Etha-GUI

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Sub-Etha Software!

Introduction

Quality. Here at Sub-Etha Software we are constantly creating quality software. Although quality programs take a little longer to produce, we firmly believe that quality and support are values that will satisfy our customers. If a company can deliver quality time and again, it's customers will keep coming back. Etha-GUI (code named "Project S.E.P.L." before release for "Sub-Etha Program Launcher") is a top-notch quality program.

OS-9 is a multi-tasking operating system. Therefore, a program should be "resource friendly," meaning it does not "hog" CPU time when there are other programs that need their fair processing time. Etha-GUI is highly resource friendly. In fact, the vast majority of the time, Etha-GUI is actually "sleeping" (taking up no processor time at all)! If Etha-GUI is doing something that takes a lot of CPU time (such as some of the screen-savers), Etha-GUI carefully watches to make sure you're viewing it on screen. So, if you switch to another window, Etha-GUI puts itself to sleep to let your computer take care of whatever other task you're doing.

"Look and feel" are very important and distinguishing characteristics of a program as well. Literally hundreds of hours have been put into the creation of Etha-GUI's easy-to-use menuing and windowing system.

I would like to thank Keith Bauer for his work in beta-testing software for Sub-Etha Software. He has been an essential part of making quality software be just that... quality! I would also like to thank Allen C. Huffman for his continued efforts to tirelessly support our community in his own very creative ways. I'm always impressed with his devotion to our community, which inspired him to found Sub-Etha Software. Thanks for your support, Allen!

Support is another important part of a company. At Sub-Etha Software, we make sure there are plenty of ways for you to reach us. We have two locations to help serve you. Feel free to call the closest one to help save on your phone bill.

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Also, we are available on both Delphi and GEnie. On Delphi, please address your mail to SUBETHA or JOELHEGBERG. On GEnie, our mail addresses are COCO-SYSOP and J.HEGBERG.

Finally, thank you for your purchase! We're glad you've chosen Sub-Etha Software, and look forward to serving you in the future!

-- *Joel Mathew Hegberg*

INSTALLATION

Before installation, please make sure you make a backup copy of Etha-GUI, and only use the backup copy from then on. Keep the original copy in a safe place.

Installing Etha-GUI is a very simple process, thanks to our easy-to-use "install_eg" program. Just insert your Etha-GUI installation disk into your /D0 disk drive and type the following:

```
chx /d0/cmds
chd /d0/eg
install_eg
```

The program will go copy the various files over to you /dd drive and will ask you a few questions regarding your system set-up. It will then configure your system for you.

Getting Started

Once Etha-GUI has been installed, you simply have to type "ethagui" to get it up and running. Etha-GUI must access a series of data files on your /DD disk drive to get started. The install program has placed those in the appropriate directories for you.

The "Main Screen"

Along the top of the screen, you see the menu-bar with a small square "exit" box, a coffee cup, and "Files", "System", and "Utilities" menus. Along the right side of the screen, you will see icons for your disk drive(s), and towards the bottom is a box named the "parameter box." Below it is your wastebasket, and next to that are your up/down scroll buttons.

Practice Session

Put your installation disk into drive /D0. Some files have been prepared for you to test-drive Etha-GUI with. Point your mouse at the /D0 icon and click the "A" (left-most) mouse button. Your drive will start up and your mouse cursor will change to an hour-glass which is Etha-GUI's way of saying it's currently completing a task you've given it. In a few moments, your screen will show icons with filenames below them, representing all of the files in the root directory of /D0. You will notice the folders "..", ".", "CMDS", "EG", and "PRACTICE". Go ahead and click with the "A" button on the PRACTICE folder icon. You should see a series of "delete_me" files in this directory. Files can be "picked up" by pointing at their icon and holding down the "B" (middle) button on the mouse. You can carry the file around the screen. To delete a file, you must carry the icon all the way down to the wastebasket icon and release the "B" button. Etha-GUI will prompt you to make sure you really want to delete the file. To cancel the delete operation, you may click

on the CANCEL button or in the small square "exit" box at the top-left of the newly opened delete window.

Placing a file in the parameter box is just as simple. Just "drag" the file's icon down into the parameter box and release it. If you want to empty the parameter box, just pick up and drag the parameter file's icon down to the wastebasket and release it... this will not delete the file since it was a parameter file, but rather will clear the parameter box. The parameter box has many uses in Etha-GUI which will be described as we go along.

