CMD

CREATIVE MICRO DESIGNS, Inc.

gateWay™

USERS MANUAL

CMD

gateWay™

USERS MANUAL

Creative Micro Designs, Inc.
P.O. Box 646
East Longmeadow, MA 01028
(413) 525-0023

Copyright Notice

Copyright © 1991
by Creative Micro Designs, Inc.

1st Edition, First printing, April, 1991

All rights reserved. No part of this document may be reproduced, in any form or by any means either manually or electronically without written permission from Creative Micro Designs, Inc.

gateWay™ is protected under United States and International Copyright Laws, and may not be copied, in whole or in part, without the written permission of Creative Micro Designs, Inc.

JiffyDOS™, RAMLink™ and HD Series are trademarks of Creative Micro Designs, Inc. RAMDrive™ is a trademark of Performance Peripherals, Inc. Commodore 64®, 64C™, SX-64™, C-128™, C-128-D™, 1541™, 1541-C™, 1541-II™, 1571™, 1581™, 1700, 1764 and 1750 are trademarks or registered trademarks of Commodore Electronics Limited. GEOS™, GEOS128™, GEOS deskTop™, GEORAM™, and Berkeley Softworks™ are trademarks of Berkeley Softworks.

Table Of Contents

Section 1: Welcome to the gateWay

Introduction and Acknowledgements.....1
A Note From CMD.....2
Warranty.....2
How to Use This Manual.....2
What you need to run the gateWay.....3
System Considerations.....4
  Single Drive Systems.....4
  Systems Without RAM Expansion.....5
  Systems With RAM Expansion.....5
    128K RAM Expansion.....5
    256K RAM Expansion.....6
    512K RAM Expansion or More.....6
    RAMDrive and RAMLink Users.....6
    Combined RAM Expansion.....7

Section 2: Getting Started

Installing The gateWay.....9
gateWay For the First Time.....11

Section 3: gateWay Functions

Main Features and Functions.....13
  The gateWay Screen.....13
    Pulling Down a Menu.....14
    Selecting a Menu Item.....14
    Selecting a Drive.....14
  The filePad.....14
    Closing the filePad.....14
    Resizing the filePad.....14
    The Fuel Guage.....15
    Viewing Files on the filePad.....15
    Selecting Files from the filePad.....15
    Filetype Icons.....15
    Moving Files On the filePad.....16
  The TrashCan.....16
The Geos Menu.....16
  Changing Screen Modes.....17
  Getting Info About The GateWay.....17
  Accessing The Control Panel.....17
  Selecting GateWay Documents.....18
The Action Menu.....18
  Opening Files.....19

Getting Info about a File or Disk 19
Renaming Files or Disks 20
Copying Files or Disks 20
Validating Disks 21
Erasing Files or Disks 21
Undoing The Trash 22
Erasing Disks 22
Formatting Disks 22
Printing Documents 23
The View Menu 23
The Select Menu 24
Selecting Page Files 25
Selecting All Files 25
The Special Menu 25
Resetting the gateWay 26
Browsing for Files 26
Emptying the TrashCan 26
Changing a Disk's Icon 26
Shutting Down the System 26
Opening Partitions on CMD Devices 27

Section 4: gateWay Configuration

Configuring the gateWay 29
Altering the gateWay presentation settings 30
gateWay Disk Drivers 33
Integrating Disk Drivers 34
Configuring RAM Expansion 35
Hard Drive Support 36
RAMLink and RAMDrive Support 36
gateWay Documents and GWMover 36
Using GWMover 37

Section 5: Task Switching

Using switcher 39

Section 6: Advanced Topics & Information

Making Additional Boot Disks 43
Booting From CMD Devices 43
Optimizing the gateWay 43
Technical Info on gateWay Documents 44

Section 1

Welcome to the gateWay

Introduction and Acknowledgements

It is important to understand that the gateWay is more than a replacement deskTop - the gateWay represents a whole new philosophy with working with GEOS. From the creation of a new boot disk, to disk drivers and the gateWay itself, a new level of sophistication is brought to the GEOS.

This sophistication brings a new ease to the task of file management. Menus have been streamlined, a text only view mode means that the entire directory of a disk can be brought into memory at one time. A directory can easily be searched for a specific file or file type, and the sizeable filePad presents as much or as little information as you feel you need.

It is important to note that the gateWay was developed with the serious GEOS user in mind. While the gateWay will operate on single drive systems, and also on systems without RAM expansion, the gateWay was specifically designed with multi-drive, RAM-expanded systems in mind. Specifically, the gateWay was developed on the following equipment:

Commodore 128D
CMD HD-20 hard drive
Commodore 1581
Commodore 1764 REU (expanded to 1 Mb)

At various times, the following items were also used for development:

CMD RAMLink (4 Mb)
PPI RAMDrive (2 Mb)
Schnedler Systems Turbo Master CPU
Berkeley Softworks GEORAM
Commodore 1541
Commodore 64

Many people were involved one way or another in the creation of gateWay. Mark who was too busy with RAMLink to know what I was doing, Charlie for the encouraging words. Doug Cotton for his suggestions and insights and his help with organizing and editing the documentation. And Charlie Sr. who took it all on faith that there really was a gateWay, and occasionally reminded that the deadline was last week...

