MoreMemTM 4.0b

USER'S GUIDE

Gamma Research, Inc.

Contents of MoreMem(TM) 4.0b

About MoreMem	1
Shareware Terms	2
Summary of MoreMem	2
Installing MoreMem	2
Why MoreMem Works	3
Programs and Users MoreMem Helps the Most	4
New Features	5
Starting MoreMem	6
Determining MoreMem's Configuration	6
Custom Configuring MoreMem	7
Custom Configuring MoreMem for 1 Program	8
Custom Configuring MoreMem in General	9
MoreMem Dialog Box	10
View DOS Memory Dialog Box	12
TopBar Window and Setup Dialog Box	12
TopBar Command Line	14
TopBar User-Specified Icons	15
Frequently Asked Questions	16
Removing MoreMem	23
Passwords	23
Payment, Pricing, and Registration	24
Order Form	26
License Agreement	27
Limited Warranty	27
MoreMem Distribution	27
Special Thanks	28
Index	29

About MoreMem

MoreMem(TM) 4.0b Copyright © 1996 Gamma Research, Inc. All rights reserved

Fixes "Insufficient Memory to Run" Errors When Loading Windows Programs

February 27, 1996

904 Bob Wallace Avenue, Suite 212 Huntsville, AL 35801-5648 USA 9am-5pm CST Sales: (205) 533-7103 9am-5pm CST Tech Support: (205) 881-5341 Fax: (205) 881-5341 BBS: (205) 533-7119 e-mail: gamma@traveller.com WWW: http://www.traveller.com/~gamma FTP: ftp.traveller.com /pub/users/gamma

Sales and Support in Europe and Australia Accurate Technology Ltd. Farrier House 48 Denmark Street Wokingham Berkshire RG40 2BB U.K. Tel: +44 (0) 1734 773889 Fax: +44 (0) 1734 771260 BBS: +44 (0) 1734 773887 e-mail: info@accurate.co.uk

Sales and Support in Japan KUBOTA Corporation 2-8-6 Shinjuku Shinjuku-ku, Tokyo 160, Japan Tel: 03-5379-0624 Fax: 03-5379-1670

MoreMem is a trademark of Gamma Research, Inc. Windows is a trademark of Microsoft Corporation. CompuServe is a trademark of CompuServe, Inc. Netroom is a trademark of Helix Software Company, Inc. QEMM-386 is a trademark of Quarterdeck Office Systems, Inc. 386MAX is a trademark of Qualitas, Inc. Other product names are trademarks or registered trademarks of their respective owners.

Shareware Terms

You may try MoreMem for 30 days before you must either register MoreMem or delete it from your computer. **Please be honest, and in the spirit of shareware,** register the program if you use it for longer than 30 days. See the Payment, Pricing, and Registration and Order Form topics.

Summary of MoreMem

Each Windows program needs a small amount of DOS memory to load. MoreMem pushes DLLs out of DOS memory into extended memory, so DOS memory remains free for programs to load.

MoreMem is a device driver that is designed to fix "Insufficient Memory to Run" errors when loading Windows programs. On startup, each Windows program needs about 800 bytes of conventional DOS memory below 640K. This is because Windows is basically a DOS extender that still needs to communicate with DOS for things like disk and other hardware interrupts. Other programs may also need DOS memory. For example, Windows for Workgroups needs about 8192 bytes to connect to a network drive. MoreMem creates DOS compartments of free DOS memory, so that programs can load.

Installing MoreMem

There are three ways to install MoreMem.

You can automatically install MoreMem by:

- (1) starting setup.exe,
- (2) if you are a registered user, entering your user name, company name, and password,
- (3) checking or unchecking Install MoreMem Group and Icons checkbox,
- (4) selecting a radio button for where to add TopBar,
- (5) checking that the from and to directories are correct,
- (6a) if you are a registered user, clicking on the Install Registered License of MoreMem button, OR
- (6b) if you are a shareware user, clicking on the Install 14-Day No Password / 30-Day Total Shareware Trial, and
- (7) clicking on the YES button to restart Windows.

YOU MUST RESTART WINDOWS FOR MOREMEM TO WORK. If you do not install to the Windows directory or the Windows system directory, the MoreMem and TopBar files must be in the PATH.

Only automatic installation using setup.exe can install the 14-Day No Password Trial. The other manual installations can only install the 30-Day Total Shareware Trial.

You can manually install MoreMem by:

- (1) starting the Control Panel,
- (2) double clicking on the Drivers Icon,
- (3) clicking on the Add button,
- (4) double clicking on the "Unlisted or Updated Driver" item in the listbox,
- (5) entering the drive and directory of the MoreMem files,
- (6) pressing enter to add the "Gamma Research MoreMem Utility" item in the listbox,
- (7) configuring the MoreMem Setup dialog box,
- (8) clicking on the OK button,
- (9) clicking on the Restart Windows Now button, and
- (10) adding to the Program Manager (or shell) a GRI MoreMem 4.0 group with icons for topbar4.exe, mempop4.exe, memicon4.exe, moremem4.hlp, mm4-us.doc, moremem4.rtf, and moremem4.doc, which have installed to the Windows system directory.

You can also manually install MoreMem by:

- (1) adding the entry "MoreMem4=moremem4.drv" to the [drivers] section of SYSTEM.INI,
- (2) adding moremem4.drv to the "drivers=" entry in the [boot] section of SYSTEM.INI,
- (3) copying moremem4.drv, topbar4.exe, mempop4.exe, memicon4.exe, moremem4.hlp, mm4-us.doc, moremem4.rtf, and moremem4.doc to the Windows system directory.
- (4) adding to the Program Manager (or shell) a GRI MoreMem 4.0 group with icons for topbar4.exe, mempop4.exe, memicon4.exe, moremem4.hlp, mm4-us.doc, moremem4.rtf, and moremem4.doc.

You can decompress files that end with an underscore by using the Microsoft expand utility. For example, the following will expand moremem4.dr_: expand moremem4.dr_ moremem4.drv

Why MoreMem Works

In summary, each Windows program needs a small amount of DOS memory to load. MoreMem pushes DLLs out of DOS memory into extended memory, so DOS memory remains free for programs to load.

On startup, each Windows program needs about 800 bytes of conventional DOS memory below 640K for its task database and an allocation by Windows' USER.EXE module. This is because Windows is basically a DOS extender that still needs to communicate with DOS for things like disk and other hardware interrupts.

Unfortunately, DLLs also try to load into DOS memory, although they can load into extended memory. MoreMem fragments DOS memory by breaking it into small compartments of free DOS memory, so DLLs cannot fit into DOS memory. Thus, DLLs are pushed out of DOS memory into extended memory, and DOS memory is saved for the other uses that actually require it. Since MoreMem just systematically allocates and deallocates DOS memory, MoreMem should be compatible with any Windows or DOS program. If any program does not seem to be working with MoreMem, try increasing the size of MoreMem's DOS compartments. Please contact Gamma Research if you find any programs that do not work with MoreMem, so that we can try to create a fix or configuration to allow those programs to work with MoreMem.

Windows allocates moveable memory from the top of memory, but it allocates fixed memory from the bottom. Therefore, if fixed memory allocations fill up the DOS memory below 640K, then no new programs can run, and you get that dreaded "Insufficient Memory to Run" error, no matter how many megabytes of free

extended memory your computer has.

Programs should allocate most of their memory as moveable. However, some things like interrupt code and data need to be fixed, and some DLLs are incorrectly designated as fixed. Things like multimedia, networking, PCMCIA, sound, screen savers, drivers, 386 enhanced drivers, databases, and modem software are notorious for gobbling up DOS memory. Thus, this trick is to fragment DOS memory into many small compartments so that those fixed memory allocations are prevented from loading into DOS memory, and then, programs can load into the remaining free DOS compartments.

Programs and Users MoreMem Helps the Most

Certain programs grab large amounts of DOS memory. MoreMem helps you load these programs by pushing their DLLs out of DOS memory into extended memory, so DOS memory remains free for other programs to load. The reason that Windows 3.x users have problems with the programs below is that they have DLLs that try to load first into DOS memory, when they should be loading into extended memory.

