

# Medical Office System

## Chapter 17: System Utility Menu

### This chapter discusses

- backup procedures recommended for the Medical Office System.
- lock files on multi-user systems.
- the index maintenance utilities.
- hard drive availability checks to insure you will not exceed the space available.
- the configuration file editor used to fine-tune your system easily.

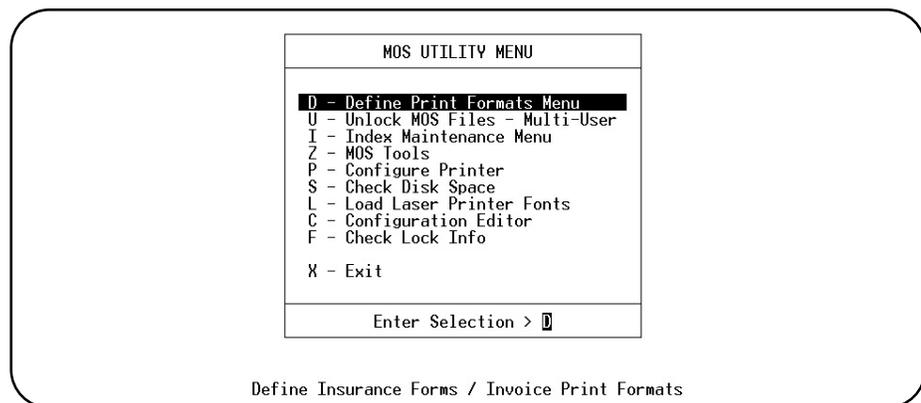


Figure 17-1 : MOS Utility Menu

## Backing Up the MOS

**Introduction** We recommend that a backup of your Medical Office System data is done on a daily basis. And we strongly recommend that a backup your Medical Office System data is done before

1. Running end-of-month
2. Running end-of-year operations
3. Prior to installing upgrades to the MOS system
4. Prior to installing upgrades to your computer operating system
5. Prior to having repair work done on your computer.

We cannot stress this strongly enough. Computers are machines and they break, always at the worst time. Computers seem to have a breakdown timer built in and if you do not backup your system for a long period of time it goes off and causes major data loss. Of course, this is not true, but Murphy's law kicks in just the same. Give your computer the respect it deserves because it can truly destroy a lot of data very quickly when it breaks. DON'T GIVE IT A CHANCE. Make those backups. This chapter describes the operation.

**BE SURE THAT YOUR BACKUP PROCEDURE IS TESTED OCCASIONALLY TO INSURE THAT IT WORKS AND YOU KNOW HOW TO USE IT IN THE EVENT IT IS NECESSARY TO RESTORE DATA.**

### Organizing your Backup Schedule

You will need a set of backup media (tape highly recommended or diskettes if nothing else is available) for each day of the week, and four weekly sets that are taken off premises each week. Label the daily sets with the day of the week and the weekly sets with the 1st Friday, 2nd Friday, etc. These should be used in rotation with two backups made every Friday and the weekly backup taken home or moved off premise to a safe place. Before any period-end purge or year-end reset, a backup should be done (use the oldest daily set of diskettes and replace them with new), labeled and put away permanently for detail audit retrieval. Your reports should also be kept to provide the appropriate audit information.

**IF YOU CURRENTLY HAVE A BACKUP METHOD IN PLACE AND ARE SURE THAT YOUR MEDICAL OFFICE SYSTEM IS PART OF THE BACKUP, IT IS NOT NECESSARY TO DUPLICATE THOSE BACKUPS.**

*Important*  
*Read THIS*

Many good backup systems are available that will run automatically after business hours and report any problems. We would be glad to recommend one that would take the worry out of your backup system. Many also offer recover features in case of hardware failure. These can be very valuable to your practice if you should ever need them. The following options are available for systems that do not have any backup functions available. They are not foolproof. The commands used are part of the normal operating systems and do not provide the best backups, we only include them because some backup is better than no backup.

## ***Instructions***

There are two sets of instructions, one for multi-user (UNIX) computers and one for single-user (DOS, Network, Windows) computers. Use the set appropriate for your system. If you are doing a full system backup daily with one of the handy backup utilities available, it is not necessary to do this partial backup in addition.