Let's try to copy a file. Click on the folder STORAGE. Next, drag the file named "copy_me" down to the parameter box. Click on the ".." folder, which will take you back up to the last directory you were in. Now drag the "copy_me" parameter icon over into the file area and release it. Your mouse pointer will change to an hour-glass and the file will be copied. But wait a second! After the pointer returns, the file isn't there! Actually, it is. To see it, click on the "." folder (which means SAME directory) and Etha-GUI will re-read the current directory and the file "copy_me" will be there.

Inside the PRACTICE folder is an application icon named "ShowParam." With nothing in your parameter box, click on the Show_Param icon using the "A" button. A small window will appear on-screen informing you that a parameter file is required by Show_Param. Click on your mouse again to make the window go away. Drag any file you want down to the parameter box and then try to run ShowParam again. A blue window will open up on your screen and Etha-GUI will attempt to run ShowParam. ShowParam merely tells you the filename it's received as a parameter. You already know this, but the important thing is that ShowParam is a separate program from Etha-GUI. In other words, if you want to edit your "startup" file using Micro-Emacs editor, you could drag the "startup" file icon down to the parameter box, and then click on the "Micro-Emacs" application icon, and your editor would automatically load up your startup file for you. Even better, the startup file and Micro-Emacs don't even have to be in the same directory or on the same drive for the matter! The parameter file from Etha-GUI. In other words, if you want to edit your "startup" file using Micro-Emacs editor, you could drag the "startup" file icon down to the parameter box, and then click on the "Micro-Emacs" application icon, and your editor would automatically load up your startup file for you. Even better, the startup file and Micro-Emacs don't even have to be in the same directory or on the same drive for the matter! The parameter box remembers a complete path to the parameter file.

ShowParam is an example of a "desktop" application, since it opened it's window and ran on top of Etha-GUI (the desktop). Most larger applications require their own window and allow Etha-GUI to continue to function while the other program runs. More about this later when we talk about .GAIF files.

Using Menus

To "pull-down" a menu, simply point to the name (or icon in the case of the coffee-cup) and click (press and release) the "A" mouse button. When pointing inside the menu, the selection you are pointing at will be highlighted. To get rid of the menu, simply point somewhere outside the menu and click the "A" button again. To make a selection, point at (highlight) a selection, and click the "A" button.

The Coffee-Cup Menu

This menu contains some nice desktop features for your use.

NOTEPAD will let you make yourself notes. At the bottom of each page of notes is "Page: xx/yy", where xx is the page number you are currently looking at, and yy is the total number of pages of notes. You are allowed up to 30 pages of notes. NotePad uses the file /DD/SYS/SEPL/notepad.sepl to store notes in. The ADD button will increase the total number of pages by one. DELETE will erase the currently displayed page and decrease the total number of pages by one. SAVE will save your notes out to disk. CLEAR will erase the currently displayed page. EXIT returns you back to the "main screen." The up/down scrollers are used to change to another page.

PHONE is the Etha-GUI PhoneBook. This will help you keep all the phone numbers of your friends right at the touch of a button. PhoneBook uses the file /DD/SYS/SEPL/phonebook.sepl to store PhoneBook information. ADD will add a new person to the PhoneBook. You can select a person by clicking on that person's name or phone number. The name will be highlighted. DELETE will delete a selected person. DIAL will dial a selected person's phone number for you (modem required)... click the button a second time to hang up the modem. DIAL will only work if you have your modem port defined (select "OTHER" in the SYSTEM menu). SAVE will save the PhoneBook information out to disk. EXIT will return you to the "main screen." The up/down scrollers are used to move through the list of persons.

SAVERS is a series of screen saving options. The purpose of a screen saver is to alter or animate screen data after a period of user inactivity so you don't get "monitor burn-in." Using the up/down scrollers you can control the approximate time delay before the screen saver is activated. Click in the small circle button will select a different screen saver. Click on the OK button when you are through. All screen savers will return you to where you were working when you press any key or click the mouse.

SHELL will open a desktop window and allow you to access a shell. To return to Etha-GUI, press the 'Esc' key.

RESET is used to completely reset (reboot) your computer system. You will be asked if you are sure you want to do this. Clicking on CANCEL or in the small box

at the top-left of the window will abort the operation. OK will reset your system.

The Files Menu

ABOUT gives the software version and copyright information.

DEL FOLDER is used to erase a folder. You cannot delete a folder just by dragging it down into the wastebasket... it requires a special procedure. To use this, drag the folder you don't want down to the parameter box and then select this option. This feature uses the "DelDir" OS-9 Utility included with the OS-9 operating system.

