedo <--- Low disk space, can't function
if errorlevel 1 goto MaxRedo <--- General failure
:MaxRedo
max -r <--- Restart Maximus cleanly
goto dolevels

:ArcSave <--- Archive file was saved
some junk goes here....
goto MaxRedo <--- Restart Maximus

:Export <--- Export the new mail
some junk goes here
goto MaxRedo

:Hangup <--- Put fone off hook for a bit
call offhook <--- Max will reset it
goto MaxRedo

:mailer <--- Restart Mailer instead
some junk goes here....
```

That's all there is to it. Using extrn_run is a little different but you should be able to figure it out. Normally MaxMail doesn't need any command line parms since it gets most of the information it needs from the Maximus files and its own config file.

MaxMail will handle the fossil correctly and deal with things based up what is in the LastUser file. MaxMail exits with a '0' if no major problems occurred, otherwise it will return a code. If you have the log file enabled, just look at it, all major errors will be shown there as well with more detail. They will also be displayed on the screen. Check the section on error codes for more detail.

MaxMail constantly interrogates the modem carrier and will also keep track of idle time. If user waits too long to respond to an input or simply hangs up inadvertently, MaxMail will clean itself up and exit gracefully. The log file will indicate what happened so you can figure things out if you want to know later.

MaxMail config file parameters

SignOutMsg: Text message displayed to user when MaxMail signs out. Use underscore '_' to separate words instead of blanks. Maxmail will substitute underscore for 1 blank space. This is parameter is optional.

THESE TOKENS ARE FOR STANDARD TEXT FORMAT SUPPORT:

TxtFile: This is filename MaxMail uses as name for capturing message records and embeds into archived file. No pathname is used here, just standard 12 letter DOS filename. MaxMail will default to "Maxmsgs.txt" if no parameter is specified.

MessageHeader: This is an optional text file that is written to the message capture file(TxtFile) *BEFORE* any of the messages. It can a little ad or whatever you want to annoy the user with. It probably should be made very short, if you use it at all!

THESE TOKENS ARE FOR QWK FORMAT SUPPORT:

Notice: If you want to add standard BULLETIN files to QWK packets for users, place text files in the Maximus root directory with the following names:

BLT-x.1 <- (x = any digit 0-9) Bulletin #1
BLT-x.2 <- (x = any digit 0-9) Bulletin #2, etc etc.

Most QWK readers will scan for these files and offer option bulletin viewing if user desires. These files may be any size and they are copied to the QWK temporary directory for packing.

BBSid: This is a short 8 character name of your bbs. It is used in QWK packets as the name for REP (reply) files and in the control data packet. This is NOT optional!! This signifies names of QWK and REP packets to users, so be sure and give a unique name here.

QWKWelcome: This is an optional signon file that may be included with QWK packets if you wish. It can have ansi graphics, text of whatever you wish. Most QWK readers will display it when starting up this particular QWK packet upon reading. Any standard DOS pathname is acceptable here.

QWKNews: This is an optional news file that may be included with QWK packets if you wish. It can have ansi graphics, text of whatever you wish. Most QWK readers can display it when user selects news option. Any standard DOS pathname is acceptable here.

QWKBye: This is an optional signoff file that may be included with QWK packets if you wish. It can have ansi graphics, text of whatever you wish. Most QWK readers will display it when finishing up reading of this particular QWK packet. Any standard DOS pathname is acceptable here.

BBSphone: This is your bbs phone number. It is used in building QWK packets. It should not be any longer than 14 characters. There are no restrictions on format, it is merely a text string.

Striptags: Answering NO to this option will leave QWKreader tag lines in ECHOMAIL areas alone. This defaults to Yes! Normally, MaxMail will convert all psuedo tags "---" to spaces and will also strip hi bits at tail of message, UNLESS you set HIBIT allowed feature in Areas.ctl file. It does NOT tamper with or remove the strings, it just converts the chars to harmless spaces so Fidonet backbone people are happy! WARNING! WARNING! You should leave this option as Yes or disabled! Fidonet Backbone people claim they will start refusing to process msgs with Hi-bit ("H") style chars and added taglines... But, MaxMail is not political so I leave it up to sysop control.

RepZip: These are the programs used for unpacking QWK REP packets. There are only 3 types currently used. Zip, Lharc and Arc formats. Just enter the correct un-arc program for each (No pathname, just executable name) and the command line. %A token is substitute for archived file.

RepUpload: This is the upload protocol used for receiving QWK REP packets back from user for import. Usually this is the same as the Protos format except the "s" is usually "r" for receive instead. See directions in PROTOS token for any details on subst tokens.

THESE TOKENS ARE FOR SYSTEM SUPPORT:

Bulletin: This will display a bulletin file upon signon. The file is standard ascii text. MaxMail will only display the file IFF the date of the bulletin file is newer than the last logon date of the user OR the user is new to MaxMail. It will automatically be paged to the screen if there are more than 23 lines of text. The filename may have a standard DOS path. If no drive/pathname given then file is assumed to be in the Maximus root directory.