***Note: We recommend that you use a tape backup system with the appropriate program to make reliable and quick backups.***

## ***Multi-User Systems*** (Unix/Xenix)

If you are doing a Master Backup daily, with a backup utility other than this, this backup is not necessary. It should be called a MASTER BACKUP by the utility you are using to insure that all the files on the hard drive are being included. A backup called an INCREMENTAL backup is not recommended since it will require the last MASTER BACKUP then each INCREMENTAL since the last MASTER BACKUP to properly reinstall lost files.

The backup below is a PARTIAL backup since it will only be backing up selected directories in one area of your hard drive. This type of backup would be considered supplemental to a MASTER BACKUP that should still be done periodically.

Since backups are best done on tape and the instructions for your system may vary, it is best to review the information that came with your backup choice.

For UNIX, LINUX systems we highly recommend BackupEDGE as an excellent backup utility that can be configured to use most tape drives available. It also has excellent recovery tools, for a system emergency.

## ***Single-User Systems***

Use the backup system that is included with the tape, CDROM or Zip Drive that was installed in your computer. A floppy backup is not reliable and not recommended for any business system. It is very important that you understand the backup system you choose and follow the instructions for making full system backups and partial backups.

## Restoring MOS Data

Be sure whatever system you have chosen for your backups, you have reviewed and understand the procedure for restoring that data, should it prove necessary.

### *Multi-User*

It may be helpful to know that our system is stored in files/directories:

```
$dir/md  
/us/bin/mos  
/etc/default/fppath*
```

where \$dir might be a parent directory depending on your installation procedure. If you backup these files/directories you will have all the MOS files backed up.

The same series of questions asked during a backup will be asked when you restore. You can specify a particular file or use wildcards (\*) to restore more than one.

## Unlocking Files - Multi-User Systems

A message is displayed that reads as follows: (Variations of the wording may occur.)

```
“Inquire, Update, Add Function Running on this file,  
File Not Available,  
Somebody else is modifying the file; try again later.”
```

### *Introduction*

The "unlock files" option is needed only for multi-user systems. The option is found on the MOS Utility menu. The Medical Office System prevents simultaneous access to files or records by more than one user. For instance, you wouldn't want functions that effect the file in independent ways to conflict and damage your data. However, power interruptions, hard disk failures, or other unpredictable occurrences may cause the system to be reset and result in file lockage. If this happens, you must unlock the file before anyone will be allowed to access the data..

If the file you want to use is locked, an error message explaining that the file is not accessible appears on the screen. When you press  , you go back to the menu from which you came.

**\*\*\*\*\*WARNING\*\*\*\*\***

Before unlocking files, make sure that they are actually locked erroneously. You should not unlock files that are in use -- for transaction reports or daily recap -- because this can throw accounts out of balance. This function only removes "FILE LOCKS", if someone is updating a record the system will still wait for that record to be released before continuing. This is called a "RECORD LOCK". A record lock is not released by Unlocking the File. It is usually a fact that someone is actually updating that record. If you check all users and none seem to be actively updating any records and the error persists, re-booting the server will certainly release the record. ONLY DO THIS AS A LAST RESORT.

**\*\*\*\*\*WARNING\*\*\*\*\***

If UNLOCKING is necessary regularly on your system, something is not right with your procedures. Please call Medical Office System Support and discuss this. Proper exit procedures for reports and daily input are necessary to insure that these lockfiles are not left, unnecessarily.

### *Steps to Unlock the files:*

1. Press **U** at the main menu for the MOS Utility menu.
2. Press **U** at the file maintenance menu. The system loads the program, unlocks all locked files, then returns to the Utility Menu. The system should then be ready for use.

If you continue to have problems, see "Multi-User Errors" in Appendix B for more information.

## ***Adding Auto Unlock to the System Boot UP - UNIX/XENIX ONLY***

To always remove lockfiles that might have been left on a previous day during boot up, follow the following procedure. This will add some commands to the `/etc/rc` file to clean up these files during boot-up. This would only need to be done once to add this permanently to your system.

Log in as the system administrator (root). At the # prompt type:

```
$prog/fp/scripts/addunlock
```

where "`$prog`" is the parent directory for the MOS system (it is usually `/md`). To recall the `$prog` used on your system, type:

```
cat /etc/default/fppath.mos
```

The first line shows the `$prog` that was used on your installation of the MOS system.

