GEM®/3 Release Note

Using GEM Applications

With Microsoft Windows®

Using GEM Applications With Microsoft Windows

This release note describes the procedures you follow to use GEM applications with the Microsoft Windows Executive. The topics covered in this note are:

- The Program Information File
- Configuring the Program Information File
- Saving and Naming the Program Information File
- Starting the GEM Application
- Special Considerations for Windows/386
- Using GEM Output with Windows

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The Program Information File

An application that is not specifically written for Microsoft Windows must use a *Program Information File (PIF)* to run under Windows.

Digital Research GEM applications are full-screen standard applications. These applications are not designed to run under Windows, however, they can be launched from the Windows Executive by executing an associated PIF file.

Since no ready-made PIF files are provided with Windows for any of the GEM family, you must use the Windows PIFEDIT program to create and configure a custom PIF file. The PIFEDIT file is in the Windows Executive WIN286 (or WIN386) subdirectory.

A PIF file contains the application name, its path, and various other parameters.

The following sections show you how to use PIFEDIT to create a PIF file.

Configuring the PIF File

To start PIFEDIT:

1. Start the MS-DOS Executive window.
2. Select the WIN286 (or WIN386) directory.
3. Select the PIFEDIT.EXE file name to open the PIFEDIT screen.

For additional information about using the MS-DOS Executive window, refer to the Microsoft *Windows User's Guide.*

The following example shows a PIFEDIT screen set up for GEM® Draw Plus™ on Windows/286.

The following sections briefly describe the entries in PIFEDIT. The examples shown provide the best performance, however, you can modify them to suit your requirements.

Program Name:

Start your GEM application as a parameter to the system file

Program Information Editor

Program Name:	GEMVDI . EXE
Program Title:	GEM DRAW PLUS
Program Parameters:	DRAW
Initial Directory:	\GEMAPPS\GEMSYS
Memory Requirements:	KB Required 0 KB Desired -1
Directly Modifies	■ Screen ☐ COM1 ■ Memory
	■ Keyboard ☐ COM2
Program Switch	● Prevent ○ Text ○ Graphics/Multiple Text
Screen Exchange	● None ○ Text ○ Graphics/Text
Close Window on Exit	■

GEMVDI.EXE.

Program Title:

Enter the name of the GEM application.

Program Parameters:

Enter the GEM application file name like DRAW or PAINT. You can enter a partial or full name. For example, either DRAW, or DRAW.APP is acceptable. The .APP files reside in the \GEMAPPS directory.

Initial Directory:

Enter the start-up directory for the GEM application. \GEMAPPS\GEMSYS is the default start-up directory

Memory Requirements:

Enter the amount of memory required and the amount desired. Although you are instructed to enter a minimum required value, entering *0* in the *KB Required* box actually yields the best results.

An entry of *-1* is best in the *KB Desired* box. This is a special flag that causes Windows to swap itself out of memory temporarily to either hard disk or expanded memory. This combination prevents memory contention problems.

Directly Modifies

These choices allow allocation of system resources unilaterally. *Screen* and *Keyboard* are selected because the GEM application will be running independently of Windows.

The Memory box is usually for programs that remain resident in memory. You choose it for GEM applications because of the side effect of forcing Windows to swap itself out of memory temporarily (similar to the *-1* in *KB Desired* mentioned above).

Program Switch

Prevent disables the ALT ESC switch which is normally used to switch back to Windows. Since Windows is being swapped out temporarily, the only way to switch back is to quit the GEM application; this automatically reloads Windows.

Screen Exchange

Choosing *None* conserves memory by disabling data exchange with the Clipboard function in Windows. This function is not used by GEM applications.

Close Window on Exit

This sets the conditions so the GEM application is purged from memory when you quit and return to Windows.

Saving and Naming the PIF File

Choose Save As... from the PIFEDIT File menu when you have completed all entries. Give the PIF file a name you associate with the GEM application, for example, GEMDRAW.PIF or GEMPAINT.PIF. This is the file you will select when you start your GEM application.

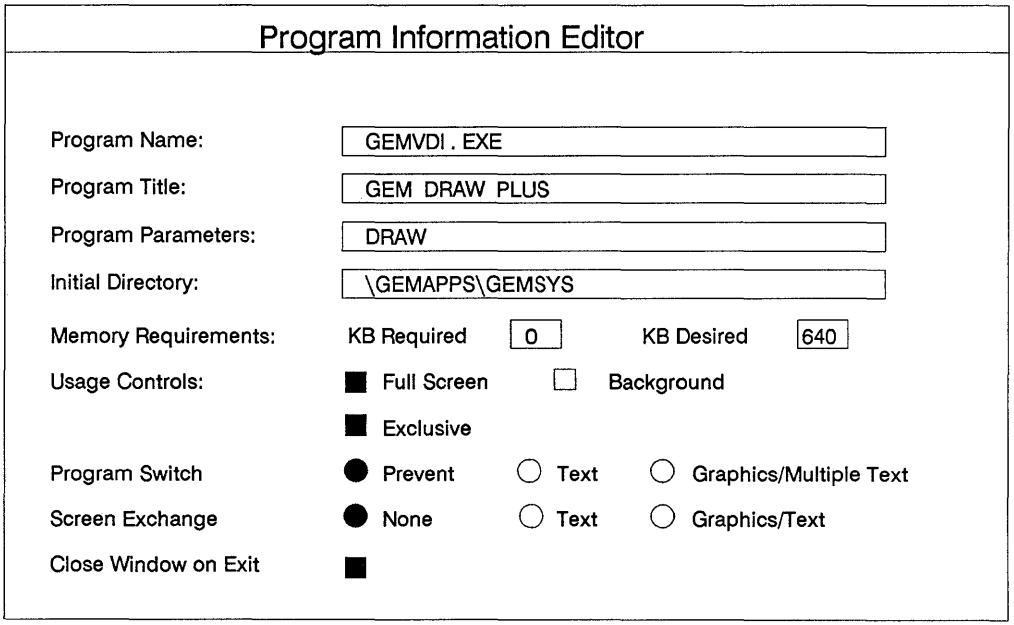
Starting the GEM Application

To start your GEM application, select the appropriate application name with the PIF extension, for example, GEMDRAW.PIF or GEMPAINT.PIF.

Special Considerations with Windows/386

There are a few differences between the PIFEDIT screen for Windows/286 and Windows/386.

Here is an example PIFEDIT screen for Windows/386:



Note that the differences are mainly in terminology. The *Directly Modifies* category is called *Usage Controls*. The *Full Screen* and *Exclusive* parameters are the correct choices in this group.

Since there is no *-1* flag available in Windows/386, *640* is now the appropriate entry in the *KB Desired* box. All other entries remain the same.

Using a serial mouse with Windows/386

A problem may occur if you are using a serial mouse with Windows/386. Windows/386 releases the serial port to any application configured as *Exclusive* and is then unable to regain control when you quit that application. Windows no longer detects the serial mouse—this is true even if Windows was correctly configured for the serial mouse.

To avoid this situation:

1. Configure and save the PIF file.
2. Return to Windows.
3. Quit Windows.
4. Start Windows again.

The mouse will function correctly after you re-start Windows.

Using GEM Output With Windows

If you go directly to GEM® Output™ from a GEM application and subsequently quit Output, you are sent to the GEM® Desktop rather than returning to Windows. Quit the GEM Desktop if you want to return to Windows.

If you wish, you can remove the DESKTOP.APP file from the GEMAPPS\GEMSYS directory. This will prevent GEM Desktop from loading when you quit the application. If you do this you will get a request to insert the Desktop disk. Cancel the request to continue.