NewFilesList: Include an externally generated files (30 day perhaps) list as option for user. User will turn this option on or off himself. Specify full pathname here. You can use a program such as AvailList or Xlist to create this special file, nightly if possible.

CfgFile: User Configuration file. This is a special binary record MaxMail uses to track user configurations. No pathname is used here. MaxMail will create file if not existing. If you wish all users to redo their configurations, just delete this file and MaxMail will restart everyone as new user. Default name is "MaxMail.usr" if no parameter specified.

LogFile: Log file to track what user does while inside MaxMail. Totally compatible with standard Maximus/Binkley log format. You can even specify the standard Maximus log file if wanted. It will automatically append to it. Logfile is optional, but recommended. Any errors occurring will also be logged.

HelpFile: Text file displayed to user if [H]elp function selected on menu. This is just a basic text file, nothing fancy. If the does not exist, will be disabled and a log entry occurs.

NewHelpFile: Text file displayed to new user at signon. If MaxMail can not find user in config file, it will first display this file to user, with automatic paging every 23 lines. Do not put any control characters in file, but IBM text (8 bit chars) may be used. This file is optional, but recommended to explain to new user what MaxMail is all about. Keep file short and to the point.

MaxDailyCalls: Maximum number of times any user pack up messages per 24 24 hours. It ignores this value if user is \geq Ast Sysop level or calling in local mode. If you set the value to 0, it will not check the counter. On my bbs, because I grant the MaxMail time back to users, I have found some people are taking advantage of it too much, by reloading MaxMail several times and thus hogging the bbs for long times! I still want to encourage usage, but not abusiveness, so I added this little function to gain more fine control. This value is tracked on a user by user basis and is ignored if user calls AFTER 24 hours from last call of course. Value placed here should be between 0 and 255. Anything above 255 is silly and is rounded down anyways. This value is not check for other functions in MaxMail such as reply uploads.

MaximumMessages: Maximum count of messages to pack in 1 session. MaxMail will check remaining time for user and not allow larger archived file than user can download (current baud rate) during time. It is a rough estimate at best though, since we can only guess the maximum messages specified here. 400 is a good reasonable number. User can always recall MaxMail later for additional messages.

SkipAreas: Specifies MaxMail message areas you do NOT want the user to pack up for some reason or other. Of course MaxMail will NOT allow user to scan any areas he does not have KEYS and PRIV access to, so these areas listed here should only be general message areas that most or all users have access to, but don't want them to be packed up with MaxMail. If you specify multiple areas use a comma to separate as in the example. If the user happens to have ASSTSYSOP level privilege, this will be ignored, i.e. the areas will be scanned anyways. The area numbers are REFERENCES (i.e. they are actually the index value in Area.dat) they are not necessarily the same as area names you give. Area #0 is the first area in area.ctl, 1 is second, etc.

ForceAreas: Specifies MaxMail message areas you want to FORCE the user to pack up for some reason or other. Of course MaxMail will NOT allow user to scan any areas he does not have KEYS and PRIV access to, so these areas listed here should only be general message areas that most or all users have access to, but you want them to be always packed up with MaxMail. If you specify multiple areas use a comma to separate as in the example. The area numbers given are REFERENCES (i.e. they are actually the index value in Area.dat) they are not necessarily the same as area names you give. Area #0 is the first area in area.ctl, 1 is second, etc.

TempDir: Specify a temporary directory used for building and packing up message files. Should have a full drive and pathname in it. Adding a trailing "\" is not required. We will check for it and add it if necessary. If you specify this it MUST have a drive letter as well! Not just a directory! Specifying a ram disk here is probably a good idea.

ExtendedBarrier: Tell MaxMail how to handle an extended Barrier message area. If token is "Yes" then user will be allowed read access. If token is anything else any message area with an extended barrier file will be locked out from users. Defaults to "Yes"

Notice: A standard OPUS style barricaded area is supported as expected, asking user for password before first time access. A Maximus extended barricaded file is recognized by '!' character as first char in token line.

UseCommand: If you are having problems shelling the packer, or your packer program is actually a batch file, place a "Yes" here which will call command.com to shell packer program instead of direct execution.

DownloadHangup: Enable user to hang up after downloading. Answer "String" or "DTR", depending on which mode you wish, if you want user to have this feature. Put a "NO" here to disable it and user won't have the option. If the feature is enabled, MaxMail has a deadlock counter and after issuing the hang-up command to the modem, it will loop for short period of time checking carrier. If for some reason the modem does not hangup, MaxMail will still exit cleanly, but with an exit code of 5. In "STRING" mode, MaxMail uses the standard Hayes "ATH0" command to hangup the modem. Useful for *PARTIALLY* compat modems. In "DTR" mode, MaxMail will toggle DTR, just like Maximus does. This works for most modems but not all.

Colors: Tell MaxMail what colors to use where. Of course these colors are ONLY displayed if user has set ANSI or AVATAR video modes. Currently there are 7 different types of text attributes defined as follows:

Standard Text, Hilite Text, Menu Items, Time Left, Prompt, Attention Text, View Text

A standard set is included as follows. You should have all 6 values filled in, else it will just repeat last value until six items are in the color set. You will just have to play with these values to see which ones are applied to what text. I have tried to use labels that make sense at least to me! The local screen will always display the what user is seeing. Even if user is in Avatar mode, the local screen will display the ANSI version of the colors, which is the same of course but not Avatar codes.