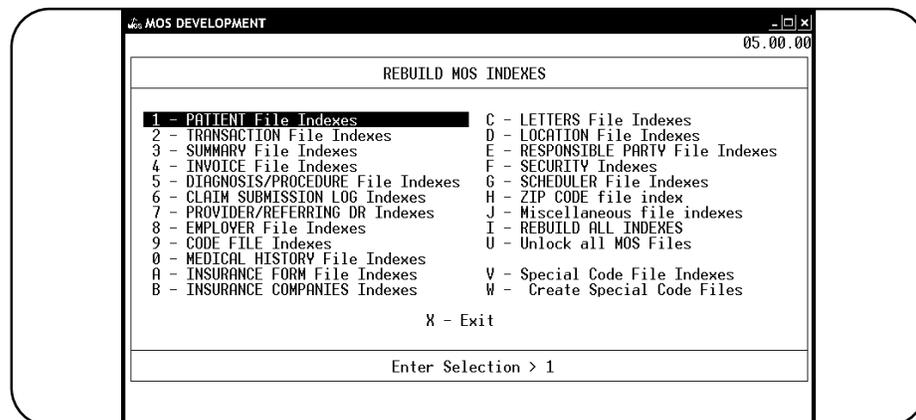
## **Index Maintenance Menu**

The indexes in your MOS system allow the information stored in separate files to be found properly by the system. If you notice that items that usually are displayed are not found, the first and simplest thing to do will be to rebuild the indexes for those files.

Your indexes can be damaged by incorrect exit methods by your data entry personnel, incorrect power down procedures, power loss during data entry, general system errors or MOS errors and other computer events that are out of the normal and correct functioning of your computer system. If these events cause your indexes to be less than perfect, rebuild them from this menu.

If for any reason data is restored from backups, rebuild the indexes to insure that the index matches the data.

Index building is one of the simplest things to do in the MOS. Press **U** for the Utility Menu then **I** for the Index Maintenance Menu. The following menu will be displayed:



**Figure 17-2 : Rebuild Indexes**

This menu allows selected indexes to be rebuilt or every index in the MOS. YOU MUST NEVER CHANGE THE INDEX STRUCTURE IN YOUR MOS SYSTEM FOR ANY REASON. You may add indexes, but do not change the indexes installed with the system. They are critical to the operation of the system.

To rebuild all indexes press **I**. Do not try to abort this function with the **CTRL** + **BREAK**, since this will cause the index currently being built to be erased entirely. This is the most common way indexes get removed from the system. Let the indexes build for every file until the menu is redisplayed.

### **Multi-User**

On multi-user systems be extra careful that all other users are logged off the MOS system. then clean up the lockfiles by pressing **U**. Then press **I** to rebuild the indexes. NEVER BUILD INDEXES ON FILES THAT ARE IN USE.

### **Special Code Tables**

Options to Create Special Code tables are also now available on this menu. This allows two files used to select codes and prompting messages to be varied for different practices. These two options allow special tables to be created and the indexes to be managed for those code tables. MOS Support will help you determine if these special tables are necessary.

## **Selected Indexes**

If only a particular file needs to be reindexed, you can select the correct file and only build indexes for that file.

To index only a selected file or group of files press the character in front of the correct group of files as listed below:

- |                                       |                                                                 |
|---------------------------------------|-----------------------------------------------------------------|
| 1 - PATIENT File Indexes              | (Mospat, mospati, mosptins)                                     |
| 2 - TRANSACTION File Indexes          | (Mostrans, mosdtl)                                              |
| 3 - SUMMARY File Indexes              | (Mosmast)                                                       |
| 4 - INVOICE File Indexes              | (Mosinv, moshold, moserr)                                       |
| 5 - DIAGNOSIS/PROCEDURE File Indexes  | (Mosdiagn, mosprocd, mospgrp)                                   |
| 6 - CLAIM SUBMISSION LOG File Indexes | (Mossub)                                                        |
| 7 - PROVIDER /REFERRING File Indexes  | (Mosaddr, mosrefer, mosreferto)                                 |
| 8 - EMPLOYER File Indexes             | (Mosemplr)                                                      |
| 9 - CODE File Indexes                 | (Mosflds, moswef, mosedits)                                     |
| 0 - MEDICAL HISTORY File Indexes      | (Moshist, mosdata, moshinv, moshtran, mosrx, mostest, mostestd) |
| A - INSURANCE FORM File Indexes       | (Mosins)                                                        |
| B - INSURANCE COMPANIES Indexes       | (mosinsco, moswrkmn)                                            |
| C - LETTERS File Indexes              | (Moslet, mosletr)                                               |
| D - LOCATION File Indexes             | (Moslocat)                                                      |
| E - RESPONSIBLE PARTY File Indexes    | (mosrespt, moshiaut)                                            |
| F -SECURITY Indexes                   | (Mosreport, mosHIPPA, mosusrlog, mosusr, mosusrlg2)             |
| G- SCHEDULER File Indexes             | (Moss1, moss2, moss3, mosrecl)                                  |
| H - ZIP CODE file index               | (Moszip)                                                        |
| V - Special code file Indexes         | (Mosedits,moswef qualified)                                     |