Multimedia (sound, CD-ROMs, video, graphics, etc.) Modem and Fax Software (BitFax, WinFax, etc.) Databases (Notes, Access, Paradox, etc.) Utilities (screen savers, antivirus, backup, etc.) Networking (WFW, Netware, Banyan, etc.) Video Conferencing (Intel ProShare, etc.) Development Software (Delphi, Powerbuilder, Paradox, etc.) Emulation Software (Rumba, Winsocks, Reflections, etc.) Graphics (Corel Draw, Photoshop, etc.) Spreadsheets (Excel, 1-2-3, etc.) Proprietary (in house development using Visual Basic, Paradox, etc.) Data Warehousing OCR Imaging

MoreMem is ideally suited for corporate needs, since networked computers and laptops suffer a large number of DOS memory problems. If networked computers or PCMCIA laptops machines have 8 Mb of RAM and cannot run at least 8 applications simultaneously without getting the dreaded "Insufficient Memory to Run Errors," then, MoreMem can almost certainly help. Some networks use more DOS memory than others, and TCP/IP, Netbios and IPX can cause more DOS memory problems.

For companies which are in no hurry to change operating systems and want an industrial strength solution to "Insufficient Memory to Run Errors," MoreMem can provide that solution. Companies around the world have bought thousands of copies on their initial purchase and often purchase thousands more after learning how MoreMem can maximize their returns on their current investment in applications, operating systems, training, support, and network administration. Practically all of the major computer companies have already purchased MoreMem. References are available.

In a recent article in *Corporate IT Strategy*, it was stated that the cost of upgrading a 1000-user network to Windows 95 was £840,000 (\$1,260,000). The cost of buying MoreMem for the same would be less than £20,000 (\$30,000). Most of our clients believe there is little need now to upgrade their operating system for several years! Even companies, which have publicly announced plans to convert to Windows 95 or NT, buy large numbers of licenses for their current computing environment.

MoreMem does not alter the applications or Windows' internal data structures or code. MoreMem does not use compression. (Compression can slow a computer's performance by about 5%.) MoreMem is of Industrial Strength, and saves the network administrators huge amounts of time as there is no need for them to tweak upper memory and TSRs. However, they can still use Netroom, MemMaker, QEMM-386, or 386MAX simultaneously without conflicts.

New Features of MoreMem 4.0b Over 4.0a

- (1) MoreMem has a normal and advanced setup dialog box.
- (2) MoreMem can uninstall its Program Manager group and icons.
- (3) MoreMem includes an online version of its manual with graphics in the Microsoft Word for Windows file format.
- (4) TopBar can display a user-specified icon for a window according to MoreMem4.ini file entries. (This fixes the icon problems for Lotus 1-2-3 and Lotus Notes.)
- (5) TopBar has an option to show all top-level windows.
- (6) TopBar allows termination of unresponsive applications and toggling of a window's always on top state.
- (7) TopBar has a Quick Exit Windows button in its setup dialog box.
- (8) TopBar has a command line option to keep TopBar hidden.
- (9) TopBar has a command line option to close TopBar after all automatic freed/filled applications have closed.

New Features of MoreMem 4.0a Over 4.0

- (1) MoreMem allows the user to turn off free DOS memory calculations to prevent conflicts with memory leaking programs.
- (2) MoreMem has a new algorithm for finding windows to prevent conflicts with programs that do not correctly close windows.
- (3) MoreMem allows the user to view which programs are using DOS memory.
- (4) MoreMem displays the largest amount of contiguous DOS memory.

New Features of MoreMem 4.0 Over 3.0

- (1) MoreMem allows the user to reserve three different sets of DOS compartments. Within each set, the size and number of the compartments are user-definable.
- (2) MoreMem has 16 default settings to handle various Windows configurations and drivers.
- (3) MoreMem can automatically cycle through the configurations on bootup until an optimal configuration is found.
- (4) MoreMem's setup dialog box can be shown on bootup until the user finds an optimal configuration.
- (5) To keep more DOS memory free after bootup, MoreMem can allocate most of DOS memory when Windows boots and free it after all drivers and startup applications load through the use of temporary compartments.
- (6) MoreMem can set aside a user-specified amount of DOS memory for programs that require larger amounts of DOS memory. These are called filled compartments, which can be automatically freed and re-filled for user-specified programs.
- (7) MoreMem can be temporarily disabled.
- (8) MoreMem can be uninstalled through a button in its setup dialog box.
- (9) MoreMem has a new dialog box to display DOS memory usage by program and size.

New Features of TopBar 4.0 Over 3.0

- (1) MoreMem now includes TopBar, a resource monitor and task switcher that fits into the title bar area at the top of the screen.
- (2) TopBar displays the time, date, DOS memory, system memory, GDI resources, and USER resources.
- (3) As memory levels fall below user-specified thresholds, TopBar changes its background color from green to yellow to red.
- (4) TopBar can optionally warn the user through a popup dialog box.
- (5) The icon of each running application is displayed in TopBar.
- (6) The user can click on an icon to switch to an application.
- (7) The user can also restore, maximize, minimize, close, and hide applications using a popup menu.
- (8) TopBar can automatically free some filled compartments when a program executes and, then, re-fill them

after the program exits.

NOTE TO MOREMEM 3.0 USERS: DOS blocks are now called DOS compartments to reduce confusion with DOS Upper Memory Blocks.

Starting MoreMem

Since MoreMem is a device driver, it automatically executes whenever Windows loads. You can bring up MoreMem's setup dialog box by:

(1) clicking on the MoreMem icon in TopBar's task button bar.

OR

(1) starting MEMPOP4.EXE, which pops up the setup dialog box of MoreMem's device driver.

OR

- (1) starting MEMICON4.EXE, which places a MoreMem icon on the bottom of the screen.
- (2) clicking on the MoreMem icon, which pops up the setup dialog box of MoreMem's device driver.

OR

- (1) starting the Control Panel,
- (2) double clicking on the Drivers Icon, and
- (3a) double clicking on the "Gamma Research MoreMem Utility" item in the listbox, or
- (3b) selecting the "Gamma Research MoreMem Utility" item in the listbox and clicking on the Setup button.
- NOTE: For Windows 95, MoreMem does not appear in the Control Panel, since it is not an actual physical device driver. Therefore, you must use one of the other procedures to display the MoreMem dialog box.

Determining MoreMem's Configuration

MoreMem has 16 default configurations. In general, higher numbered configurations reserve progressively larger and more DOS compartments for more advanced users. By checking the **Cycle Through Configs** checkbox, MoreMem will automatically increment the configuration on each bootup. You can then uncheck the checkbox when you find a configuration that works with all of your programs. Finally, you can uncheck the **Show Dialog on Bootup** checkbox so you no longer have to see the MoreMem setup dialog box on bootup.

- (1) **Minimal User**. This setting is for the user who only runs well-behaved Windows programs that do not allocate DOS memory.
- (2) **Normal User**. Same as above, except this setting reserves slightly more and slightly larger DOS compartments. This is a good setting for non-networked users who only run normal applications.
- (3) **Power User**. This setting is for the user whose communication or multimedia programs allocate some DOS memory. Try this setting if the above settings are not working.
- (4) **Max Out User**. This setting is for the user who wants to maximize free DOS memory. This setting allocates temporary DOS compartments, which are initially filled on bootup, but then, freed after bootup, so the DOS memory is not used by bootup drivers and programs.
- (5) **WFW Net. Min. User**. This setting is for the user whose network, communication, multimedia, or antivirus programs allocate some DOS memory. Try this setting if the above settings are not working. NOTE: You do not have be on a network to use these configurations. The names of these configurations are just general descriptions.
- (6) **WFW Network User**. This setting is for the WFW network user who uses WFW to connect to network drives and uses other WFW network features like e-mail.

- (7) **WFW Power User**. This setting is for the WFW network user who needs larger sized DOS compartments.
- (8) **Max Out WFW Net**. This setting is for the WFW network user who wants to maximize free DOS memory. See setting (4) for how this is done.

The eight additional default settings are available by checking the Double Default Sizes checkbox, which doubles the DOS compartment size and halves the number of DOS compartments.

Setting (9) is for custom configuration of MoreMem. See the Custom Configuring MoreMem topic.

NOTE: Using temporary compartments, as in the Max Out configurations, requires TopBar to run. If you do not want to use TopBar, you can turn on the Close After Free Temps option in TopBar's setup dialog box to close TopBar automatically, or you can turn on the Hide TopBar option in TopBar's setup dialog box.

Custom Configuring MoreMem

NOTE: To custom configure MoreMem, MoreMem's dialog box must be in its advanced mode, which displays the groupboxes for customizing Sets A, B, and C. If you are not in advanced mode, press the **Advanced** >> button to switch to advanced mode. You can switch back to normal mode by pressing the same button, which would now be labeled as the **Normal** << button.

For most users, one of the standard configurations in MoreMem's setup dialog box is suitable for optimizing the use of DOS memory. First, try all eight standard configurations in MoreMem's setup dialog box. See the Determining MoreMem's Configuration topic. You should only have to custom configure MoreMem when you cannot get one or more programs to load because of insufficient DOS memory. At first glance, it might seem difficult to custom configure MoreMem, but it is not as hard as it looks. After DOS and Windows load, MoreMem works by dividing up what is left of the 640K of conventional DOS memory into compartments of specific sizes. By limiting the sizes of these compartments and keeping them fairly small, it is possible to exclude large program files like Dynamic Link Libraries from loading into DOS memory. Most Dynamic Link Libraries are larger than 20K. By making compartments of 800 to 10,000 bytes, these larger files cannot load into DOS memory because there is not enough continuous DOS memory available. Thus, they are forced to load into extended memory where there is much more room for them. This is basically how MoreMem works.

Some software, like networking software, need to load large files or drivers into DOS memory in order to function properly. These drivers are often larger than the compartment sizes in the standard configuration settings of MoreMem. Thus, they will not be able to load into DOS memory and the program will not be able to run because there is not enough continuous DOS memory available for the driver to load. The simple solution is that you need to increase the sizes of the compartments that MoreMem is making so that this driver will be able to load into DOS memory. Now, you do not want to increase the sizes of the compartments too much because this will allow Dynamic Link Libraries and other files to load into DOS memory also. Since the program that is not loading is only a single program, the most efficient way to allow it to load would be to create a single compartment with a large enough size so that this program can load. This is very simple to do with MoreMem.

MoreMem breaks up the DOS memory into 3 sets of compartments (A, B, and C). It is possible to see how many compartments of what size are being used in each set of compartments by opening MoreMem's Setup dialog box and looking at the right side. The first thing you might notice is that the set C of DOS compartments is never being used with the standard configurations. The reason for this is because this set is used to custom configure MoreMem so that the user can tailor it to help a specific program load.

Below are two procedures for customizing MoreMem. The first is for customizing MoreMem for one program, and the second is for customizing MoreMem in general.

Custom Configuring MoreMem for 1 Program

The first thing to do is to reboot Windows. Bring up MoreMem's setup dialog box, and click on the

FREE ALL button. Then, click on the VIEW MEM button. This brings up a View Dos Memory dialog box that shows the use of DOS memory. Switch back to Program Manager (or your shell), and run the program that has been giving you trouble. Once the program is opened, switch back to the View Dos Memory dialog box. Click on the SHOW CHANGED button, and then look at the top of that window at the value for Change in Free DOS Memory. This is the maximum amount of DOS memory the program needs in order to load properly. For an example, let us say that the value came out to 32,000 bytes. Now all you have to do is create a compartment large enough for the program to load into and you have successfully custom configured MoreMem.

NOTE: If you cannot start your program with the above procedure, open MoreMem's Setup dialog box. Select a Max Out (4) or (8) configuration, and repeat the above procedure.

To finish the custom configuring, you will need to go close the View Dos Memory dialog box and go back to MoreMem's Setup dialog box. Now, pick one of the standard configurations that you think will suit your needs. Now using that standard configuration as the background, you will add a single compartment to set C of DOS compartments. To do this you will change the Size to Reserve in the set C of DOS compartments to the size that you determined from above; you will change the Number to Reserve to 1, and you will make it a type FILL compartment so that MoreMem will fill it and not let anything else load into it. Now click on the RESERVE button, and reboot Windows with your new custom configuration. When Windows comes back up open MoreMem's Setup dialog box, and you will see that you have one filled compartment of 32,000 bytes in set C of your DOS compartments. Now, whenever you want to use your program, you will simply click on the FREE 1C button at the bottom of MoreMem's Setup dialog box. Now, you can run your program. After you close the program, you will click on the FILL 1C button at the bottom of MoreMem's Setup dialog box. If you want the program to load immediately after Windows, you can change the compartment type from FILL to FREE, and then, load the program with Windows by placing it in the Startup group (or on the load= line in the [boot] section in your win.ini file). Then, reboot Windows, and the program should load. Also, if you use the program frequently, you can use TopBar to fill and free the compartment automatically. See the TopBar Command Line topic.

Some of the known custom configurations are as follows:

(1) Lap Link 2.0

Set A: 8 compartments of size 6400 byes of type temp (will not create any more) Set B: 40 compartments of size 1600 bytes of of type free

Set C: 1 compartment of size 120,000 bytes of type fill

You may then load Lap Link with the TopBar command line and TopBar's /C1 switch. See the TopBar Command Line topic.

(2) **Banyan Vines**

Use standard configuration #6, and add in Set C 1 compartment of 32,000 bytes or 48,000 bytes as a type free compartment.

Custom Configuring MoreMem in General

First, you need to enter the size of a MoreMem DOS compartment into the Size to Reserve edit box of Set A. The number should be at least 512 and a multiple of 32. (MoreMem automatically rounds off for you.) A size of 800 will allow the DOS memory of a normal Windows program to fit inside of a MoreMem DOS compartment. A size of 8192 will allow Windows for Workgroups to connect to network drives. Lotus, network, communication, antivirus, and multimedia drivers/programs may require a size greater than 800. Remember that each MoreMem DOS compartment uses about 32 extra bytes of DOS memory. If any program does not seem to be working with MoreMem, it may need a larger continuous compartment of DOS memory. Try increasing the size of MoreMem's DOS compartments.

Second, you need to enter the number of DOS compartments into the Number to Reserve edit box of Set A. The valid range of DOS compartments to reserve is 0 to 500. Remember that MoreMem loads before

practically all other drivers and programs. If you use a DOS compartment size of 800, estimate the maximum number of Windows programs and drivers that you will load after MoreMem and then add a bunch more for safety. If you use a DOS compartment size of 800, a good number to use would be around 100. If you use a DOS compartment size of 8192, a good number to use would be around 15. In general, you want 50-200K worth of DOS compartments.

Third, you need to determine what kind of DOS compartment that you want. FREE type compartments are the normal DOS compartments of free DOS memory. FILL type compartments take up DOS memory. They are used to set aside DOS memory for specific programs or tasks. (FILL type compartments are not fragmented; they are continuous in memory.) TEMP type compartments are filled on bootup and, then, freed after startup drivers and programs load. You can specify how many seconds for MoreMem to wait before freeing its TEMP type compartments by entering the number of seconds into the Free Type Temp After x Sec edit box. (TEMP type compartments are not fragmented if they are freed after 0 seconds.) TEMP type compartments maximize free DOS memory by preventing startup drivers and programs from taking too much DOS memory.

Fourth, if you need different sized DOS compartments for different programs, you can repeat the process for Set B and Set C. The order of allocation is Set C, then Set B, and then Set A. For example, if a sound board or antivirus program needs about 32K on bootup, you could allocate one 32768 byte Free type DOS compartment in Set C.

Fifth, you probably want to reserve DOS compartments as high as possible in DOS memory by checking the Reserve Compart. High checkbox. Since DOS memory is allocated from the bottom, this feature helps prevent fragmentation of DOS memory, by keeping MoreMem's DOS compartments unused as long as possible, but it increases the time for Windows to bootup, because this option uses a more complicated allocation algorithm. This option may be incompatible with some DOS memory-leaking programs.

MoreMem Dialog Box

STATIC TEXT

User Name. Displays the current or registered user name.

- **Company Name.** Displays the current or the registered company name.
- **Free DOS Memory (Contiguous).** Displays the current amount of free DOS memory in bytes and the largest contiguous amount of DOS memory in parentheses.
- Free DOS Memory On Bootup. Displays the amount of free DOS memory when Windows boots.
- **Free DOS Memory Before MoreMem.** Displays the amount of free DOS memory before MoreMem was installed by the setup program.
- **Free DOS Compartments; Free Bytes.** Displays the number of free DOS compartments for each set and the total free bytes in DOS compartments.
- # of Reserved DOS Compartments. Displays the number of reserved DOS compartments for each set.

RADIO BUTTONS

Configurations 1-9 are described in a previous topic. See the Determining MoreMem's Settings / Configuration topic.

CHECKBOXES

- **Double Default Sizes.** This doubles the DOS compartment size and halves the DOS compartment number of the first eight default configurations to get the other eight default configurations.
- **Cycles Through Configs.** This increments the configuration setting on each bootup. You should uncheck this checkbox when you find a setting that works with all of your programs.
- **Show Dialog on Bootup.** This shows MoreMem's setup dialog on each bootup. You should uncheck this checkbox when you find a setting that works with all of your programs.
- **Reserve Compart. High.** This reserves MoreMem's DOS compartments as high in DOS memory as possible. This helps reduce memory fragmentation by keeping MoreMem's DOS compartments free as long as possible, but it increases the time for Windows to bootup. Uncheck this option if you have any DOS memory-leaking programs that are conflicting with MoreMem.
- **Boot As First Driver.** This boots MoreMem as the first Windows device driver. You should uncheck this if you cannot get your multimedia drivers to work with MoreMem.
- **Enable MoreMem.** This turns on MoreMem's DOS compartment allocations. You can turn off MoreMem by unchecking this option, and then pressing the Reserve button and rebooting.
- **Do Not Show Warnings.** This turns off MoreMem's warnings when it cannot allocate all of the requested DOS compartments.
- **Do Not Show F/F Warnings.** This turns off MoreMem's Fill/Free Warnings when it cannot fill or free a specific fill/free request.

BUTTONS

Help. This brings up the contents topic in the help file.

Configuration Help. This brings up the Determining MoreMem's Settings / Configuration topic in the help file. **Registration Info.** This brings up the Payment, Pricing, and Registration topic in the help file.

Order Form. This brings up the Order Form topic in the help file.

OK. This reserves the requested DOS compartments and closes the dialog box.

Reserve. This reserves the requested DOS compartments.

Password. This brings up the Password / About dialog box to enter a registered user name, company name, and password.

Close. This saves the current settings and closes the dialog box.

Cancel. This cancels the current settings and closes the dialog box.

Free All. This frees all of MoreMem's DOS compartments. This temporarily disables MoreMem.

About. This brings up the Password / About dialog box.

Reboot. This reboots Windows.

ViewMem. This brings up the View DOS Memory dialog box, which displays DOS memory usage by program and size.

UnInstall. This removes MoreMem from a computer's SYSTEM.INI file.

- **Normal** << (or Advanced >>) This switches the dialog box between normal and advanced mode. The normal mode does not show the sets or the fill/free buttons.
- Fill 1A. This fills 1 DOS compartment of set A.
- Fill 1B. This fills 1 DOS compartment of set B.
- Fill 1C. This fills 1 DOS compartment of set C.
- Free 1A. This frees 1 DOS compartment of set A.
- Free 1B. This frees 1 DOS compartment of set B.
- Free 1C. This frees 1 DOS compartment of set C.

SETS

Size to Reserve edit box. This is the size of the DOS compartments to reserve for the respective set.

- Number to Reserve edit box. This is the number of DOS compartments to reserve for the respective set.
- **Free radio button.** This is the normal type of DOS compartment. It is free for use by programs and drivers. **Fill radio button.** This is a special type of DOS compartment. It is filled and cannot be used by programs until it
- is freed by the free buttons in MoreMem or by TopBar's command line options.
- **Temp radio button.** This is a special type of DOS compartment. It is filled on bootup, and then, automatically freed after startup drivers and programs load.
- **Free Temp Type after x Sec. edit box.** This is the number of seconds to wait until automatically freeing temp type DOS compartments.

STATIC TEXT

Free DOS Memory. This shows the amount of free DOS memory.Largest Contiguous Free DOS Memory. This shows the largest contiguous amount of free DOS memory.Change in Free DOS Memory. This shows the change in free DOS memory since the previous free DOS memory calculation.

RADIO BUTTONS

Address. This sorts the DOS memory by the address. **Program.** This sorts the DOS memory by the program. **Size.** This sorts the DOS memory by the size.

CHECKBOXES

Show All. This shows all DOS memory including MoreMem, User, MMSystem, Display, GDI, Sound, System, Comm, Kernel, Mouse, Fonts, OEMFonts, Toolhelp, Win87em, Timer, and Winoldap allocations.

BUTTONS

OK. This saves the configuration and closes the dialog box.

Refresh. This refreshes the DOS memory calculations.

Show Changed (or Reset). This shows the changes in DOS memory since the last DOS memory calculations. Then, switches to a **Reset** button to refresh the DOS memory calculations.

Help. This brings up this help topic.

Cancel. This cancels the configuration and closes the dialog box.

TopBar Window and Setup Dialog Box

TopBar is a separate Windows program that provides a resource monitor and task switcher that fits into the empty space at the top of the screen where the title bar of a maximized application normally resides. TopBar displays the date, time, DOS memory, system memory, GDI resources, and USER resources. As memory levels fall below user-specified warning and error thresholds, TopBar changes its background color from green to yellow to red. TopBar can optionally warn the user through a popup dialog box. The icon of each running application is displayed in TopBar. The user can click on an icon to switch to an application. The user can right click on an icon to bring up a popup menu to restore, maximize, minimize, close, terminate, toggle the always on top state, and hide the associated application. The application's title will be displayed in the top line of the popup menu. TopBar is also used to free MoreMem's TEMP types. TopBar has command line settings to fill and free MoreMem's DOS compartments. See the TopBar Command Line topic.

- (1) To move TopBar's window, drag on the green memory information section of TopBar or on the title bar.
- (2) To bring up TopBar's setup window, double click on the green memory information or on the title bar or single click on the TopBar icon in the button bar.
- (3) To bring up MoreMem's setup window, left click or right click on the MoreMem icon in the button bar.
- (4) To switch to a task, click on its icon in the button bar.
- (5) To restore, minimize, maximize, close, terminate, toggle the always on top state, or hide a task, right click over the task's icon to bring up a popup menu.

NOTE: Termination may not free all of the memory owned by the application.

CHECKBOXES

24 Hour Time. This option turns on 24 hour military time.

European Date. This option makes the date format day-month-year.

2 Line Display. This option turns on a 2 line display of memory information.

Stretch Icons. This option stretches icons to fit in the button bar.

Full Size Top Bar. This option displays full size (32x32) icons in the button bar.

No Warnings. This option turns off the popup warning message boxes.

No Error Messages. This option turns off the popup error message boxes.

Show All Top-level Wiindows. This option shows all top-level windows in the button bar.

Show Hidden Windows. This option shows all windows in the button bar.

Always On Top. This option displays TopBar over all other windows.

Hide Top Bar. This option hides TopBar.

Hide When Screen Saver. This option hides TopBar for Windows 3.0 screen savers that do not cover Always-On-Top windows.

Load TopBar in win.ini. This option adds topbar4.exe to the "load=" entry in the [windows] section of win.ini.

- **No Title Bar.** This option removes the title bar from TopBar's window and adds a thickframe to TopBar's window.
- **Calc Free DOS Memory.** This option turns on calculation of free DOS memory for TopBar's information window. Uncheck this option if you have any DOS memory-leaking programs that are conflicting with TopBar.

Exit After Free Temps. This option closes TopBar after all MoreMem TEMP types are freed.

EDIT BOXES

Messages: Warning and Error for DOS KB, memory KB, GDI %, and User %. These eight edit boxes set the thresholds for popping up warning and error message boxes and for changing TopBar's background color from green to yellow to red.

Refresh Every x Sec. This sets the time between refreshing the memory information and task button bar. The valid range is 1 to 60.

Number of Task Icons. This sets the number of task icons in the button bar. The valid range is 1 to 30. **Font.** This sets the font for the memory information.

BUTTONS

Font. This brings up a font dialog box for the memory information display. NOTE: You can only change the font name. The size of the TopBar font is fixed depending on (1) the height of a standard Windows title bar, (2) the state of the 2 Line Display option, and (3) the state of the Full Size TopBar option.

Good. This brings up a choose color dialog box for the good background color.

Warning. This brings up a choose color dialog box for the warning background color.

Error. This brings up a choose color dialog box for the error background color.

Text. This brings up a choose color dialog box for the text color.

OK. This accepts the current values in the dialog box and closes the dialog box.

Help. This brings up TopBar's topic in the help file.

Exit. This closes TopBar. All of MoreMem's TEMP type DOS compartments are immediately freed. **Reboot.** This reboots Windows.

Compact Memory. This rearranges memory and frees all discardable memory so that as much memory as possible is freed.

Cancel. This cancels the current values in the dialog box and closes the dialog box.

TopBar Command Line

TopBar has command line settings to fill and free MoreMem's DOS compartments. These command line options can be executed even if TopBar is already running.

topbar4.exe [/H] [/X] [+/-][ABC][#] [program]

/H This keeps TopBar hidden when TopBar is restarted for the below filling or freeing options.

- /X This causes TopBar to exit after all automatic freed/filled applications have closed.
- + This fills [#] DOS compartments of set [A, B, or C].
- / (1) This frees [#] DOS compartments of set [A, B, or C], (2) runs the [program], (3) when the program closes, fills [#] DOS compartments.
- This frees [#] DOS compartments of set [A, B, or C].
- ABC This specifies the set for the [+/-] option.
- # This specifies the number of compartments.

program This is the command line for the program.

Examples:

topbar4.exe +A1

This fills 1 DOS compartment of set A.

topbar4.exe /A1 notepad.exe

(1) This frees 1 DOS compartment of set A, (2) runs notepad.exe, (3) when notepad exits, fills 1 DOS compartment of set A.

topbar4.exe -A1

This frees 1 DOS compartment of set A.

TopBar User-Specified Icons

If you do not like the icon that TopBar is using for a window, TopBar can display a user-specified icon for that window. For example, Lotus applications sometimes do not contain icons in their modules' executable files, so TopBar can only display a white blank icon for those applications.

To set up user-specified icons, you must edit the MoreMem4.ini file to tell MoreMem which windows to change and which files contain the icons that you want to use. You can have up to 9 user-specified icons. Add the following entries to the [topbar4.exe] section in the MoreMem4.ini file in your Windows directory, where *x* is a user-specified number from 1 to 9:

ChangeWindow*x*=*window-title-bar-name* ChangeFile*x*=*filename-with-icon*

You can get the title bar name by right clicking on the task icon in TopBar's window. It is the first line in the popup menu. You may specify a full filename path up to 127 characters or just a filename. Your user-specified numbers must be consecutive from 1 to 9 because TopBar will stop searching for user-specified icons after one is not found. For example, TopBar installs the following default user-specified icons:

ChangeTitle1=Lotus 1-2-3 ChangeFile1=123w.exe

ChangeTitle2=Lotus Notes ChangeFile2=notes.exe **Frequently Asked Questions**

- 1. I still can't get a program to load. What can I do?
- 2. How can I find out how much DOS memory a Windows program needs?
- 3. Why doesn't my permanent password work?
- 4. Does MoreMem work with DOS memory managers, like Netroom, MemMaker, QEMM-386, and 386MAX?
- 5. I cannot get my sound card, fax, communication, or network drivers to load (especially for Banyan or Sound Blasters). What should I do?
- 6. Does MoreMem change my config.sys or autoexec.bat file?
- 7. My computer boots too slow. How can I get it to boot faster?
- 8. Do I have to reboot every time I change MoreMem's settings?
- 9. I am still getting an Insufficient Memory to Run error. What can I do?
- **10.** Does MoreMem affect the DOS memory in a Windows DOS box?
- 11. I am getting GPFs while starting, running, or closing Microsoft Word, Microsoft Excel, DOS boxes, and/or other programs. What can I do?
- 12. When can MoreMem help a program while its running?
- 13. Why won't my antivirus program load or run?
- 14. Why won't my Win32s drivers load?
- 15. Can MoreMem help my printing or help file problems?
- 16. Why are icons disappearing from my screen?
- 17. Why is my hard disk thrashing?
- 18. How much memory, resources, and CPU time do MoreMem and TopBar use?
- 19. How can I stress test my computer so I can get the "Insufficient Memory to Run" error?
- 20. Is MoreMem compatible with Windows 95? Is MoreMem needed in Windows 95?
- 21. Is MoreMem compatible with OS/2 Warp?
- 22. What is the easiest way to install many network licenses?
- 23. Can I get one password for all of my multiple licenses?
- 24. Can I register through Compuserve's SWREG?
- 25. Where can I download the latest version of MoreMem?
- 26. Where can I get a button bar program launcher that is similar to MoreMem's button bar task switcher?
- 27. Can I boot Windows without the MoreMem logo?
- 28. Can I run TopBar without MoreMem?
- 29. Can I run MoreMem without TopBar?
- 30. TopBar has disappeared. Why can't I find TopBar on my screen?
- 31. Can I run MoreMem and/or TopBar in Windows NT?
- 32. Can I change the size of the TopBar font in the memory display?
- 33. Why won't TopBar show the current icon of the running applications?

Frequently Asked Questions & Answers

1. I still can't get a program to load. What can I do?

It probably needs DOS memory. Try the following process. You may first want to find out how much DOS memory a program needs. See FAQ #2.

- (1) You may want to reboot Windows using one of MoreMem's Max Out settings.
- (2) Then, bring up MoreMem's setup dialog box.
- (3) Reserve 1 compartment of size 32000 bytes of type FREE in Set C by
 - (A) typing 32000 into Set C's Size to Reserve edit box,
 - (B) typing 1 into Set C's Number to Reserve edit box,
 - (C) selecting Set C's Free radio button, and
 - (D) pressing the Reserve button.
- (4) Try to load the program.

- (5) Decrease or increase the size until you find the smallest size that will allow your program to load.
- (6a) You can then use that size as your new DOS compartment size,
- (6b) or instead, you could reserve 1 or more FILL type compartments and free 1 or more of them before running the program.
- (7) To automate the process, you can use TopBar's automatic freeing and re-filling command line features. See the TopBar Command Line topic.

2. How can I find out how much DOS memory a Windows program needs?

You can use MoreMem's View DOS Memory dialog box to help you find out how much DOS memory a program needs.

- (1) You may want to reboot Windows using one of MoreMem's Max Out settings.
- (2) Then, bring up MoreMem's setup dialog box.
- (3) Press the Free All button in MoreMem's setup dialog box.
- (4) Press the View Mem button in MoreMem's setup dialog box to bring up the View DOS Memory dialog box.
- (5) The two listboxes show the free DOS memory blocks and the used DOS memory blocks.
- (6) Load the program.
- (7) Press the Show Changed button in MoreMem's setup dialog box.
 - (A) Memory blocks that are new are marked with a + on the right margin.
 - (B) Memory blocks that are now gone are **NOT** marked with a + on their right margin.
 - (C) Memory blocks that have not changed are no longer displayed in the listboxes.
 - (D) The program's DOS memory allocations are now displayed in the Used DOS Memory listbox.
 - (E) The change in free DOS memory is displayed at the top of the View DOS Memory dialog box.
- (8) Use this as a guide to figure out how much DOS memory the program needs.
- NOTE: Code and some other allocations probably do not require DOS memory. You should exclude these from your DOS memory estimate.
- Also, as a temporary quick fix solution to loading a program, you can press MoreMem's Free All button and, then, press MoreMem's Cancel button before running the program, and then press MoreMem's Reserve button after the program exits.

3. Why doesn't my permanent password work?

Make sure you are **EXACTLY** entering your user name, company name, and password. It should be on your diskette and/or your invoice/sales receipt.

4. Does MoreMem work with DOS memory managers, like Netroom, MemMaker, QEMM-386, and 386MAX?

Yes, in fact, MoreMem works better with DOS memory managers because they provide more DOS memory for MoreMem to use.

5. I cannot get my sound card, fax, communication, or network drivers to load (especially for Banyan or Sound Blasters). What should I do?

It may need DOS memory. (A) Allocate 1 compartment of size 32000 bytes in Set C by (1) entering 32000 into Set A's Size of Reserve editbox and (2) entering 1 into Set C's Number to Reserve editbox. Decrease or increase the size until you find the smallest size that will allow your drivers to load. OR (B) Try unchecking the Boot As First Driver checkbox in MoreMem's setup dialog box.

6. Does MoreMem change my config.sys or autoexec.bat file?

No, MoreMem is a Windows device driver, which only requires changes in the SYSTEM.INI file in the Windows

directory.

7. My computer boots too slow. How can I get it to boot faster?

Turn off the Reserve DOS Compartments High checkbox in the MoreMem setup dialog box. Also, try only using 1 set by selecting configuration 1 or 2. Or, you can allocate 16 compartments of size 8192 by (1) entering 8192 into Set A's Size of Reserve editbox, (2) entering 16 into Set A's Number to Reserve editbox, and (3) entering 0 into Set B's and Set C's Number to Reserve editboxes.

8. Do I have to reboot every time I change MoreMem's settings?

No, MoreMem can dynamically change its DOS compartments while Windows is running. However, you should reboot if you change your settings a lot to get the maximum benefit of your new settings.

9. I am still getting an Insufficient Memory to Run error. What can I do?

(A) Try all 16 of MoreMem's default settings.

(B) MoreMem helps programs load when DOS memory is scarce. Although some users have reported to GRI that MoreMem allows programs to operate with 10% less resources than before MoreMem, MoreMem does not remove Windows' resource limitation. Windows will not let a program load when resources fall below about 10%. If your resources are below 10% as reported in TopBar or in any Microsoft About dialog box, then you can try the shareware program, AnyView, by Binar Graphics at (415) 492-8161. AnyView replaces your video driver so it can allocate resources separately to each specific program. MoreMem and AnyView can work together. During testing of AnyView, GRI has experienced 10% gains of resources on bootup and progressively more as Windows continues. AnyView is available on Compuserve and on other online services.

(C) If your total system memory is low, you should increase your permanent swap file.

(D) If your free DOS memory on bootup as reported by MoreMem's setup dialog box is below 64000, then you may need a DOS memory manager like Netroom, MemMaker, QEMM-386, and 386MAX to get more DOS memory for MoreMem to use.

10. Does MoreMem affect the DOS memory in a Windows DOS box?

No, MoreMem only affects the DOS memory in Windows' DOS session. Each DOS box gets its own DOS session. If you need more DOS memory in a DOS box, you may need a DOS memory manager like Netroom, MemMaker, QEMM-386, or 386MAX.

11. I am getting GPFs while starting, running, or closing Microsoft Word, Microsoft Excel, DOS boxes, and/or other programs. What can I do?

In general, MoreMem does not affect a program while it is running. Make sure you have the latest bug fixes for Word and Excel, which are available direct from Microsoft. When a program closes and does not release all of its DOS memory, Windows may become unstable (especially when starting a DOS box), and TopBar's free DOS memory calculations may not work correctly since TopBar checks the amount of free DOS memory during every refresh. Thus, you should uncheck TopBar's Calc Free DOS Memory checkbox when running a DOS memoryleaking program.

12. When can MoreMem help a program while its running?

If a program is specifically allocating DOS memory for a task like connecting to a network drive and it reports an Out of Memory error, MoreMem can help that program by reserving DOS compartments for it.

13. Why won't my antivirus program load or run?

It may need DOS memory. Allocate 1 compartment of size 32000 bytes in Set C. If the problem is on bootup, then allocate it as a FREE type. If the problem is after bootup, allocate it as a FILL type and free it before running the antivirus program. Decrease or increase the size until you find the smallest size that will allow your

antivirus program to load OR (B) Try unchecking the Boot As First Driver checkbox in MoreMem's setup dialog box.

To automate the process, you can use TopBar's automatic freeing and re-filling command line features. See the TopBar Command Line topic.

14. Why won't my Win32s drivers load?

They may need more DOS memory. Try using a higher numbers configuration, or reserving larger DOS compartments by entering a larger number into the Size to Reserve editboxes in the MoreMem setup dialog box.

15. Can MoreMem help my printing or help file problems?

MoreMem can help your printing problems if they are caused by Print Manager having insufficient DOS memory to load. If WinHelp cannot load due to insufficient DOS memory, MoreMem can also help. Some programs do not report the Insufficient Memory to Run error when they cannot load. They just do not load and do not report an error.

16. Why are icons disappearing from my screen?

You are probably low on resources. See answer 9B. If incorrect icons or white blank icons are appearing in TopBar's display, especially for Lotus applications, see the TopBar User-Specified Icons topic.

17. Why is my hard disk thrashing?

More RAM would reduce hard disk thrashing caused by excessive accesses of your swap file. You should have at least 8MB of RAM to run Windows efficiently. MoreMem cannot help hard disk thrashing.

18. How much memory, resources, and CPU time do MoreMem and TopBar use?

MoreMem uses about 68K of memory, 1K of DOS memory, and practically no GDI or USER resources. After MoreMem reserves its compartments, MoreMem uses practically no CPU time. TopBar uses about 90K of memory, 800 bytes of DOS memory, 1% GDI resources, and 1% USER resources. TopBar's CPU usage depends on how often you request it to refresh its time, memory, and task information.

19. How can I stress test my computer so I can get the "Insufficient Memory to Run" error?

Use MoreMem to allocate filled compartments by reserving compartments of type FILL, or by pressing one of the FILL 1 A, Fill 1 B, or Fill 1 C buttons until DOS memory is used up. Then, try to start a new program, and you should get the "Insufficient Memory to Run" error.

20. Is MoreMem compatible with Windows 95? Is MoreMem needed in Windows 95?

Yes, MoreMem is compatible with Windows 95, which still requires DOS memory to start a program. However, Windows 95 does not use DOS memory when loading DLLs, so MoreMem is not needed as much for Windows 95. However, some users have reported to GRI that MoreMem increases stability in Windows 95, especially for networked computers.

21. Is MoreMem compatible with OS/2 Warp?

MoreMem should be compatible with OS/2 Warp, since MoreMem just performs standard Windows memory operations.

22. What is the easiest way to install many network licenses?

First, set up MoreMem on a computer with the settings that you want for your network. Then, copy the MoreMem4.ini file from the Windows directory to the MoreMem installation disk or directory. Now, when you run setup.exe from the MoreMem installation disk or directory, MoreMem4.ini will be copied to the computer, and the user will not have to re-enter the password information, because MoreMem4.ini already contains the user name, company name, password, and all MoreMem and TopBar settings.

You can also manually install MoreMem as described below or in the Installing MoreMem topic.

- (1) adding the entry "MoreMem4=moremem4.drv" to the [drivers] section of SYSTEM.INI,
- (2) adding moremem4.drv to the "drivers=" entry in the [boot] section of SYSTEM.INI,
- (3) copying moremem4.drv, topbar4.exe, mempop4.exe, memicon4.exe, moremem4.hlp, mm4-us.doc, moremem4.rtf, and moremem4.doc to the Windows system directory.
- (4) adding adding to the Program Manager (or shell) a GRI MoreMem 4.0 group with icons for topbar4.exe, mempop4.exe, memicon4.exe, moremem4.hlp, mm4-us.doc, moremem4.rtf, and moremem4.doc.
- You can automate this manual process if you have a batch installation program that can modify the system.ini file, copy files, and install icons.

23. Can I get one password for all of my multiple licenses?

Yes, we usually provide only one user name, company name, and password for multiple licenses.

24. Can I register through Compuserve's SWREG?

GRI does not support registration through SWREG.

25. Where can I download the latest version of MoreMem?

MoreMem is available on the Internet and Compuserve as file moremem4.zip

MoreMem is available on SDN/Fidonet BBSs, AOL, Simtel, Bix, Genie, and Delphi as file mmem4b.zip

MoreMem is available by anonymous ftp from ftp.traveller.com in directory /pub/users/gamma as file moremem4.zip

MoreMem is available through the World Wide Web at http://www.traveller.com/~gamma

If you have a Web browser, you can use the following URL to download MoreMem: ftp://ftp.traveller.com/pub/users/gamma/moremem4.zip

The phone number for Gamma Research's BBS is (205) 533-7119. Download file moremem4.zip

Compuserve has MoreMem in (1) the WINUTIL forum, in the System/Memory library as file moremem4.zip and (2) the WINSHARE forum, in the Win System Utils library as file moremem4.zip.

MoreMem is on the Internet in the CICA Archives.

mrcnext.cso.uiuc.edu [128.174.201.12] /pub/win3/util/moremem4.zip ftp.cica.indiana.edu [129.79.26.27] /pub/pc/win3/util/moremem4.zip

ftp.dataplex.net [199.183.109.245] (Texas) mrcnext.cso.uiuc.edu [128.174.201.12] (Illinois)

OVERSEAS-Mirrors-----

vmsa.technion.ac.il [132.68.7.2] (Israel Institute of Technology) nic.switch.ch [130.59.1.40] (Switzerland) ftp.uni-stuttgart.de [129.69.8.13] (Stuttgart, Germany) ftp.monash.edu.au [130.194.11.1] (Monash Univ, Melbourne Australia) nctuccca.edu.tw [140.111.3.21] (Chiao Tung Univ, Hsinchu,Taiwan) src.doc.ic.ac.uk [146.169.2.1] (JANET mirror at Imperial College, London) ftp.nectec.or.th [192.150.251.32] (Thailand) ftp.iij.ad.jp:/pub/win3 [192.244.176.50] (Internet Initiative, Tokyo Japan) ftp.cyf-kr.edu.pl [149.156.1.8] (Cracow, Poland)

26. Where can I get a button bar program launcher that is similar to MoreMem's button bar task switcher?

Try AppBar 4.0 or 4.1. It should be available online wherever Windows programs are located including Compuserve and the CICA archives on the Internet.

27. Can I start MoreMem without the MoreMem logo?

No, since MoreMem is shareware, the logo is built into MoreMem's start procedure.

28. Can I run TopBar without MoreMem?

No, TopBar requires MoreMem to run. If you want to run TopBar without MoreMem's features you can turn off the Enable MoreMem option in MoreMem's setup dialog box.

You can also try the shareware program TaskTool for Windows 3.x. It is available by anonymous ftp from ftp.cybercat.com in directory /ftp/TaskTool as file ttool15u.exe. If you have a Web browser, you can use the following URL to download TaskTool for Windows 3.x: ftp://ftp.cybercat.com/ftp/TaskTool/ttool15u.exe

29. Can I run MoreMem without TopBar?

Yes.

- (1) If you have already installed MoreMem, do the following:
 - (a) Open the TopBar setup dialog box and make sure the Load TopBar into win.ini option is unchecked.
 - (b) Select the OK button to close the TopBar setup dialog box.
 - (C) Delete the TopBar icon from your Startup group in the Program Manager (or your shell).

(2) If you have not installed MoreMem, do the following:

- (a) Run MoreMem's setup.exe.
- (b) In the Topbar groupbox, select the Do Not Load TopBar radio button.
- (c) Finish installing MoreMem.
- NOTE: Using temporary compartments, as in the Max Out configurations, requires TopBar to run. If you do not want to use TopBar, you can turn on the Close After Free Temps option in TopBar's setup dialog box to close TopBar automatically, or you can also turn on the Hide TopBar option in TopBar's setup dialog box.

30. TopBar has disappeared. Why can't I find TopBar on my screen?

(1) TopBar may have moved off of your screen, possibly because your screen resolution changed.
 (a) You can restart Windows, and TopBar should move back to the edge of your screen, or

- (b) you can delete the "XPos=" and "YPos=" entries in the [topbar4.exe] section of MoreMem4.ini in your Windows directory, and restart TopBar4.exe, or
- (c) you can delete the entire [topbar4.exe] section of MoreMem4.ini in your Windows directory, and restart TopBar4.exe, or
- (d) you can delete the MoreMem4.ini file in your Windows directory, and restart TopBar4.exe. NOTE: You will also have to reenter your MoreMem settings and password.
- (2) TopBar may have its Hide TopBar option turned on.
 - (a) After executing TopBar4.exe twice, TopBar should appear on your screen. Then, click on the TopBar icon to bring up TopBar's setup dialog box. Finally, turn off the Hide TopBar option, or
 - (b) you can delete the "HideTopBar" entry in the [topbar4.exe] section of MoreMem4.ini in your Windows directory, and restart TopBar4.exe, or
 - (c) you can delete the entire [topbar4.exe] section of MoreMem4.ini in your Windows directory, and restart TopBar4.exe, or
 - (d) you can delete the MoreMem4.ini file in your Windows directory, and restart TopBar4.exe. NOTE: You will also have to reenter your MoreMem settings and password.

31. Can I run MoreMem and/or TopBar in Windows NT?

MoreMem and TopBar should run with Windows NT. However, Windows NT should not need MoreMem, and TopBar will only show your 16-bit applications. If you want to run a task switcher like TopBar with Windows NT, you can try the Microsoft's Windows 95 beta shell for Windows NT. It is available by anonymous ftp from ftp.microsoft.com in directory /bussys/winnt/winnt-unsup-ed/newshell as file nt351nsi.exe

If you have a Web browser, you can use the following URL to download the Windows 95 beta shell: ftp://ftp.microsoft.com/bussys/winnt/winnt-unsup-ed/newshell/nt351nsi.exe

You can also try the shareware program TaskTool for Windows NT. It is available by anonymous ftp from ftp.cybercat.com in directory /ftp/TaskTool/win32 as file TTNT15U.EXE. If you have a Web browser, you can use the following URL to download TaskTool for Windows NT: ftp://ftp.cybercat.com/ftp/TaskTool/win32/TTNT15U.EXE

32. Can I change the size of the TopBar font in the memory display?

No, the size of the TopBar font is fixed depending on (1) the height of a standard Windows title bar, (2) the state of the 2 Line Display option, and (3) the state of the Full Size TopBar option.

33. Why won't TopBar show the current icon of the running applications?

TopBar gets its icons directly from the executable file. Otherwise, TopBar would need much more processing time, and the icons may not fit in TopBar's window. If incorrect icons or white blank icons are appearing in TopBar's display, especially for Lotus applications, see the TopBar User-Specified Icons topic.

Removing MoreMem

You can remove MoreMem by pressing the UnInstall button in MoreMem's setup dialog box. See the Starting MoreMem topic on how to display MoreMem's setup dialog box.

You can manually remove MoreMem by restoring your old system.ini which was saved as system.m00 (or system.m01, system.m02, etc.) by MoreMem's setup program.

When you manually remove MoreMem, you should manually remove TopBar from your startup group (or your win.ini file). You must also manually remove MoreMem and TopBar icons from your Program Manager (or shell).

You can also manually remove MoreMem by:

- (1) starting the Control Panel,
- (2) double clicking on the Drivers Icon,
- (3) clicking on the "Gamma Research MoreMem Utility" item in the listbox,
- (4) clicking on the Remove button,
- (5) pressing enter to confirm removal, and
- (6) pressing enter to restart Windows.

You can also manually remove MoreMem by:

- (1) starting an editor on SYSTEM.INI in your Windows directory,
- (2) removing the two occurrences of moremem4.drv by:
- (2a) removing moremem4.drv from the "drivers=" entry in the [boot] section,
- (2b) removing the entry "MoreMem4=moremem4.drv" in the [drivers] section,

Passwords

A password is required to start MoreMem. Case, spaces, and punctuation do not affect the password. The user name, company name, and password for registered users should be on your diskette and/or your invoice/sales receipt. For multiple licenses, GRI usually provides only one user name, company name, and password for all of the licenses.

If you are an unregistered user, you can get a 14-day no password trial with a 30-day total shareware trial. After your 14-day trial is over, you will be given a temporary password in the About dialog box to enter for the remainder of your shareware trial. When you register, you will get a password, a user name, and a company name that will disable the password requirement. See the Payment, Pricing, and Registration and Order Form topics.

Payment, Pricing, and Registration

Pricing: Units: 10-99 100-499 500-1-9 U.S. Price/Unit: \$40 \$35 \$30 Call International Price/Unit: \$59 \$52 \$45 Call Europe & Aus. Price/Unit: £40 £35 £30 Call Japan Price/Unit: Call Call Call Call

Shipping:

\$0 to Mail Password\$5 per Disk\$15 for Overnight Disk\$35 for International Overnight Disk

When you pay the shareware registration fee, you will get a password, user name, and company name that will disable the password requirement in the About dialog box. You can order and get the password by

- (1) Tel: (205) 533-7103 (9am-5pm CST)
- (2) Fax: (205) 881-5341
- Internet e-mail: gamma@traveller.com
 NOTE: DO NOT SEND CREDIT CARD NUMBERS BY INTERNET E-MAIL.
 CREDIT CARD NUMBERS SHOULD BE SENT BY FAX, MAIL, OR PHONE.
- (4) mail

Gamma Research, Inc. 904 Bob Wallace Avenue, Suite 212 Huntsville, AL 35801-5648 USA

Orders with the following payment methods are accepted:

- (1) Visa, Mastercard, or American Express credit card,
- (2) US check,
- (3) US currency,
- (4) US money order, or
- (5) International money order. International money orders are preferred in US currency, but International money orders in foreign currency are accepted (though not preferred) if you ensure that all costs of conversion are included in the payment.
- (6) Purchase orders are also accepted. The terms for purchase orders are net 30 days.

For Europe, contact our European distributor.

Accurate Technology Ltd. Farrier House 48 Denmark Street Wokingham Berkshire RG40 2BB U.K. Tel: +44 (0) 1734 773889 Fax: +44 (0) 1734 771260 BBS: +44 (0) 1734 773887 e-mail: info@accurate.co.uk For Australia, contact our Australian distributor.

Accurate Technology Australia "Montrose" 65-67 Glenisla Drive Mount Martha Vic 3934 Australia Tel: 006159741774 Fax: 006159741722

For Europe and Australia, orders with the following payment methods are accepted:

- (1) Visa, Mastercard, Eurocard, or Access,
- (2) UK cheque,
- (3) Purchase orders are also accepted. The terms for purchase orders are net 30 days.

For Japan, contact our Japanese distributor.

KUBOTA Corporation 2-8-6 Shinjuku Shinjuku-ku, Tokyo 160, Japan Tel: 03-5379-0624 Fax: 03-5379-1670

See the Order Form topic.

MoreMem 4.0b Order Form - U.S. & Foreign (except Europe, Austl. & Japan)
To: Gamma Research, Inc.(205) 533-7103 Sales (9-5 CST)904 Bob Wallace Ave. Suite 212(205) 881-5341 Tech SupportHuntsville, AL 35801-5648(205) 881-5341 FaxUSAgamma@traveller.com e-mail
NOTE: DO NOT SEND CREDIT CARD NUMBERS BY INTERNET E-MAIL. CREDIT CARD NUMBERS SHOULD BE SENT BY FAX, MAIL, OR PHONE.
From: Name:
Company:
Street Address:
City, State, Zip:
Country:
Tel #:
Fax #:
e-mail Address:
Units: 1-9 10-99 100-499 500- U.S. Price/Unit: \$40 \$35 \$30 Call International Price/Unit: \$59 \$52 \$45 Call
Quantity:
\$0 to Mail Password Shipping:\$5 per Disk3.5"5.25"
\$15 for Overnight Disk Total: \$35 for International Overnight
Payment MethodVisaMCAmexCheckCashMOPO
Credit Card #
Expiration Date /
Signature
How did you hear about MoreMem ?
Where did you get MoreMem ?
Suggestions:

License Agreement

The use of MoreMem is subject to the following terms and conditions:

MoreMem is copyrighted material. It is protected by the copyright laws of the United States. You may not make any changes or modifications to MoreMem. You may not decompile, disassemble, or otherwise reverseengineer the software in any way. You may use MoreMem on a trial basis provided you do not violate the protection afforded the licensed software by the copyright laws, and you agree to the terms of the license agreement. If you use MoreMem for longer than thirty (30) days, you are obligated to purchase a license for its use. Licensed users may not distribute their user name, company name, and password for unlicensed use of MoreMem.

See the Payment, Pricing, and Registration and Order Form topics.

Title to the licensed software is NOT transferred to the end user. The end user is granted an exclusive license to use the software on one computer or computer work station at any given time.

Limited Warranty

Gamma Research does not warrant that the licensed software will meet your requirements or that the operation of the software will be uninterrupted or error free. The warranty does not cover any media or documentation which has been subjected to damage or abuse by you or others. The software warranty does not cover any copy of the licensed software which has been altered or changed in any way. ANY IMPLIED WARRANTIES INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE TERMS OF THE EXPRESS WARRANTIES. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

The warranties set forth above are in lieu of any and all other express or implied warranties, whether oral, written, or implied, and the remedies set forth above are the sole and exclusive remedies.

Gamma Research is not responsible for any problems or damage caused by the licensed software that may result from using the licensed software. This includes, but is not limited to, computer hardware, computer software, operating systems, and any computer or computing accessories. End user agrees to hold Gamma Research harmless for any problems arising from the use of the software.

Gamma Research SHALL NOT IN ANY CASE BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, INDIRECT OR OTHER SIMILAR DAMAGES ARISING FROM ANY BREACH OF THESE WARRANTIES EVEN IF Gamma Research OR ITS AGENTS OR DISTRIBUTORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

In no case shall Gamma Research's liability exceed the license fees paid for the right to use the licensed software.

MoreMem Distribution

You are granted a limited license to copy MoreMem only for use during a trial period of thirty (30) days subject to the terms of this software license agreement described herein, provided the conditions described below are met:

MoreMem MUST be copied in an unmodified form and MUST contain the following files:

File_id.diz MemIcon4.exe MemOrder.wri MemOrder.txt MemPopup.exe MM4-US.doc MoreMem4.drv MoreMem4.hlp MoreMem4.rtf MoreMem4.doc OEMSetup.inf Readme.txt Setup.exe Sysop.txt TopBar4.exe

No fee, charge or other compensation may be accepted or requested by anyone without the express written permission of Gamma Research.

Public Domain Disk Vendors may not charge a fee for MoreMem itself. However you may include MoreMem on a diskette for which you charge a nominal distribution fee. The purchaser of said diskette must be informed in advance that the fee paid to acquire the diskette does NOT relieve said purchaser from paying the Registration Fee for MoreMem if said purchaser uses MoreMem.

Operators of electronic bulletin board systems (Sysops) may post MoreMem for downloading by their users without written permission only as long as the above conditions are met. A fee may be charged for access to the BBS as long as no specific fee is charged for downloading MoreMem files without first obtaining express written permission from Gamma Research to charge such a fee.

Distributors of public domain and user supported software, such as disk vending services, may not charge a fee for MoreMem itself. However you may include MoreMem on a diskette for which you charge a nominal distribution fee. The purchaser of said diskette must be informed in advance that the fee paid to acquire the diskette does NOT relieve said purchaser from paying the Registration Fee for MoreMem.

The above constitutes the license agreement for MoreMem. It supercedes any and all previous license agreements.

Special Thanks

Special thanks to Brian Livingston of *InfoWorld* for his informative and enlightening articles on MoreMem. He also suggested many changes to the help file, including the new DOS compartment terminology.

Special thanks to Roleigh Martin of United HealthCare Corp. for suggesting that GRI contact Brian Livingston of *InfoWorld*.

Special thanks to Willis Allen of Disneyland for suggesting the resource monitor features of TopBar.

Special thanks to all those misbehaved programs, which led to the automatic freeing and re-filling features of TopBar, which led to the task switching features of TopBar.

Special thanks to all those who make suggestions for MoreMem.

Special thanks to all those nice compliments from MoreMem users.

Gamma Research, Inc.

Index

386MAX 17.18 About MoreMem 1 AnyView 18 Antivirus programs 19 Autoexec.bat 18 Banyan network drivers 9,17 BBS 1,2,20 Bootup 16-19 Communication drivers 17 Compuserve 18,20 Config.sys 18 Configuration for MoreMem 6-9 CPU usage 19 Custom configuration 7-9 Decompress 3 Dialog box for MoreMem 10 Dialog box for ViewMem 12 Directories in PATH 3 Distribution of MoreMem 27 DOS box 18 DOS memory usage 19 Drivers 16-19 Excel 18 Expand 3 Fax drivers 17 Frequently Asked Questions 16-22 FTP 20,21 General Protection Faults 18 GPFs 18 Hard disk 19 Icons disappearing 19 Icons in TopBar 13,15 Installation 2 Internet 20.21 License Agreement 27 Limited Warranty 27 Loading drivers 16-19 Loading programs 16-19 Logo 21 Lotus icons 15 MemMaker 17,18 Memory usage 19 MoreMem 2 MoreMem dialog box 10 Multiple licenses 20,23 Netroom 17,18 Network drivers 9,17 Network install 20

New Features in MoreMem 5 New Features in TopBar 5,6 Online access 1,2,20,21 Order form 26 OS/2 Warp 20 Password 2,3,11,17,20,23,27 Payment 24 Pricing 24 Printing 19 Program launcher 21 Programs MoreMem helps 4 QEMM-386 17,18 Rebooting Windows 11,14,18 Registration 24 Removing MoreMem 23 Restarting Windows 11,14,18 Resources 12,18,19 Running MoreMem w/o TopBar 21 Running TopBar w/o MoreMem 21 Setup 2 Shareware terms 2 Slow bootup 18 Sound Blaster 17 Sound cards 17 Special thanks 28 Starting MoreMem's dialog 6 System resources 12,18,19 Summary 2 SWREG 20 System.ini 3,11,18,23 Technical support 1 Testing MoreMem 19 TopBar command line 14 TopBar dialog box 12,13 TopBar disappearing 22 TopBar font size 14,22 TopBar icons 13,15 TopBar window 12-13 UnInstalling MoreMem 11,23 Users MoreMem helps 4 View DOS Memory dialog box 12 Why MoreMem Works 3 Win32s 19 Windows 95 5,6,19,22 Windows NT 22 Word 18 World Wide Web 1,20