Though these tokens are in DECIMAL value, attributes are the standard 8 bit IBM char attributes. Upper 4 bits are the background (high bit is blink) and lower 3 bits are the foreground (I always set the intensity bit). Here are the standard IBM color codes:

0	Black	4	Blue
1	Red	5	Magenta
2	Green	6	Cyan
3	Yellow	7	White

If you decide to use any background color other than black, you might get some messy results. Feel free to experiment. The local mode will look the same as the remote user sees it. Remember the values are in DECIMAL not HEX.

ReDirectPacker: If you wish to redirect the console output while the the packer program is being shelled, answer "Yes" here. It will only work if the current COM port being used is a valid DOS device. MaxMail will look for devices GATE1, GATE2, etc. (Gateway device driver) first and use that if possible. Also some packer programs do NOT use STDOUT so they may not work with this. We also redirect STDERR so that may help. Dos will always use the standard fossil calls during the re-direction.

Packer: Here is where you specify the packer programs user is allowed. You can specify as many packers as you want. Menu will display them in order appearing here. So if you change packers or the order of them, you probably want to force users to re-do their configuration (delete User Config file), or use Utility mode. There are 4 tokens (seperated by tab/blank) required. Any lines with less than 4 tokens will be ignored. Be sure each token has *NO* embedded spaces/tabs, else it will be considered another token! Use an underscore "_" in place of blank space. See the examples here if confused. Tokens are:

Description	Filename	PackedFilename	CommandLine
-------------	----------	----------------	-------------

Description:	Simple short description of packer type. Obviously you should use something meaningful, as this text will be shown to user in menu selection for packer type.
--------------	---

Filename:	12 letter filename (no paths!) of packer program. Be sure it's on your DOS path somewhere and MaxMail will find it. Just name and extension.
-----------	--

PackedFilename:	12 letter filename (no paths!) which will be packed filename. Actually MaxMail will only use first 6 characters of filename and add a numeric series (00,01,02,etc) to pad onto name. Extension will be whatever you specify though, but it should be default one that packer program expects. Prob you should use name of your bbs (1st 6 chars or whatever) to indicate to user where file came from.
-----------------	---

CommandLine:	Command line to pass to packer. Again, make sure there are no embedded spaces! Use an underscore. You have a substitute token you will have to embed here. It begins with '%' character:
--------------	--

%a: Subtitutes PackedFilename.

This token can be located anywhere in the command line string of course. See examples below for clarity. We use standard packers here but you can always add any exotic new packer you wish! Very flexible huh? In building the arc packet the file to be added will be appended to this string, so it assumed that the input filename MUST be the last token on the packer's command line.

ViewLine: This is an optional field. It is the command line for viewing the archived packfile. MaxMail, if it sees this field, will call up the packer program again, executing this command line. It is expected this is the command to display the archived file, using standard DOS output. MaxMail will re-route that output to a text file, then display the file to the user. Thus the user can confirm what the packed file looks like. Just a nice additional feature. It uses the same substitute token as the previous field. If you don't want to bother with this, just put a semicolon in front of this, or remove the string.

Protos: Here is where you specify the xfer protocols user is allowed. You can specify as many protocols as you want. Menu will display them in order appearing here. So if you change them or the order of them, you probably want to force users to re-do their configuration (delete User Config file), or use Utility mode. There are 3 tokens (seperated by tab/blank) required. Any lines with less than 3 tokens will be ignored. Be sure each token has *NO* embedded spaces/tabs, else it will be considered another token! Use an underscore "_" in place of blank space. See the examples here if confused. Tokens are:

Description	Filename	PackedFilename	CommandLine
-------------	----------	----------------	-------------

Description:	Simple short description of protocol type. Obviously you should use something meaningful, as this text will be shown to user in menu selection for protocol.
Filename:	12 letter filename (no paths!) of protocol program. Be sure it's on your DOS path somewhere and MaxMail will find it. Just name and extension. Currently we have used PCZ.exe here You can try out any others you wish, but be and test them first.
CommandLine:	Command line to pass to protocol program. Again, make sure there are no embedded spaces! Use an underscore. You have 3 substitute tokens you can embed here. They begin with '%' character: %a: Subtitutes PackedFilename. %p: Subtitutes current com port. 1 based, I.E. 1 = com1,2=com2,etc. %b: Current baud rate.

These tokens can be located anywhere in the command line string of course. See examples below for clarity. We use standard protocols here but you can always add any exotic new protocols you wish! Very flexible huh?

Command Line Switches

Here are the current documented MaxMail command line switches. Case on characters is not significant. I don't care whether you use a / or a - for switch character, just use one or the other!

Filename	:Specifying a filename (or any text!) without prepending it with a switch will cause MaxMail to think you want a different config file. Thus you could load up with different configurations for different times, whatever. Any legal DOS pathname is okay. Normally MaxMail will just look for MaxMail.cfg in the default directory.