And finally, Noelle, Dylan and Alexander who put up with long hours and even longer days. And yes, Alexander, you do have a father...

A Note From CMD

Many long hours have gone into making gateWay, mostly by Paul in developing the software, though many hours were also put in by others in testing and evaluating the product, and more in creating this documentation. In all, the gateWay has taken approximately 9 months to develop - at a cost much higher than we would have ever expected. Yet, we feel compelled to keep the product affordable - and we feel that it is a good value to the GEOS user. In fact, the gateWay may just be the product that can convince a lot of non-GEOS users to reconsider the possibilities...

For buying this product, and also for supporting those who continue to support you, we at CMD would like to take this opportunity to say thank you. At the same time, we would also like to urge you not to make copies of this product to give to your friends. It is only through continued sales that we will be able to go on supporting Commodore users with exciting new products such as this. So show it to your friends, talk about it, let them see the manual - but if they ask you for a copy of the software, please tell them that you do not wish to contribute to the decline of companies who still support your computer.

Warranty

CMD warrants the disk to be readable and free of any manufacturing defects for a period of 90 days from time of purchase. If, within that period of time, the disk should fail to be readable, contact CMD for a replacement disk. After 90 days, CMD will replace disks for a nominal fee. CMD cannot guarantee this product to be fit for any particular purpose, either in part or in whole, nor can we guarantee that the software itself is free from all bugs or errors. CMD cannot be held responsible for loss of data due to or in connection with the use of this product, whether that loss be either consequential or inconsequential, nor can CMD be held liable for any damage to your equipment through the improper use of this product.

How to Use This Manual

Please note that throughout this manual, unless differences exist, all versions of GEOS will be simply referred to as GEOS. This same approach is taken when talking about either gateWay 64 or gateWay 128 and their associated files. It is important to remember these differences when, for example, we mention switcher - gateWay 128 users should assume we mean switcher_128.

Section 1 of this manual discusses certain system considerations. These are very important, and these areas of the manual should be studied carefully before beginning the installation process to insure that you know just how your system should be configured.

Section 2 takes you through the procedures for getting the gateWay up and running under all 2.0 versions of GEOS. These procedures apply to using the gateWay with GEOS for the 64, GEOS 128, and the versions of GEOS supplied with Berkeley Softworks' GEORAM. You should read this section thoroughly before attempting to install or use the gateWay.

Section 3 explains and discusses the main features and functions of the gateWay, as well as each of the individual gateWay menu items. Some of this information will be familiar to you if you have been using GEOS for any period of time, yet, there are some subtle (and some not-so-subtle) differences which this section will help to clarify.

Section 4 provides information about customizing the gateWay to suit your own own personal tastes. This section also contains information about disk drivers and about integrating gateWay documents. Much of the information in this section (and the following sections) can be used interactively - as you begin using the gateWay.

Section 5 contains information about the use and capabilities of switcher, our task switching mechanism. If you intend to use switcher on your system, you should read this section thoroughly.

Section 6 discusses how to make additional copies of your gateWay boot disk, and provides information on booting the gateWay directly from RAMLink, RAMDrive, and the CMD HD Series hard drives. Section 6 also has some specific information about optimizing the gateWay, and contains information about some of the more technical aspects of the gateWay. This can be read at your leisure after you have become comfortable with the gateWay and it's features.

Above all, remember that the majority of problems in using any product usually stems from not reading the provided documentation. If you find yourself uncertain about about some aspect of the gateWay - check this manual carefully for associated subjects.

What you need to run the gateWay

The following software and hardware list give the minimum requirements needed in order to operate the gateWay. While the gateWay can be operated from the minimum system requirements given, we highly recommend expanding your system beyond these requirements in order to get the most benefit from using gateWay.

Required Software:

- any original 2.0 version of Berkeley Softworks' GEOS
- the gateWay System disk

Required Hardware:

- a Commodore 64 or 128
- a 1541 or 1571 disk drive
- a mouse, joystick, or some other GEOS supported input device

Other Requirements:

- a blank disk in a format supported by one of the drives on your system

Optional Equipment:

- a RAM Expansion Unit. Not only does RAM expansion dramatically improve the performance of GEOS, it also more easily facilitates the use of multiple drives of different types (i.e., 1541 and 1581). The gateWay supports CMD's RAMLink, PPI's RAMDrive, Berkeley Softworks' GEORAM, and all Commodore 17xx series REU's.
- additional drives, for example Commodore's 1581 3.25" disk drive, or a CMD HD Series hard drive.
- a GEOS supported printer. A list of supported printers can be found in your GEOS 2.0 manual.

System Considerations

While it has always been our intention to make the gateWay as system independent as possible, many aspects of the GEOS kernal itself coupled with having to observe strict memory limitations have caused us to place certain restraints on some of the gateWay's features when used some systems. The following paragraphs should help illustrate these differences.