If the file you wish to rebuild does not appear in any group above, then select this prompt:

J - Miscellaneous file indexes

If you are not sure, it is best to press **I** to rebuild all indexes. Whenever, an upgrade is sent the installation procedure always includes a rebuild of all indexes to insure that all exist and are in good shape.

## Check Disk Space

Press **S** to display the available disk space on your screen. This is your hard drive or storage space for additional invoices/patients/payments/etc. Be sure to check it periodically.

### DOS

```
Drive   Free   Used   Total  %Free
=====
C:  20054016 452534272 472588288 4.2 <== PFDATA
D:  152338432 183934976 336273408 45.3
```

Free RAM 527408 Total RAM: 655360

Any drive with less than 10% free is worrisome. Be sure that you keep an eye on these numbers as you utilize your MOS system.

The "<== PFDATA" indicates the C: drive is currently the drive that is being used for the MOS system.

### MULTI-USER (XENIX/UNIX)

```
Mount Dir File system  blocks  used  free  %used
/      /dev/root  2042556 1718988 323568 84%
```

These figures are reported in blocks. If you multiply the blocks by 512, the result is the number of bytes. One million bytes is referred to as a meg (million). It is important to have at least 20% of your hard drive free. In the example above, the space has fallen below the suggested minimum and should be purged and cleaned up soon.

**Note:** *We estimate that about 50 meg (million bytes) of hard drive space should allow an average practice about 2 years of history stored on the computer. This varies greatly and is to be used only as an estimate.*

## MOS Tools Menu

This menu is password protected. The access to these functions is restricted to avoid incorrect data entry. In the course of normal use, it should not be necessary to use the data entry options on this menu. In some cases, the Medical Office System support staff will request that you look at data from this menu. This should only be done under the direction of MOS support staff. Changing data from the options on this menu can put your system out of balance.

In some cases, however, events outside your control cause your data files to become out of balance or otherwise compromised. There are options available here to reestablish the account balance in your system, look for lost information and correct mis-aligned data.

**\*\*\*\*\* WARNING \*\*\*\***

This should only be accessed with the supervision of the MOS support staff.

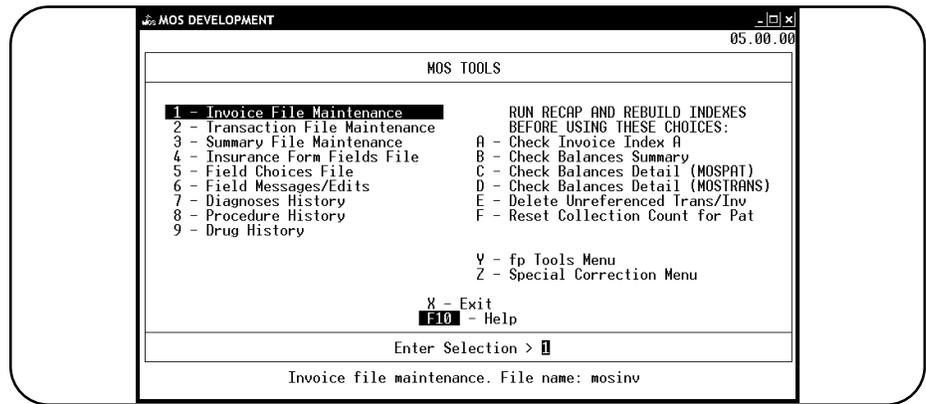


Figure 17-3 : MOS Tools Menu

**Note:** *The Daily Recap report is also programmed to test data and warn you of problems before they get serious. Please review that information daily and make changes and corrections at problems are noted.*

These options can be used when data becomes out of balance or corrupted to repair problems.

