

– CHAPTER 9 –
DESKTOP

Overview

The 'Desktop' is a **GEM** application that is started after the operating system is initialized and all '\AUTO' folder programs and desk accessories are loaded. The desktop is responsible for providing basic file management and program launching abilities to the user.

Normally, the desktop is contained in ROM, however under **MultiTOS**, the desktop may be soft-loaded by placing the following command line inside the 'GEM.CNF' file:

```
shell [new shell filename]
```

If the 'shell' command fails, the normal desktop is started.

If an installed shell program exits under **MultiTOS**, the OS will display a single menu from which programs may be launched.

MultiTOS Considerations

Messages

The desktop may be sent messages using the **AES**'s `shel_write()` command. The desktop currently recognizes two special messages as follows:

Message	Number	Meaning
SH_WDRAW	72	This message tells the desktop that files on a particular drive have been modified so it can update the information in any open windows. <i>msg[3]</i> should contain the drive number (0 = A:, 1 = B:, etc.). A value of -1 will force the desktop to update all of its open windows.
AP_DRAGDROP	63	The desktop included with AES 4.1 now accepts all drag & drop messages and places the dropped object on the desktop.

Extensibility

The **MultiTOS** desktop allows the replacement of file copy, rename, and delete, and disk copy and format commands. To replace the file commands, place the filename of an application designed to replace them in the environment variable `DESKCOPY`. Likewise, a disk command replacement application can be placed in the environment variable `DESKFMT`.

The file command replacement will be called with one of three command line formats as follows:

1. Copy a file(s): `-c [-options...] [filename(s)] [destination path]`
2. Delete a file(s): `-d [-options...] [filename(s)]`

9.4 – Desktop

3. Move a file(s): `-m [-options...] [filename(s)] [destination path]`

The following are valid options to appear on the command line:

Option	Meaning
-A	Confirm file copies.
-B	Do not confirm file copies.
-C	Confirm file deletes.
-D	Do not confirm file deletes.
-E	Confirm file overwrites.
-F	Do not confirm file overwrites.
-R	Prompt to rename destination file(s).

An application which is installed to replace disk operations will receive one of two command lines as follows:

1. Format a drive (ex: A:): `-f A:`
2. Copy a disk (ex: A: to B:): `-c A: B:`

TOS Application Launching

When the user uses the desktop to launch a .TOS or .TTP application under **MultiTOS**, the desktop looks for an environment variable called TOSRUN. If it finds one, it attempts to launch whatever application is specified in that variable with the TOS filename as its parameters.

If the environment variable does not exist, it opens a pipe called 'U:\PIPE\TOSRUN' and writes to it the filename and any parameters separated by spaces terminated by a **NULL** byte.

Desktop Files

DESKTOP.INF

The desktop in **TOS** versions less than 2.00 place configuration defaults such as window size and position, drive icons, etc. in the DESKTOP.INF file. In addition, some control panel settings (from CONTROL.ACC, not XCONTROL.ACC) are stored in the file as well.

The DESKTOP.INF file is in standard ASCII text format. This file was not designed to be edited by the user or programmer, but, rather from the desktop itself and will not be discussed in detail.

NEWDESK.INF

As of **TOS** 2.00, the desktop now looks for a file called NEWDESK.INF rather than DESKTOP.INF. This file contains the same information as its predecessor with some additions. Icons which appear on the desktop or in windows may now be linked to icons in the DESKICON.RSC file (as described below). Other entries are still reserved and should be left unmodified.

A creative install program wishing to install custom icons may do so by adding the icons to the DESKICON.RSC file and adding information to NEWDESK.INF which points to the new icons. The install application must be careful to avoid disturbing the original information and icons and must not reorder the icons in the DESKICON.RSC file. The following two lines show example entries in NEWDESK.INF that identify an icon for a file and folder respectively.

```
#I 2C 2C 000 @ *.TXT@ @  
#D 1A 1A 000 @ FOLDER@ @
```

The '#I' identifies a file icon and the '#D' identifies a folder icon. The next two numbers should be identical hexadecimal indexes to the icon in the DESKICON.RSC file. The entry '000' is unused and should be included only as a placeholder.

The filename specified on the line can contain wildcard characters and identify the file or folder name(s) which are to be linked. All spaces and '@' characters must appear exactly as above or the system may behave strangely.

DESKICON.RSC

The DESKICON.RSC file is a standard **GEM** resource file (see *Appendix C: Native File Formats*) with one object tree containing a **BOX** object at the **ROOT** (object #0) with the icons as children. The position of the icons in the object tree determine their index as referenced by the NEWDESK.INF file.

DESKICN.RSC

This file is supported as of **TOS** 4.0 and is looked for before DESKICON.RSC. It has an identical format except that it supports the new resource file format and contains color icons rather than monochrome ones.