Single Drive Systems

Using the gateWay on systems equipped with only one disk drive places some severe restrictions on the system, mainly in the area of copying disks and files. The gateWay does not support copying either disks or files from one disk to another - this capability is only available under the standard GEOS deskTop itself.

Single disk systems can use the gateWay as a point of operation, and this will allow the single disk system user to use the gateWay's more streamlined approach to finding files, as well as the many other subtle features that gateWay provides. A gateWay document has been provided to allow those using single drive systems to exit to the deskTop (make sure that you have a copy of the deskTop on your disk), and a return to the gateWay may be accomplished by double-clicking on Launch. Please note that this type of switching is only supported when using drive types which are normally supported by GEOS itself (1541, 1571 or 1581).

Systems Without RAM Expansion

Using the gateWay on systems which are not equipped with some form of RAM expansion will place two basic restrictions on the system. Since the gateWay normally uses a portion of RAM expansion to store information about extra disk drivers, and because each disk on the system must have a separate driver, using more than one drive must be handled in a different manner. This is done by an auto-exec program called the Integrator, which will automatically integrate the first two disk drivers found on your boot disk when gateWay is launched. Systems without RAM can only use two drives - three drive support is only possible on RAM expanded systems.

Since memory is at a premium (and you never get something for nothing), the addition of a second drive on a system without RAM expansion will in turn cut back on the number of files which can be read into the gateWay's directory buffer. Normally the gateWay can hold up to 144 separate filenames of the type being viewed. Integrating a second driver cuts this to 120 filenames.

The other limitation placed upon systems which are not equipped with RAM expansion is that they will not be able to utilize switcher, the gateWay's task switching mechanism.

Systems With RAM Expansion

Using the gateWay on systems equipped with RAM expansion will normally allow you to use all the features of the gateWay. There are, however, some exceptions to this rule, and different sizes and types of RAM expansion devices are supported in different ways as is explained in the following paragraphs. The general rule to remember is that as more RAM expansion is placed on the system, less restrictions are placed upon what can be done with it.

128K RAM Expansion

If you are using a RAM device which contains only 128K of RAM (Commodore 1700 REU), you will not be able to create a RAM disk of any type. The RAM expansion will be used to allow you to have up to three drives on the system, and you will be able to mount switcher for the purpose of task switching.

256K RAM Expansion

If you are using a RAM device which contains only 256K of RAM (Commodore 1764 REU), you will not be able to mount the switcher. It was felt that the benefits of having a RAM disk outweighed those of being able to task switch, and that a RAM disk of only 128K would be mostly useless under GEOS and the gateWay. With this system configuration you must use the Ram41_71 driver.

512K RAM Expansion or More

If you are using a RAM device which contains 512K or more of RAM (Commodore 1750 REU, Berkeley Softworks' GEORAM, or expanded versions of either), you will be able to use all the features of the gateWay.

Commodore 1750 REU users and GEORAM can both use either the RamDisk driver or the Ram41_71 driver. The RamDisk driver allows you to configure a RAM disk of up to 2 Megabytes, while the Ram41_71 driver can be used to configure a RAM disk the same size as a 1541 or 1571. The Ram41_71 driver was included to insure backwards compatibility with some programs which may steal certain areas of your RAM expander for their own purpose.

GEORAM users have one other option - the gRamDisk driver - which is similar to the RamDisk driver, but which has been optimized for use with the GEORAM unit. We highly recommend the use of this driver to all GEORAM users.

RAMDrive and RAMLink Users

If you intend to use the gateWay with a PPI RAMDrive or a CMD RAMLink, you must configure your RAMDrive or RAMLink in a special way in order have the gateWay recognize your unit as a RAM expander. If you do not do this, gateWay will not allow you to use the switcher, nor will it allow you to use three drives on you system at the same time. RAMLink users who also have some other form of RAM expansion (a GEORAM or Commodore REU) attached have some other options which will be covered later (see 'Combined RAM Expansion').

To configure for using the gateWay with a RAMDrive or RAMLink only system, use the RAM-TOOLS program provided with RAMDrive and RAMLink to create a Foreign (direct access) partition of 512 blocks. This must be the first partition created, so you must delete all other partitions before creating this one. You may then create whatever other partitions you wish to use on RAMLink or RAMDrive.

The gateWay provides two drivers for use with RAMDrive and RAMLink equipped systems - RLDrive and RL1581. RLDrive works with CMD Native partitions of any size, and RL1581 works with 1581 Emulation partitions. Either of these partition types may be used under the gateWay, and it is up to you to decide which type or types you desire to have available to you, and to create these with RAM-TOOLS.

You should also change the default device number assigned to RAMDrive or RAMLink (again with RAM-TOOLS) to a GEOS recognized device number if you wish to have these devices recognized during the boot process. GEOS recognizes devices numbering from 8 to 10. You may also wish to change the default partition number to the number of the partition you wish to have the gateWay see when it is first booted.