EXEC will execute (run) a program. This is used for programs which don't have a .GAIF file (see next selection). Drag the program you want to run into the parameter box and then select this option, which will run the program from the desktop.

MAKE GAIF will create a .GAIF file for an application program. GAIF stands for Graphical Application Information File. Since .GAIF files are slightly complex, the section following the UTILITIES MENU is devoted to making .GAIF files. For more information, refer to that section.

NEW FOLDER will create a new folder (directory) in the current directory. To see the new folder, click on the "." directory icon.

RENAME will change the name of the file in the parameter box. To see the name change, click on the "." directory icon. RENAME uses the "Rename" OS-9 utility provided with the OS-9 operating system.

QUIT has the same function as the "exit box" located at the top-left corner of the main screen in the menu-bar (right next to the coffee-cup icon). It will ask if you are sure you want to quit Etha-GUI. If OK, then Etha-GUI will exit back to OS-9.

The System Menu

COLORS will let you alter your desktop colors. A window with all 16 desktop colors will appear on screen. EXIT will close the colors window. Click on the color you want to alter. All colors displayed by your computer are a combination of Red, Green, and Blue. There are a total of 16.7 million color combinations. To select a color to edit, click on the box below the color (with the numeric value in it), then use the up/down scroll buttons to raise/lower the color value. Using the "A" button will change the value by 1, while the "B" button will change the value by 10. A faster way of changing a color value is to drag the little square scroller inside the red, green, or blue color block. Simply point at the scroller and hold down the "A" button and drag it up or down to where you want the color to be.

LOAD DT will load in the default desktop parameters. These include the colors, launching priority, default font, confirmation attribute, fast-windows attribute, modem port, screen saver delay, and screen saver choice. These are loaded up when Etha-GUI starts up.

PRIORITY lets you set the "launching priority" for your other applications. Whenever you run an application that creates it's own window, Etha-GUI will run the application at the "launching priority." The lower the value, the less attention OS-9 will pay to the application. Use the up/down scrollers to change the value. The "A" button will alter the value by 1, while the "B" button will alter the value by 10.

REFRESH will redraw the main screen. It is possible for the main screen to get garbled if you have memory constraints. If there is not enough memory in your system when an overlay window opens, then the system cannot remember what is beneath the overlay window, and thus the overlay window remains on the screen when it should disappear. This is not a fault of the program nor the windowing system, but rather is due to a lack of memory.

SAVE DT will save the default desktop parameters (see LOAD DT).

OTHER contains a few other desktop settings. These include the default font, confirm attribute, fast-windows attribute, and modem port. Default font is the system font buffer number you wish to use when an application is launched (run). Confirm, when set, will notify you that an application has been launched whenever you click on an application file... this can get annoying after a while, so you may turn this off to eliminate the confirmation window. Fast-Windows will eliminate the "spring-open" type overlay windows, and just open them... The "spring-open" windows provide a neat effect, but not everyone may want to use them. Modem Port will let you define the port that your modem is connected to. This is used by PhoneBook when dialing a phone number. If this field is blank, then you are not allowed to dial out. Use the form "/Tx" (where x is the port number) when entering the modem port.

The Utilities Menu

This menu contains several OS-9 utilities for your convenience.

ATTR provides a unique and easy way to set file attributes. Drag the file you want into the parameter box and then select this utility. Clicking on the small box in the upper-left corner of the ATTR window will close the ATTR window without altering the file's attributes. You cannot alter a file's "directory" attribute... it is shown on screen for your information. Clicking on the OK button will call the "attr" OS-9 utility provided with the OS-9 operating system to alter the file's attributes. If the attr change will alter the file's icon, you will have to click on the "." folder to see the change.

FORMAT will invoke the "format" OS-9 utility. You will first be asked which

drive you want to format. Click on the icon representing the drive you wish to FORMAT. Another window will open for the format utility to run in.

FREE will provide information regarding how much free space is available on a disk. You will first be asked which drive you want. Click on the icon representing the drive you wish to run FREE on.

IDENT gives module information for an executable program. Other files will cause an error to be generated. Drag the executable file you want to inspect down to the parameter box and then select this utility.

LIST will display the contents of a text file. Drag the text file down to the parameter box and then select this utility. If the file is not a text file, and error will occur.

MFREE will display how much memory is free on your system.

PROCS will show a list of all the processes (programs) currently running on your system.