"/?" or "-?"	:Displays current version, compile date and all the command line options. MaxMail returns to DOS after this function.
"/A" or "-A"	:Adjusts online time in Maximus RestarXX.bbs file. Thus time spent in MaxMail will NOT be subtracted from bbs time. Will NOT allow time to override any event time from the switch on the Maximus command line (/T option).
"/C" or "-C"	:Specify alt MaxMail User config file. You probably shouldn't mess with this!
"/D" or "-D"	:Turns off swapping mode. If for some reason you are having problems with the swapper code or you want a little better performance you can turn off swapping with this switch. You will need additional memory though, probably about 200K additional to run all the external archivers and protocol engines.
"/L" or "-L"	:Force local mode. You don't want to enable this unless you are testing out MaxMail locally. Will disable download function and other stuff.
"/N" or "-N"	:Don't delete packed file. Use this only when testing and you want to see what the packed file looks like. Otherwise you will clutter your hard disk with gobs of extra files! MaxMail creates a unique pack file for each user, based upon # of times he called, unless he is using QWK format.
"/P" or "-P"	:Specify alternate Max parameter file. It defaults to Max.Prm. But if you are running a multi-user mode or you want to run MaxMail from another directory, or you just have a different name, specify it here.

"/S" or "-S" :Sysop local maintainence mode. Does not use use fossil/com ports. Will bring up the special Sysop menu and the additional PACK records function. See sep section for details on this menu.

"/T" or "-T" :If you are running multiple Maximus systems, this specifies the task number for the lastuser?? file. Use same number as /N on Maximus command line.

"/U" or "-U" :Turn off lastread update. Will turn off adjusting the lastread message pointers. Use this only when testing,elsewise you'll drive the users nuts!

QWK Files and Support

Starting with MaxMail 1.6 I have added QWK support! QWK is a special archived format created by Sparkware for downloading messages from PcBoard and clones. It has become quite popular. Many bbs users will have some kind of offline reader that already supports QWK such as SLMR or WinQwk or Deluxe. There are QWK readers for DOS, MS Windows, Apple Mac and even Amiga! If you are looking for QWK reader to use and offer for your users, you may Freq SLMR20.LZH from me at 1:343/22 (soon to be HST/Dual Standard speeds). I find this shareware reader excellent, though I have tested MaxMail with all the other common DOS QWK readers such as EzReader, Qmail Deluxe, Session Manager. Many PCBoard/Wildcat bbs's also carry these various readers. If you would like more details about QWK format, you may file request the source to MaxMail 1.6 (details at end of docs) which includes a file discussing the format.

Rather than re-inventing the wheel with yet another offline reader I just added that support to MaxMail so users can choose their own readers. QWK format is nothing more than a compilation of special files (in fixed record format) packed into an archive such as PkZip or Lharc. Most QWK readers will usually support standard PKzip and Lharc, or just PkZip. QWK readers can create REP packets which are also in archived form, containing special formatted files for uploading back to QWK bbs door, in this case MaxMail.

In the MaxMail configuration file there are special parameters which must be entered by the sysop for supporting QWK format, such as upload protocols, tag line stripping, bbsid, etc etc. Be sure and make adjustments to them for your local needs, using a standard text editor.

One of the nice features about QWK is that the user may add/delete msg areas directly from his reader, sorta like an Areafix function! Most readers, if not all, function like this and I support this feature in MaxMail. What happens is that when the user request a change in message area, it will generate a special message in the REP packet, which MaxMail is designed to recognized. When the user uploads his REP packet, it will process that message and inform the user, so he has visual confirmation. All upload messages as well, get tossed into their respective areas. Extensive logging to the Maxmail log will show these details.

One thing to watch out for, QWK message areas are based solely on numeric address, there is a short 10 char name, but REP packets and QWK packets use the message area NUMBER for identification. In MaxMail, that number corresponds to the actual Area.idx item number. Future version will allow latering that. In any case, if you change/move around message areas AFTER a user downloads a QWK packet but BEFORE he uploads a REP packet, the reply messages may get tossed into the wrong area! There's not much that can be done about that at this time, even PcBoard systems have this problem, no verification. As said earlier, I will be adding a special alternate config file so you can adjust area numbers without mucking your AREAS.CTL file, in a future version.

I think most everyone will probably start using QWK format. I use it here myself locally, rather than a standard fidonet message reader, I find it much more powerful. I have designed MaxMail 1.6 so you can even upload REP packets in local mode, it will prompt for source pathname of the rep packet, even optionally delete it after uploading! You'll like this feature. I set up a special batch file, with a dummy task number and can thus use MaxMail locally even when another user is online. Here's how to do it:

- 1) Log onto your bbs briefly, to create a Lastuser.bbs file with your name in it. After logging off, copy that file (located in your Maximus root dir) to a special name such as Lastuser.cd (your initials) or whatever.
