Multi-Tasking MS-DOS
Beta Test Release 1.00

Session Manager
User's Guide

Introduction

The Session Manager(SM) for Multi-Tasking MS-DOS
allows you to run up to six programs at one time and switch
between them with a couple of keystrokes. Each program's
screen is preserved so that it can be restored when you
switch back to it. SM also contains the system-wide, Int24
Handler.

Initialization

The first thing SM does when it is started is look for
any program initialization information you may have. SM
looks for the initialization information in a file named
SM.INI in the current directory. Although recommended, no
initialization information is needed.

There are two types of initialization lines:
    1)   define <program key> <program name> [program args]
          <working directory>
    2)   start <program key>

    "program key" - a printable ascii character, a control
          character (^A thru ^^), or a function key (F1
          - F10).
    "working directory" - a well formed path; i.e., begins
          with drive letter (d:\).

Each define line will associate a key with a program.
If there is more than one define line using the same key,
only the information in the last one is used.

A start line is optional. If one exists, the program
associated with the key on the start line is run as soon as
SM finishes initializing. If more than one start line is
given, the last one is used.

This is what a sample initialization file might look like:

          define f1 a:\command.com c:\bin\src
          define ^z z.exe foo.c a:\foo\bar
          start f1

Running the Session Manager

To run Session Manager, just type SM. It does not
require any arguments. If there was a start line in the

initialization file, the program associated with the start key will be run. Otherwise, the SM screen will be displayed and you will be prompted for input.

The SM screen contains a chart that describes each defined program's key, status, arguments, and working directory. There are 3 types of program status:

1) New - the program has never been run.
2) Active - the program has been started.
3) Dead - the program has terminated.

The input choices at this point are to either type a program key or hit the <ESC> button to enter command mode. If you hit a program key, the screen associated with that program will be displayed and the program will start/continue executing. If this is the first time the program has been run, a chdir to the program's working directory is made before it is started. If SM cannot start the program you desired, the SM screen will reappear.

If the program you chose to run has died, its screen will still be displayed so that you can check its output. That is all you can do while in a dead programs screen except switch back to SM.

To switch back to SM, hit Alt-F10. Alt-F10 is currently the program key for SM and will be recognized no matter what other programs are running. This is the only program key that works this way. All of the others will only be recognized if SM is running and the SM screen is being displayed.

Whenever any of SM's children die, their status is changed to dead. You will see the status change the next time the SM screen is displayed. If the program using the current screen dies, you will go back into SM.

Command Mode

When you enter SM's command mode the prompt "SM command or HELP>" is displayed. The valid SM commands are:

1) INIT <program key>
   Initialize the program associated with key so that it can be run again. The program's status is changed to "New" and its screen memory is freed. If the program is active, it is killed before it is initialized.

2) DEFINE <program key> <program name> [program args]
   <working directory>
   Define and run a new program using the supplied information. If the key was previously defined, redefine it.

3)   RUN <program key>
Run the program associated with key.

4)   RESTART <program key>
Restart the program associated with key.   This
like issuing an INIT and a RUN command.

5)   KILL <program key>
Kill the program associated with key.   Its status
is changed to dead.

6) HELP
Display a help screen.

7)   EXIT
Kill all of SM's children and exit SM.

In all of the above commands, "key" is the printable
ascii representation of a programs key. If a command fails,
you will either be asked to enter a new command or placed in
SM's top level.

Session Manager's Int24 Handler

Whenever an Int24 occurs, SM's Int24 handler is called.
No matter what program is using the screen and no matter
which program caused the error, SM's Int24 screen is always
displayed.   This screen will contain information on the type
of Int24 that happened, and the name and pid of the program
that caused the error.   You will then be prompted for one of
the valid actions for this type of error.   After the action
typed in has been taken, you are returned to the screen you
were using before the Int24.