It is not required to make the default device number and default partition number changes to use RAMDrive or RAMLink with the gateWay - since both of these devices can be swapped into device number 8 or 9 using the SWAP switches, you can always bring them online after starting the gateWay by performing a device number SWAP and then double-clicking on the appropriate driver located on some other disk drive on your system.

Please note that in order for the gateWay to recognize the Foreign partition on RAMDrive or RAMLink as a form of system RAM expansion, you must choose YES when asked if you wish to install the RAMLink GEOS kernal patches during the gateWay installation procedure which is discussed later (see 'Installing The gateWay').

Combined RAM Expansion

If you intend to use the gateWay with a CMD RAMLink which is equipped with both a populated RAMCard and which also has some other form of RAM expansion (Commodore REU, Berkeley Softworks' GEORAM, or PPI RAMDrive) plugged into the RAM port, you may use the method given above in 'RAMDrive and RAMLink Users'. If you do use this method, you must leave the NORMAL/DIRECT switch in the NORMAL position. Please note that you must use this method if you have either a PPI RAMDrive or a Commodore 1700 with only 128K of RAM attached to the RAM port on RAMLink.

For those users who have either a Commodore REU with at least 256K of RAM or a Berkeley Softworks' GEORAM attached to the RAM port in RAMLink (but not a PPI RAMDrive) there is another possible choice - you may have two separate RAM devices for use under the gateWay! If you use this method it is suggested that you use the RAM device attached to the RAM port as your main RAM disk - but the final decision as to how to configure your overall system is entirely up to you.

To configure your system in this manner, use the RAM-TOOLS program provided with RAMLink to create a Foreign (direct access) partition which is the same size as the RAM expansion device which you have attached to the RAM port. This must be the first partition created, so you must delete all other partitions before creating this one. The following chart shows how many blocks needs to be allocated for each size RAM expansion unit:

RAM	Expander Description	Blocks
256K	Commodore 1764	1024
512K	Commodore 1750 or Berkeley Softworks' GEORAM	2048
1 Mb	Expanded 17xx or GEORAM	4096
2 Mb	Expanded 17xx or GEORAM	8192

After creating the correct size Foreign partition, you may then create whatever other partitions you wish to use on RAMLink. Keep in mind that you may only use CMD Native or 1581 Emulation partitions with gateWay itself. After you have completed configuring RAMLink, set the NORMAL/DIRECT switch to the DIRECT position for use with the gateWay. When installing the gateWay, answer NO when asked if you wish to install the RAMLink GEOS kernal patches.

Section 2

Getting Started

Installing The gateWay

Installing the gateWay is not a complicated procedure, however, because you will be creating a new boot disk, we suggest you read this section over until you are comfortable with the procedures described.

The following steps summarize the procedures necessary to install the gateWay under GEOS:

- first, power up your 64 or 128 and boot GEOS as you would normally. Make sure that you use an original, unmodified GEOS boot disk.
- remove the GEOS System disk from Drive A and insert the gateWay System program disk. Click on the disk drive icon representing Drive A. This will open the gateWay System disk on the GEOS deskTop.
- from the menu bar, select disk. After the disk menu unfolds, click on validate.At this time, the DeskTop will validate the gateWay System disk. If the deskTop reports an error, proceed no further with the installation procedures! Contact CMD for a replacement disk.
- assuming the deskTop reported no errors, format a disk on any disk drive normally supported by GEOS (1541, 1571 or 1581). This will be you new boot disk. To make a boot disk directly on a CMD RAMLink, CMD HD Series hard drive, or a PPI RAMDrive, see the special instructions in Section 6 under 'Creating Additional Boot Disks'.
- copy the following files from the gateWay System disk over to the newly formatted disk. Note that depending on which versions of GEOS and gateWay you have (64 or 128), some of the filenames may have a "_64" or "_128" appended to the end:
  - GEOS (the bootstrap loader)
  - GATEWAY (the file manager)
  - Launch (a gateWay auto-exec)
  - MakeBoot (system creation utility)
- if you plan on using your system without RAM expansion of any type, copy the Integrator auto-exec to your new boot disk.

- copy your default input and printer drivers from your regular GEOS boot disk to your new gateWay boot disk. Make sure that the drivers you intend to use most are the first ones located on the disk.

The following steps will help to insure that you have the proper disk drivers on your new boot disk. With the gateWay, the order in which these disk drivers appear on the disk is very important. You should move the drivers over in the order in which the devices on your system are numbered. In other words, the driver for device number 8 should go on first, then the driver for device number 9, and lastly, the driver for device number 10.