- 2) Set up this special batch file like this:

Getmail.bat	Explanation
-----	-----
@echo off	
cdd d:\max	< This is my maximus root dir
copy lastuser.cd lastus09.bbs	
maxmail /l /n /t9	< Start up MaxMail in dummy task/local
if errorlevel 7 goto moveit	< If MaxMail exits with 7, means a a packet was created and saved..
goto end	
:moveit	
pause	
move t:\qwk0009\crn*.qwk b:	< Move the packet to my floppy drive
rd t:\qwk0009	< clean out special QWK temp dir
:end	
del maxmai09.log	< log not needed.

You should get the idea. I use drive T: as my temp dir, otherwise the QWK000? directory is created off the Maximus root directory. For QWK packets, there is always a special temp dir created, because it uses common names like Cornerstone.qwk (your bbs id) even with multiple users. Unless you specify the "/n" switch it will always clean up and remove the temp dir at end of MaxMail session. Just adjust according to your own tastes. I guarentee you'll love this feature and NEVER go back to using poor Fidonet readers, except for Netmail perhaps.

Most QWK readers have powerful quoting functions, usually configurable and a tag line (sometimes optional) with random or pre-selected tags. Since Fidonet backbone people are getting upset over added taglines I offer as OPTIONAL the converting the tag line marks to harmless spaces, but I leave the rest of tag line alone. I make no political statements here, leaving it up to individual sysops! Also I strip high bits on any messages if set in parameters established in Maximus areas.ctl file.. Newer QWK readers such as SLMR 2.0 can allow you to turn off the tagline altogether if desired.

One important thing to note about QWK export from MaxMail. PcBoard type bbs software (includes clones such as Wildcat) pre-formats messages (ala word wrapping) to fit within 80 columns. Most fidonet messages are NOT pre-formatted. While exporting, I do NOT wordwrap or reformat the messages, that would slow things down a great deal. As a result, since most QWK readers assume pre-formatted, some messages may look funny in the readers, words wrap around the edge. Some users may complain a bit. There's not much I can do. I have spoken to a couple of QWK reader authors to no avail. In my opinion, the QWK reader should do formatting, but they usually don't. I just mention this here so you will aware of this situation.

Program Flow

Here's a general logic flow of MaxMail.

When a user first logs on, MaxMail checks for his record in the MaxMail user file. If it can't find it, it will display a special newuser file specified in the sysop config file, with paging to the screen. This file should explain a little bit about MaxMail to the user and maybe what your system is. It is totally optional. If MaxMail can't find the file, nothing happens and a notation is logged in the log file.

Next the user drops into a special configuration menu. This menu is also selected from the main menu by typing a "C" for change configuration. First the user is presented with all the possible message areas for his priveledge level and keys. On some bbs's this list can get quite enourmous. I do handle paging to the screen when there are more areas than can be fit onto 1 screen. At the prompt, the user simply types in 1 or more area numbers followed by a c/r. If he types in names or any other nonsense besides digits, it is ignored. Also he could just type in nothing, just press the c/r. This basically says no areas are marked and he'll be informed later when he tries to start the capture. After the message areas are listed, MaxMail does a quick scan to get hi message numbers and build a message table for recall later. This may take a while so the user is informed of this.

Next the user is prompted for the ARCHIVE type. The titles for these ARCHIVE types are totally flexible and up to the sysop. I have included some default names and descriptions of the most common. I doubt that most people will change this. Be sure and keep the order in the sysop config file straight, the number entered here is based upon that order. Also the user could enter a "0" and then he would always be prompted for archive type when packing up his mail.

Next, the user is prompted for PROTOCOL type. It follows the same methodology as above, you can have anything you want and even add more if you have additional protocol engines. I include the basics I think most people would use. Again the user may enter a "0" and always be prompted at download.

Now finally we are at the main menu. Since message areas have already been scanned and tabled, the user will always quickly see how many new messages there are, and which areas, at the main menu. At that point he could either go ahead and pack them up or decide to add or change. There are 2 commands, "A"dd and "D"elete message areas to do just that. Makes it easy for him to pick up new areas or delete large areas he may not want in this run. MaxMail will track areas user has selected from 1 session to the next, so he need not do anything if he just wants a fast log on and packup mail.

At the main menu the user can pack up the mail simply by typing a c/r or entering the "S" command. Its my experience here most people don't read the obvious choice menus and they always press an "S" then return, even though I do allow you to press a c/r only. I did it that way so power bbs users, like myself, type as few commands as possible.

Now, if there are new messages to be packed up, the packer functions will start. User will get an accurate display of each area as it is being packed up. There is a cute little activity divit "\|/-" which is displayed while messages are packed up. Helps to inform that something is happening, since it takes a while. Notice here that the display indicates how many *POSSIBLE* new messages there in each area to be packed up. In local message areas the user may not get all those messages. If an area is local-non echomail, and a message is marked private the user won't receive it UNLESS it is addressed to him. This is obvious behaviour. If the user happens to have sysop level though, it will pack up all messages regardless. Private messages in echomail areas are always ignored and packed up anyways. If ALL the new messages in an area are private and are NOT to the current user and user is NOT sysop, then a simple msg states so and user is returned to menu.

User has an option of re-adjusting the lastread pointer. If he wants to re-capture old messages or such, he can enter the "R" command and be prompted for message areas to change. When a message area # is entered, user is prompted for a start message #. Any number between 1 and hi message # is accepted. This is a nice added convenience. If the user does execute this function, the Lastread.bbs is immediately updated, so it will be reflected even if he aborts back to Maximus without downloading the archive.

Notice also that MaxMail may not pack up ALL possible messages. The sysop can establish a default message count limit, 400 in the example config file I included. It is also based roughly on the amount of remaining time the user has on the bbs, baud rate in consideration. If the user has more messages after a successful download, he could always go back and pick up the rest of the mail if he has more free time.

Now the user is ready to download the archive. He will be prompted with display of the filename and a rough calculation of how long it will take to download. He could just simply opt NOT to download it at this time, perhaps it's too big for him or whatever. No problem, if he aborts, the archive will still be kept active and available for downloading UNLESS he adds, changes or resets messages areas. If that is the case, he returns to main menu and there is an added menu item "T"ransfer. Which allows downloading the just created archive. Of course if he decided to add or delete message areas, the archive is erased and he must pack all over again. User could actually abort and "Q"uit MaxMail without downloading anyways. Message pointers for the selected areas will *NOT* be updated UNLESS he does actually successfully download the archive. So he could try later if he wants.

During the download process itself, activity is displayed to the screen, provided by your specified protocol engine. DSZ or PCZ does display normal activity and checks for carrier. If there is some chance that the user drops or aborts during the download it is expected that the protocol engine will return with an error code other than 0. I check for this and adjust. Again, MaxMail doesn't update message pointers because the user aborted the download or dropped out. The logfile will indicate the error level received. This has been tested and seems to work fine using DSZ or PCZ here.

If the download was not successful and user is still online, he is returned to the main MaxMail menu. He can retry the download with the added [T]ransmit item now appearing. Provided he does not change message area selection, this menu item will always appear if a packet is created but not yet downloaded.

Finally after a successful download, the user gets a signoff message. The sysop can add an extra line here if he wants to display something. If the "/A" switch was on the command line, MaxMail calculates total time online (also shown in log file) and adjusts the RestarXX.bbs file that Maximus creates. This will have the effect of subtracting time spent in MaxMail from bbs time. MaxMail will NOT override any external event time coming up, specified by the "/T" switch on Maximus command line, so don't be concerned. This is just a nice little extra bonus you can give to users for encouraging message participation. After that, MaxMail exits gracefully. At that point you should have it set up so that Maximus reloads with a "-r" switch.

That's pretty much it for the user. The sysop has one added function to the menu. MaxMail looks at the priv level of the user and if he has a priv of ASTSYSOP or greater, a "Z"sysop functions. Go ahead and try this out, preferably in the local or maintenance mode. See separate section next on sysop function details.

Program Functions

The main menu functions for all users. Here's a summary:

[C]hange configuration: User can re-enter his complete MaxMail configuration. He will be prompted for message areas to select. Then he will be asked for Packer program type, from a list sysop has configured. User can enter a "0" here and always be prompted for archive type at pack time. Then MaxMail asks for transmit protocol type, from a list the sysop has set up. Again user can enter a "0" for choice and always be prompted at download time. This complete function is always executed for the user first he calls in, however it is also available as a menu choice. Best way to enter new message areas is the "A"dd or "D"elete function, which will NOT ask for packer or protocol type.

[L]ist configuration: User can list configuration with this function, in case he is nosy or curious.

[A]dd message areas: User can dynamically add new message areas on the fly. He will be prompted with list of new message areas to be added. Any new areas added will cause a re-scan of all message areas for message count. If an archive was already built, this function will delete that archive.

[D]elete message areas: User can dynamically delete message areas on the fly, like above. This is much easier than going through the whole configuration again. If an archive was already built, this will delete that archive.

[L]ist your configuration: Will display msg areas selected and other various configuration items. On msg areas listing user will see some flags after area name:

L	-> Local Msg area	E	-> Echomail Msg area
S	-> NetMail msg area	*	-> Forced Msg area

[H]elp: Displays a standard text help file. You will only see this menu item if textfile is actually there, as specified in the MaxMail config file. We include a sample file, which you may easily edit for your own tastes.

[G]oodbye: User may hang up from MaxMail directly rather than returning back to bbs. This is displayed only IF sysop has hangup established as DTR or STRING in config file.

[R]eset message pointers: Here's a slick function! Most users may not recognize it easily, but you can change the last message read with this function. Its just like entering a direct message number at the Maximus message menu. Allows a user to rescan and capture old messages. Very handy!

[S]can for new messages: Starts message scan/capture function. This function is also executed if the user simply presses a c/r at main menu prompt, but is listed here for redunancy. Will pack up a message file, if messages are available, with full working display. If an archive is created, user will be prompted for download at that time. If he says no, returns to this main menu.

[T]ransmit archive: If a user selected "N"o at download prompt, this menu item will pop up if an archive is built. User then gets a 2nd chance to download file. Even if there is an error in the download and user did not hangup, archive is saved and user can retry from this function.