## Configuration Editor

This new feature allow you to edit the configuration file available with the MOS to fine tune your system. This can define color for a Unix terminal or special parameters that were difficult to manage in earlier versions of MOS.

Press **C** to enter the configuration editor. The maintenance password is required to access this feature. Also your User ID must have full access to access this feature. This is a sensitive area and can affect all users and functions so no chances were taken here.

A prompt will be displayed:

Please wait while data is loading.

This is loaded each time and this is always repeated each time this function is requested.

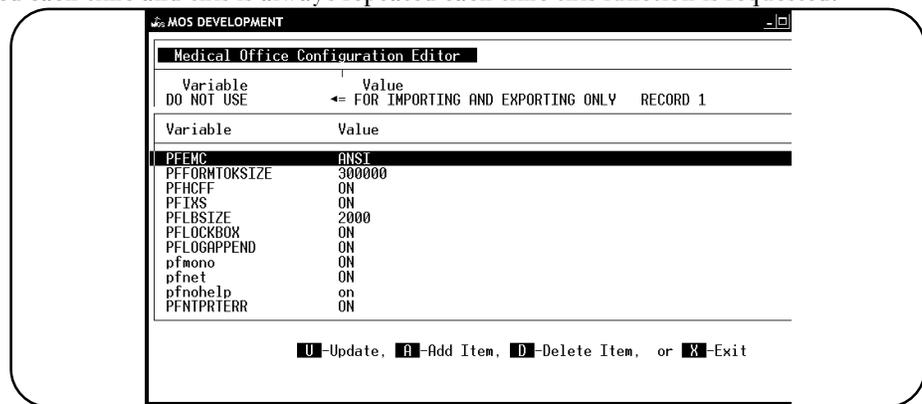


Figure 17-4: Configuration Editor Browse

A browse screen will display all the parameters currently in your configuration table. The first nine printers on your system and your default printer assignment are defined and managed in the Printer Configuration Table and are not displayed here. However, if you need to add more than nine printers the additional printers can be defined here.

The items displayed are installed as part of the basic MOS system. To view a list of available options, first press **U** or **A** to enter the edit mode and then press **F10** to display the configuration HELP file. This will display a complete list of variables available with your version of MOS. Follow to the end of the HELP file to view the color selections for any of the color parameters.

When the browse list is displayed, the following options are available:

- U** Update the highlighted item
- A** Add a new item
- D** Delete the highlighted item
- X** To finish and exit to the menu

When you update or add an item, the data is displayed in the box at the top of the screen.

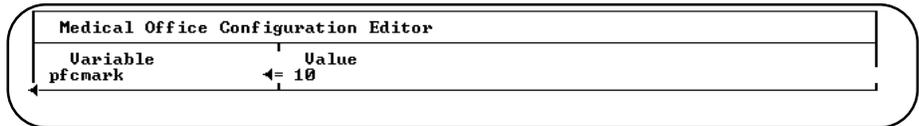


Figure 17-5: Update Configuration Item

*Printers*

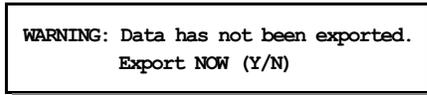
Make whatever changes are necessary and press .

To add more than nine printers to your system, it is necessary to add them on the configuration editor. Press  to add a new item, then enter the data as shown below:

Variable	Value
printer10	Name, type, destination command, comment
Example	
printer10	laser,hplaser1,lp -dlaser -s,front desk laser printer

**WARNING:** The default system printer must be one of the first nine printers, so set that on the Printer Maintenance Screen.

When all changes have been made, press  from the browse list and the following prompts are displayed.



Press  to write the changes back to the configuration file.

Press  or  if you would not like to update the configuration file. If you make this selection, a final warning is displayed:



Press  to exit without writing any changes made. Press  or  to return to the configuration editor.

Some variables are listed in Appendix D, however, the HELP file is much more complete.

Notes: