

<PC-MOS & Task Size>

PC-MOS uses the 38k reserved memory address to load it's operating system overhead (cache descriptors, system memory pool, kernal, etc.). When the 384k reserved memory area is depleted, PC-MOS then takes memory from the 640k task area to finish loading the operating system overhead. The "remaining" memory is used for task size.

Hence, typical PC-MOS systems (with 5 users) have about 550k task size(s). The task size could be larger if a user were running a MONOCHROME video card on the host. When a MONOCHROME video card is installed, PC-MOS uses the reserved VGA memory addresses for task size.

Since most systems have VGA installed, the VGA video address area is generally not available for task size; Hence PC-MOS task sizes are small.

Key Component - System Memory Pool (SMP)

The SMP is a key component to the operating system. The SMP monitors tasks in memory, loads the device drives and stores file handles. Generally we recommend a 30% reserve for SMP. This means a user cannot totally deplete SMP and expect PC-MOS to perform. When 70% of the SMP is allocated, PC-MOS has reached it's threshold regarding SMP usage.

As a result, the more users on a system, the greater are the SMP requirements. Likewise, when a users installs several tasks, has a VGA host, and loads several device drivers, the need for a larger SMP becomes more apparent. The larger one's SMP, then PC-MOS will use a portion of the user task memory area to load SMP.

Typically PC-MOS task sizes will not reach 640k; however, users with MONOCHROME video cards on the host could possibly reach larger task sizes (around 640k or above).

PC-MOS Booster will give most users approximately 24k more in task size. If PC-MOS Booster is not installed, upgrade the operating system to Booster. Also, our product MLW (MultiLink for Windows) may be an alternative. MLW runs under the Windows operating environment and most users will see larger task sizes.

Steps to Try:

1. Check for fragmented Freemem areas and determine what hardware devices are loading between the fragmented freemens. (NIC, SCSI Bios, EMS, etc - use upper memory) These areas "may" be a possible Freemem area(s). If the area is in fact FREE (no devices or hardware is loacated there, then include these areas into your config.sys as new or additional Freemem statement(s).
2. Are you running applications that require VGA?
If not, then you could add a VTYPE=5f to your config.sys. The VTYPE statement tells PC-MOS to use VGA video save area for task size. Hence, your task size will increase but it is at the expense of running VGA graphics. For example, you will not be able to do a VIEW in Word Perfect 6.0.

note: do not use a VTYPE=2f or ; this statement does not support Emulink users and generally does not create an adequate video save area.

note: Users must disable all shadow bios before attempting to

add a VTYPE statement. Some ROM BIOS settings require PCI VIDEO cards to have shadow bios enabled. Hence a VTYPE statement is not always a valid option.

3. Check the SMPSIZE.

If the current smpsize is too large, then "try" reducing smpsize by 10- 20k. note: The risk here is "system performance" without at least 30% smpsize in reserve, your system may begin to generate errors. If so, go back to your original smpsize value.

PC-MOS 4.1 users and above can use a split smpsize statement. Determining split smpsize is trial and error. Choose the maximum desired smpsize. The split the number into two values - x,y.
example: Previous statment SMPSIZE=85K
 New Statement SMPSIZE=65K,20K

Where one of the above values must fit into your contiguous FREEMEM RANGE and the remaining value comes from your base memory (640k),

SMPSIZE must fit into a contiguous memory addressss; otherwise smpsize is taken from user base memory. By splitting SMPSIZE, we have some control as to how much SMP is taken from user base memory.