[Y]ell for sysop: Holler for the sysop if he is around. This function will only be displayed if Sysop has yell scheduled at logon time, based upon what Maximus itself is setup. Also the # of bells is same as Maximus too. User can abort the yell by pressing escape. Sysop can start the chat by typing "Alt-C" from the local console. MaxMail will only allow the yell command to be entered 3 times, eliminating some annoyance for the sysop. Also, the sysop can always initiate a chat with the user at anytime while the user is at the main menu prompt, by typing "Alt-C".

Config Menu Functions

In MaxMail 1.6 there is a new separate menu for the configuration functions. Menu items are dynamic, some will appear only under certain conditions, such as QWK message format selection. Some functions are toggle type. Here is a detailed explanation of each:

- [A]dd new message area: Add a new area for message scanning, if possible. User will be shown current areas selected, then a list of any other message areas available to user at his current priv level, keys, etc. If areas list is larger than screen, will automatically page. If you select this function while an archive is already built up, it will be deleted and and you will have to do a full re-scan.
- [D]elete message area: Delete message area currently selected. Will be shown list of current message areas selected to choose from. If you select this function while an archive is already built up, it will be deleted and and you will have to do a full scan. If sysop has set up some special LOCKED areas, user will not be allowed to delete them. LOCKED message areas are shown in displays with the "*" beside them.
- [E]rase all message areas selected. Remove all current selections.
- [H]ang up after download toggle. If sysop has enabled this, and user has it turned on, MaxMail will automatically hangup on the user after a download. There's always a last chance 10 second delay on hangup anyways.
- [L]ist current message areas selected. Will be paged to screen if more than 23 lines.
- [M]essage format type. User can either select QWK packets or standard text archives. If you select this function while an archive is already built up, it will be deleted and and you will have to do a full re-scan.
- [N]ewfiles list toggle. If enabled and sysop has a newfiles list specified in the MaxMail.cfg file, it will be included in the user archive. The newfiles must be generated externally from some program such as Xlist.
- [P]acker type. Select packer program from choices sysop has set up.
- [Q]uit to main menu.
- [T]otal number of messages packed per area. On QWK packets, some readers, esp older versions, can only handle 200 messages per per area. This option allows them to select any number they wish, or ALL. It defaults to ALL.
- [X]fer protocol. Select default download protocol, or always ask. MaxMail will ALWAYS ask for protocol on uploads.

Sysop Functions

The sysop menu has 4 added functions for controlling users. Here's a summary:

- [D]elete a user: Deletes individual user. Prompts for name and checks to see if user exists. Actual user record is cleared, so that next new user will grab this record.
- [E]rase user message areas: This forces individual or ALL users to re-select message areas, not complete configuration. If you are changing message areas a lot, you may want to do this, but don't do it often as it will likely annoy the user.
- [L]ist users: General statistics function displaying some pertinent data about each user. How many times they have called, last call, packer type, etc. There are also some special flags for each user listed as well. Here's their meaning:
- N ---- Packup newfiles list, if there.
 - H ---- Always hangup after download, if enabled.
 - M ---- User will be forced to update msg areas next time he calls.
 - F ---- User will be force to do full config next time he calls.
- [F]orce reconfig: Forces individual or ALL users to re-do their full configuration. This is seldom necessary, or perhaps never at all. Usually if you add or delete available message areas, MaxMail will detect that and force the user to re-do his configuration anyways. MaxMail does this by keeping track of all *POSSIBLE* message areas available to user, and checks that number every time the user logs on. However if you alter message area #s, etc, WITHOUT changing message area count, you could use this function to force users to enter configuration again.

[K]ill old users: This function will remove MaxMail users who are no longer active on the Maximus bbs.

[P]ack users: This function will only show up on the local maintainence mode. If you delete users or kill off dead users, the record remains in the file but becomes "empty" and available for another user. Its not a problem but file could grow large over a period of time. Running this pack feature will clean out empty records and organzie things. It creates a backup, just you would expect.

[Q]uit: Exits back to main menu

[V]iew user message area: List all the message areas a given user has. Will prompt for user name, check for existance of user, then displays all the message areas user has chosen.

Files that MaxMail creates/uses

MaxMail only has to deal with a few files other than itself. Naturally it needs to load Max.prm. If you are using some other name, be sure and specify it (with full path) on the command line. It will default to looking for Max.prm in the current directory. It also needs the LastUser.bbs file, obviously. I do fully support multi-user modes. Use the /T switch as specified. I open all files in a fully shared mode and try my hardest to make sure no filenames conflict when I have to create files, just in case 2 or more users are executing MaxMail at the same time.

MaxMail also needs to muck with a User config file. It will create one if necessary. If the user doesn't exist in this file, he is considered new and will be shown the new user help file and forced to do a configuration setup first. MaxMail.usr file is used to keep track of user configuration, times called, etc. There is some additional info in there not currently used. The file is a fixed record length and is about 450 bytes for each user. If you later delete a user that MaxMail tracks, you can disable it in the usr file as well. You can specify an alternate user file on the command line, but I don't recommend it. You should run the pack function (from local sysop mode /s) once in a while if you delete users. It will remove all the dead records and make the usr file smaller.

MaxMail also looks for the sysop config file, MaxMail.cfg, in the default dir. I discussed this earlier, and all the information is detailed in it. If no config file is found it will look for it in the directory where MaxMail.exe is. If not there, it will just give up and tell you so!

If user has selected QWK format, the text capture file (which is now a different format) is renamed to your BBSID.QWK, also some other special files are created, needed for QWK format. All these files are generated in the special QWK temp dir that MaxMail will create off maximus bbs root dir or a temp dir you specify. QWK packets can include newfiles lists, news, bulletins, etc. See MaxMail.cfg in QWK section for details. If NOT using QWK format, in addition to the text capture file, MaxMail creates a MsgStat file for the user, and places it into the archive. This file is a summary of all the messages in each area captured, along with list of subject headers, for the convenience of the user. I can also include an optional NEWFILES list with these packets as well.

Running MaxMail in Multi-User nodes

I have tried my best to support multi-user nodes for MaxMail. If you are running multi-user, then you must put the '/T' task switch on the command line for MaxMail. You need to specify a task of 1 or greater, such as '/T1'. Don't use task 0, that's superfluous and I don't think even Maximus works that way.

I open all files in the shared mode, allowing full reading and writing. When I must write to a file, UserConfig, Logfile or Lastuser.bbs, I lock the file down temporarily. Obviously if I can't lock the file down MaxMail will abort and tell the user and sysop why. I have tested this situation out and it seems to work ok. You MUST have SHARE.EXE pre-loaded, but I think that's a requirement for Maximus anyways. All archived files and text capture files are specifically tested and created carefully making sure that there is no possibility of 2 simultaneous users creating the same archive filename at the same time. The text capture file, inside the archive, will have a task number embedded, so no chance of duplication there.

MaxMail opens separate log files with task # appended if you are using the "/T" switch. The log file itself will also indicate task number in each log transaction it makes, so there shouldn't be any confusion. The logfile is always closed and only opens when a transaction needs to be made, so # of open files are kept to a minimum.

When Maxmail is activated it creates a null taskfile to tell itself it's alive. Maximus does this too, I think. Anyways if the sysop logs on and tries to do certain things like reset users or some such, MaxMail will look for any taskfiles and if it finds them, obviously someone else is using MaxMail in another node. It won't allow mucking the user file in that case. I think that's the best checking methodology I could come up with.

I had 2 beta testers running multi-user MaxMail. So far one of them is working with it fine, the other is not. I really don't know why yet. At this point I can only state I make no guarantees. I have tried the best to support MaxMail in multi-user. Hope it works for you!

I had an additional beta tester running it under Novell network lan. After much head beating I have been able to get it fully working in that mode fine. Again I make no guarantees.

Error Codes

MaxMail does return various error codes to the caller, depending upon conditions described below. They may be useful in batchfiles. Although most codes are based upon error conditions, NOT ALL are! The higher levels return other types which may be useful. Sysop should also check the MaxMail log file for more details on any error conditions.

Code	Condition

0	Standard return.
1	General failure, log file may give more details.
2	Low disk space. MaxMail looks for 500K free minimum on the working drive, usually that's the Maximus drive, but it could be another drive that is specified in the TEMPDIR token.
3	User dropped carrier or was idle too long.
4	Some kind of file error.
5	Normal exit BUT user requested hangup after download. You could wish to start mailer instead of Maximus in this condition, but Scott Dudley, the Maximus author reccomends against it. Return to Maximus instead, but its your choice.
6	User uploaded a REP packet, you may want to run your mail export function after this.
7	Normal exit BUT the archived file is saved instead of being deleted. This occurs with the "/N" command line switch. Probably only useful in the local mode. This error code take PRIORITY over errorlevl 6, even if both conditions occur.

Looking for the author!

That's me, Craig Derouen. You can contact me via Fidonet mail at my point address 1:343/600.10. Sorry, my bbs is no longer in operation.

MaxMail was developed on an 80386 machine running at 33 Mhz. I tested it also on my bbs machine, an 80286 running at 12 Mhz using Omniview for a multi-tasker. It has also been tested under DoubleDos and Desqview. I also had 5 other beta testers running it for over 2 months! Needless to say it has been well tested, even under Novell Network lan.

Currently I am supporting Maximus 1.02, but when new versions are released I will update quickly, especially to support future planned message formats.

What's Ahead?

Well of course I will still release a new version of MaxMail to support Maximus 2.0 and the new message format, when it arrives. In the meantime, depending upon timing, I may introduce another major version before Max 2 release. In the next release, regardless, I will concentrate more on speed and less on features. MaxMail is now pretty much full featured and reached the end of my goals. Nevertheless I have some minor features I may try to add:

- 1) Built in watchdog support for archiver/packer programs. If a user drops carrier (especially during a long pack session) will automatically restore BACK to MaxMail! You can use external watchdog programs, but they usually cause a re-boot, undesirable in my opinion. I tried some test code for MaxMail but it is not working yet, so it's disabled.
- 2) Optional message area selection file. Instead of picking up message areas and determining numbers direct from Area.idx file, sysop can have a special alternate file which will establish area numbers desired for selection. Makes it easier if sysop changes around area locations in his area.ctl file, without forcing a re-configuration for MaxMail users.