SETIME will call the OS-9 "setime" utility to let you set your system's date and time. Note: Changing your system date/time after the system has started can cause very large numbers (both positive and negative) to be shown in the PROCS utility under "age" since "age" is directly related to date/time. This is not a bug.

Gaif Files

GAIF files contain information on how to run an application. These must be created from within Etha-GUI. Here's an explanation of the various options when using MAKE GAIF feature in the FILES menu:

Program Name: The name of the program to execute (as if typing it from an OS-9 prompt).

DeskTop Name: A 10-character name that will appear under the application icon of the file to identify the program.

Icon Path: Give the name of the icon file as well as where to find it. NOTE: All GAIF icon paths are given relative to the CMDS directory!

Parameter: If an application cannot use a parameter, set this to "Not Allowed." If an application requires a parameter, set this to "Required." If an application can handle either case, set this to "Optional."

Options: This is a string of additional command-line parameters. For instance, if the program was "mfree" and you wanted to use the "mfree -e" option to list all the available blocks of memory, then you would set the program name to "mfree" and the option line to "-e".

Window Type: To run a program from the desktop, set this to DeskTop, otherwise set the graphics resolution the application requires. (Normally almost all applications expect 80x26x16c non-interlaced.)

Loc_X and Loc_Y: Only valid for desktop applications. These tell where to locate the top-left corner of the application's window. These are also limited by the Size_X and Size_Y parameters.

Size_X and Size_Y: How many characters in width the application's window should be. If the window would extend beyond the right or lower edge of the screen, the Loc_X and/or Loc_Y values are automatically corrected.

Foreground: Foreground color number.

Background: Background color number.

Border: Border color number.

Font #: Font buffer number to use when the application is run. If this is set to 0, Etha-GUI uses the "default font" defined in the OTHER selection located in the SYSTEM menu.

Some options must be typed in, some are "flipped through," and some must be altered using the up/down scrollers. Clicking on OK will attempt to create the GAIF file (which will be given the DeskTop name plus the extension ".GAIF"). To see the new GAIF file, click on the "." folder icon.

The Icon Editor

For your convenience, an icon editing program named "Etha_Icon" has been included with your Etha-GUI purchase. While this is not a feature-packed editor, it is very robust and does it's intended job quite effectively. You will find Etha_Icon on your installation disk along with it's icon and .GAIF file. Copy the icon out of the CMDS/ICONS directory of your installation disk and place it in the CMDS/ICONS directory of another disk. Then copy Etha_Icon over to the CMDS directory and copy it's .GAIF file over to the directory where you want the program to appear. Usually, you will want to have it in an ICONS directory (such as in your CMDS/ICONS directory) so you can see it on-screen as well as your icon data files. A parameter is required to run the program, so drag an icon data file to the parameter box before clicking on Etha_Icon.

Once inside Etha_Icon, you draw by pointing the mouse into the large box in the center-left of your screen. By holding down the "A" button, you will set pixels in your current color. To the right you will see an actual size representation of your icon. To change color, simply point at which color you want (in the color bar at the top of the screen) and click the "A" button, then start drawing again. If you click on "Clear" at the to of the screen, your entire icon will be changed to the current color. "Save" will write out your changes to disk. "Exit" will exit the program.

Technical Information

All program and device icons are 32x16 in dimentions, giving a file size of 256 bytes per icon file.

Sub-Etha Software has reserved group number $F4 (244 decimal) for Etha-GUI icons. Please do not use group number $F4 inside your programs unless you are making use of Etha-GUI's icons. The purpose is so other programs can use Etha-GUI's built-in icons in their own programs (provided that Etha-GUI is currently running in another window). Here is a list of useful icon buffer numbers and their sizes:

HEX	DEC	ICON	SIZE
E6	230	Busy Pointer	16x14
E7	231	Off Pointer	8x2
EF	239	WasteBasket	32x16
F0	240	Scroller	16x8
F1	241	Open Circle	16x8
F2	242	Closed Circle	16x8
F7	247	Down button	32x16
F8	248	Up button	32x16
FA	250	Folder icon	32x16
FB	251	Exec icon	32x16
FC	252	Text icon	32x16

All other buffer numbers are reserved for future use. Many are currently being used by Etha-GUI but are not stable, as they are loaded as needed. For instance, buffer number $F9 (249) is the parameter box icon, which is totally dependent on what file you've currently dragged into the parameter box region. More icons will be available in future enhancements.

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