- if you own (and plan to use) a 1541 disk drive, copy the CBM1541 disk driver to your new boot disk.
- if you plan to use a 1571 disk drive, copy the CBM1571 disk driver to your new boot disk.
- if you will be using a 1581 disk drive, copy the CBM1581 disk driver to your new boot disk.
- if you own a CMD HD Series hard drive, move the HardDrive and HD1581 drivers to your boot disk.
- if you own a Commodore REU with at least 512k, move the RamDisk driver over to your boot disk. If you have only 256k of RAM expansion, move over the Ram41_71 driver. You may also use the RBOOT program from your regular GEOS boot disk with these drivers, so copy this over as well.
- if you own a GEORAM, move the GRamDisk driver over to the boot disk. You may also use the RBOOT program from your regular GEOS boot disk with this driver, so copy this over as well.
- if you have a RAMDrive or RAMLink, move the RLDrive and RL1581 drivers to your boot disk.
- if you have at least 512k of RAM expansion, move switcher over to the boot disk. If you are using a GEORAM system disk to create your system, then use switcher_r instead.
- Open the new boot disk by clicking on the icon of the drive in which it is inserted, making it the current drive.
- Double-click on the MakeBoot icon.
- If you own a RAMLink or RAMDrive and it is connected, MakeBoot will request whether to install the RAMLink kernal patches. Select YES if you own no other form of RAM expansion.

After a few moments, you should be back at the deskTop. There will be a new file on your boot disk named GEOBOOT. The gateWay will always be booted from this disk. If for some reason you make dramatic changes to your system hardware in the future, you should again repeat this process to create a new gateWay boot disk.

At this time, shut down your system.

gateWay For the First Time

You are now ready to boot the gateWay. Place your new boot disk in the appropriate disk drive, and boot the gateWay as you would normally boot GEOS by entering the following:

```
LOAD"GEOS",8,1
```

Now press the RETURN key to start the load process.

You can actually boot the gateWay from any GEOS supported device number (8, 9 or 10) by changing the "8" in the above LOAD statement to the appropriate device number.

If you are booting from a floppy device on a C64, you may notice that the initial loading process will be a bit slower than usual. This is because the boot process does not use the GEOS diskTurbo routines. Users who have JiffyDOS, or are loading from hard drives or RAM systems will not notice the lack of the diskTurbo routines in the loading process.

You will notice some new things happening during the boot process. The first thing that you see is the 'Welcome to the GATEWAY...' screen message. At the bottom of the screen, driver icons will appear as they are loaded into the system. For example, the icon of your printer and input will driver will appear followed by your disk drivers, and finally by the switcher icon (if you have moved it over to your boot disk).

At this point, you will be brought out to the gateWay. This first time only, you might want or need to configure certain features of the gateWay before you start copying it over to other disks. Certain settings, such as screen color, and pad pattern are stored in the gateWay itself. Adjusting these options is described later in this manual under 'Configuring the gateWay'.

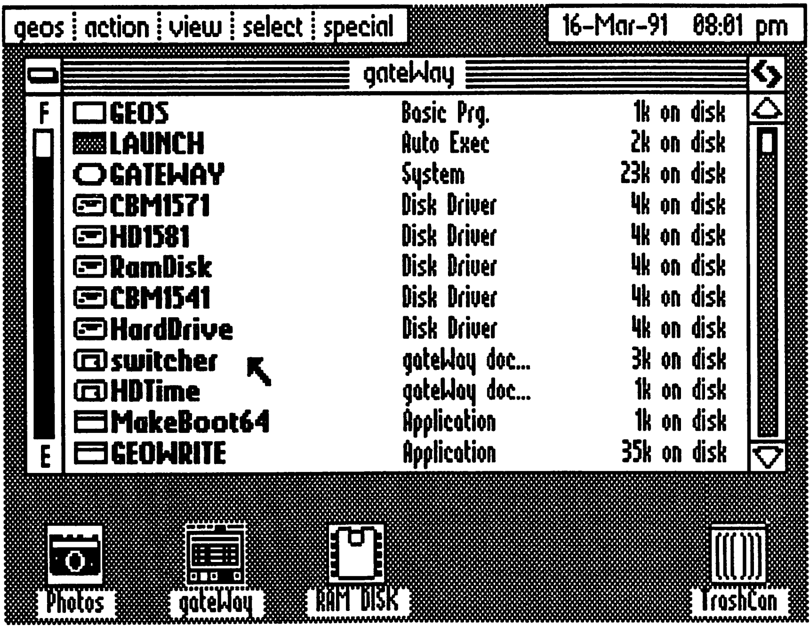
Section 3
gateWay Functions

Main Features and Functions

The gateWay allows you easy access to your files and simplifies file management on multiple-drive systems. From the gateWay, you will be able to do everything you were accustomed to doing from the deskTop. This section describes many of the gateWay's advanced file management features.

The gateWay Screen

Along the top of the gateWay screen lies the menu - to the right of the menu is the clock. Across the bottom of the screen are the drive icons and, at the far right, the TrashCan.



GEOS	Basic Prg.	1k on disk
LAUNCH	Auto Exec	2k on disk
GATEWAY	System	23k on disk
CBM1571	Disk Driver	4k on disk
HD1581	Disk Driver	4k on disk
RamDisk	Disk Driver	4k on disk
CBM1541	Disk Driver	4k on disk
HardDrive	Disk Driver	4k on disk
switcher	gateWay doc...	3k on disk
HDTime	gateWay doc...	1k on disk
MakeBoot64	Application	1k on disk
GEOWRITE	Application	35k on disk

The gateWay

Pulling Down a Menu

To pull a menu down, place the pointer over the menu you wish to pull down, and click once. Clicking is accomplished by pressing a joystick fire button or a left mouse button once, then immediately releasing it. The options for that menu will then 'drop down' and will be available for selection.

Selecting a Menu Item

After pulling down a menu, you may select one of the menu items by moving the pointer until it rests over the desired menu item. Click once to complete the selection process.

Selecting a Drive

Drives may be selected by clicking on any of the drives by moving the pointer until it is positioned over the drive icon, then clicking once. While a drive is selected, its icon appears in reverse video.

The filePad

The filePad occupies the center of the screen. It contains information concerning the currently open drive. The name of the currently opened disk is displayed at the top center of the filePad.

Closing the filePad

To the left of the disk name is the close icon. Clicking once on the close icon will have one of two effects. Usually, the filePad will close - leaving only the inverted disk icon to indicate which drive is currently selected. However, if the device is a CMD Hard Drive, RAMLink or RAMDrive native mode partition, clicking the close icon will, assuming you are in a subdirectory, place you in the parent directory. If you are in the root directory, clicking the close icon will close the filePad as above.

Resizing the filePad

To the right of the disk name, is the resize icon. Clicking once on this icon allows the file pad to be resized to your liking - displaying as much or as little information about the file as you wish. After you have clicked once on the resize icon, a vertical line will appear. You may then move the line horizontally until it is located where you wish the right margin of the filePad to be moved to. Click once more to complete the process. The filePad will automatically redraw itself using the new margin you have set.

The Fuel Guage

Below the close icon and extending the height of the filePad is a fuel gauge. The gauge allows a quick assessment of the space available on the disk. Occasionally, more accurate information might be required. Clicking on the fuel gauge, will bring up an info box describing the disk - from drive type (1541, RAM DISK, 1581 etc.), to when the disk was initially formatted - and of course, the size of the device, the number of blocks free and used.

Viewing Files on the filePad

Below the resize icon, is the slider. The slider allows quick access to any file on the disk. Simply click on the slider and move it up or down. Click again to deposit the slider. The directory listing has been moved up or down in accordance with the slider movement. Below and above the slider are scroll arrows which are used to scroll the directory up or down one line at a time. This may also be accomplished by using the cursor up/down key. Clicking above or below the slider icon in the slider region, will move the listing up or down a full page. The cursor left/right key has been programmed to mimic this action. The filePad page will displays up to 12 entries at a time.

Selecting Files from the filePad

Before you can perform an action on a file, generally, you must select it. This is done by clicking in the filename region for that file. The filename region for that file is then inverted. To select multiple files, hold down the Commodore key and click on additional filename regions. The scroll icons and slider can be used to facilitate moving to other parts of the directory.

To deselect a file, click anywhere outside the filename region. If multiple files are selected, you may deselect a file by clicking again in the filename region while keeping the Commodore key pressed.

Making the process of selection easier is the select menu. From this menu, you can either select all or select page. Selecting all, will select every file on the disk. Selecting page, will select the page. In either case, the filePad will be inverted. Clicking on the filePad will then attach the MultiFile icon to the pointer.

To deselect at this point, just click anywhere outside the filePad.

Filetype Icons

To the left of filename region is a small icon. This is the filetype icon and it is meant to inform you at a glance as to the class of the file. Clicking on the filetype icon will bring up an info box, displaying the file icon and various other information. Clicking on the file icon closes the info box.

Moving Files On the filePad

For a variety of reasons, it is often necessary to rearrange files with the directory. You might be doing this for thematic reasons, i.e., grouping all your applications together, or in order to access a data file or font from within an application.

To move a file on the Pad:

- while holding down the C=, click on the filetype icon to the left of the filename region. A small icon will become attached to the pointer.
- move the icon to the position in the directory you want the file to occupy. Click again.
- one of two things will happen:
  a. if there is a free directory slot preceding the file entry, the file will be moved to that position
  b. if there is no free directory slot, the files will be swapped.
- if you decide you do not want to move the file, simply redeposit the file in its old slot.
- to facilitate moving files beyond the range visible on the filePad, the up and down scroll keys will move the directory one listing at a time.

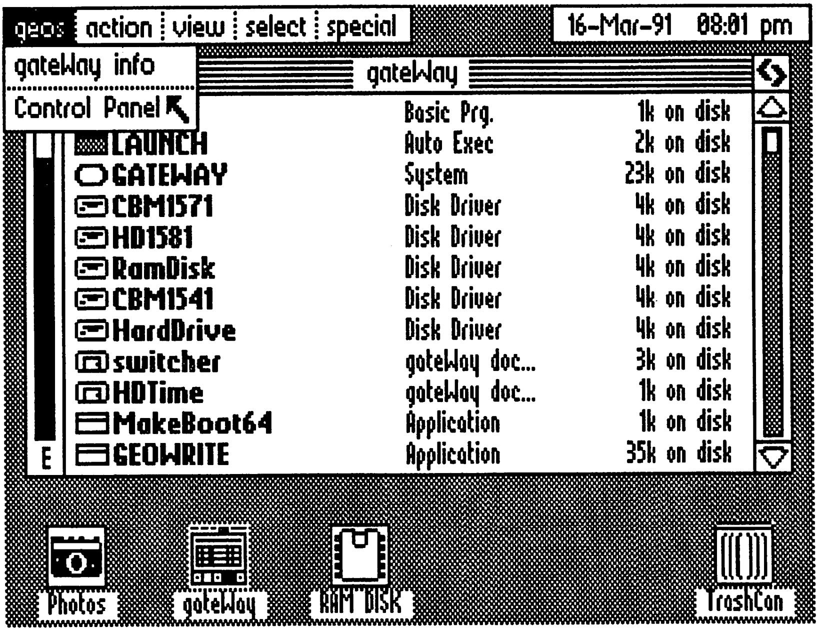
The TrashCan

The TrashCan appears at the bottom of the screen, to the far right. Files which are no longer needed can be dropped into the trash, erasing the file from the disk. After files have been placed into the TrashCan, they may be restored back to their normal condition up until another disk is opened.

Whenever files are located in the TrashCan, clicking once on the TrashCan icon will cause it to invert, indicating that it has been selected. The filePad of the currently opened disk will change status, displaying only the names of those files which have been dropped into the trash. Double clicking on the filename region of a file will restore the file, placing its name back into the normal disk directory.

The Geos Menu

The first item listed under the geos menu will differ, depending on which version of the gateWay (and GEOS) you are using. The geos menu is mainly intended as a means for accessing gateWay documents, but also contains options for getting info about the gateWay, accessing the control panel, and in the case of the 128 version, an option for switching between 40 and 80 column modes.



LAUNCH	Basic Prg.	1k on disk
GATEWAY	Auto Exec	2k on disk
CBM1571	System	23k on disk
HD1581	Disk Driver	4k on disk
RamDisk	Disk Driver	4k on disk
CBM1541	Disk Driver	4k on disk
HardDrive	Disk Driver	4k on disk
switcher	gateWay doc...	3k on disk
HDTime	gateWay doc...	1k on disk
MakeBoot64	Application	1k on disk
GEOWRITE	Application	35k on disk

The Geos Menu

Changing Screen Modes

In 128 mode only, the first option on the geos menu is the 40/80 switch option. Selecting this option will allow you to switch between 40 and 80 column screen modes. Obviously, you must have a monitor and cables which support both of these modes in order to use this option. A dialog box will request if you wish to switch modes.

Getting Info About The GateWay

The first item on the menu in gateWay 64, and the second item on the menu in gateWay 128, is gateWay info. This presents the name of the author and copyright message.

Accessing The Control Panel

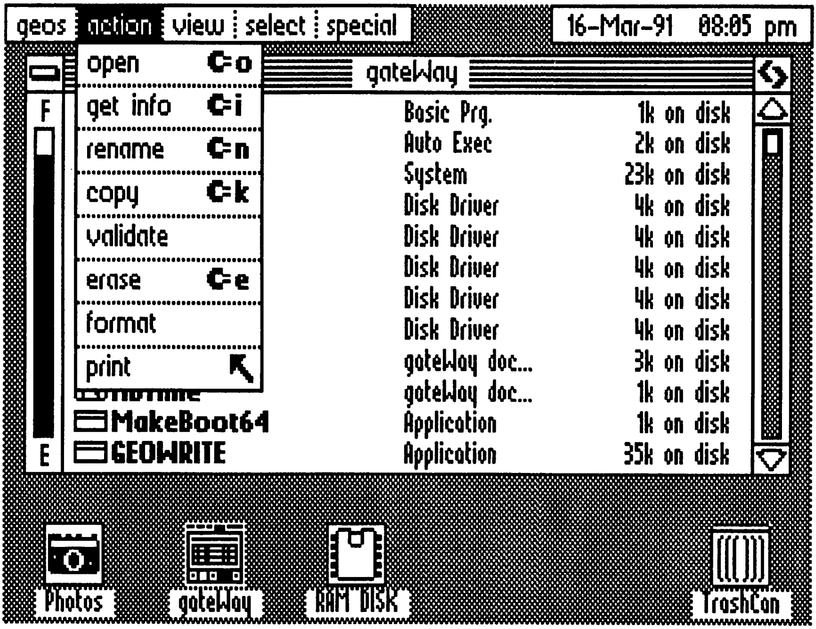
The control panel is a special gateWay document which contains the controls to allow you to configure the gateWay to your individual tastes. More information concerning the control panel can be found in a later section 'Configuring the gateWay'.

Selecting GateWay Documents

If you use the GWMover to integrate gateWay documents into a copy of the gateWay, those gateWay documents will show up below the control panel option on the geos menu. For more information concerning gateWay documents and integrating them into the gateWay, see the sections concerning gateWay documents and the GWMover.

The Action Menu

With the gateWay, a wide variety of actions can be performed on the files of a disk. Files and groups of files can be selected copied, renamed, rearranged and printed. Similarly, disks can be renamed, copied, erased and formatted.


geos
action
view
select
special
16-Mar-91 08:05 pm
open C=o
get info C=i
rename C=n
copy C=k
validate
erase C=e
format
print
gateWay
F
E
MakeBoot64
GEOWRITE
Photos
gateWay
RAM DISK
TrashCan

Basic Prg.	1k on disk
Auto Exec	2k on disk
System	23k on disk
Disk Driver	4k on disk
Disk Driver	4k on disk
Disk Driver	4k on disk
Disk Driver	4k on disk
Disk Driver	4k on disk
gateWay doc...	3k on disk
gateWay doc...	1k on disk
Application	1k on disk
Application	35k on disk

The Action Menu

Most of these actions are carried out through the action menu item. Unlike the disk/file menu mechanism of the deskTop, the action menu of the gateWay offers much the same utility through its duality. If a file is selected when an action is requested, the gateWay assumes that the file is the object of the action. However, if no file is selected, then the gateWay assumes that the disk itself is to be the object. For example, selecting action rename while a file is selected will rename the file. However, if no file is selected, the disk will be renamed.

Opening Files

To open a file, select the file you wish to open, pull down the action menu, and select open. You may also double click in the filename region of a file to open it. If a data file, the application will be sought out and launched as well.

It is important to note that the gateWay will generally autoswap applications launched from Drive C into either the Drive A or Drive B slot. There are, however, two occasions on which the gateWay will not do this. If a flag is set in the application's header, the gateWay will assume that the application can handle a three drive system. If a data file is launched from Drive A or B and its application is on Drive C, the application will not autoswap. The application will, internally, have access to Drive C, but will run from Drive A and B.

Certain files cannot, for various reasons, be opened from the gateWay. If you attempt to open such a file, a dialog box will open informing you of the problem.

The gateWay differs from the deskTop in that BASIC programs cannot be launched from the gateWay. If you wish to do this, select SHUTDOWN from the special menu. This will return you to your computer's native mode where you will be able to launch your program.

Getting Info about a File or Disk

The get info menu item under the action menu allows you access to information concerning a disk or a file. To gain information about a file or number of files first select them. Then either click on get info, or press C=i. At that point the info box will appear.

Note the file icon and its name to the right of that icon. The file icon doubles as a close icon. When you are finished viewing the information, click on the icon. At that point, either the next file in the queue will be displayed or, you will be returned to the filePad.

There is a short cut to viewing a file's info box. Click on the filetype icon to the left of the filename region. This will bring up the file info.

Selecting get info when you have not selected a filename will bring up the disk info. This will include the drive type, the size of the disk, the number of blocks free and used as well as the date the disk was formatted.

This will also display the disk's icon. Under the gateWay a disk's icon is user selectable. Simply select a file from the filePad. Then, from under the special menu, select set disk icon. The disk icon becomes that of the selected file.

Renaming Files or Disks

A filename can be altered or changed using the action rename menu item.

To rename a file:

- select the file or files
- select rename from the action menu
- a dialog box will then appear prompting you for a new filename. The new name must be unique and not more than 16 characters in length. Use the backspace key to delete the old file name.
- press the RETURN key
- if you should decide not to rename the file, click on CANCEL.

If you are renaming more than one file, the next file in the queue will then be presented.

Occasionally, it may be that after entering a new filename, the dialog box will reappear asking you to rename the file. This occurs because a file on the disk already has that name. Choose another name and continue.

To rename a disk:

- without a file selected, select rename from the action menu.
- a dialog box will then appear prompting you for a new disk name. The new name must be not more than 18 characters in length. Use the backspace key to delete the old file name.
- if you should decide not to rename the disk, click on cancel.

Copying Files or Disks

The methods for copying a file or files from one disk to another vary. Unlike the deskTop, you are able to immediately copy from and to Drive C without having to swap the drive in.

To copy a file from one disk to another:

- select the file by clicking on it. Pause then click again. The file icon will then become attached to the pointer. Simply move the pointer and icon over to the drive you wish to copy to and click again.
- at that point the copy process will begin immediately.
- a status box will appear indicating the name of the file being copied and the number of file yet to be copied.
- multiple files can be selected and copied to another disk in the same fashion.

- if the file exists at the destination, a dialog box will open informing you of that fact. At that moment you can choose to replace the file or CANCEL. In group select mode the next file in the queue is then copied.

To copy a disk to another disk:

- there is no true disk copy supported by the gateWay, however, to copy all the files from one disk to another, click on select all. This will select each file on the disk. Clicking on the filePad will then attach the multifile icon to the pointer. Move it to the destination disk and click again. The copy process will start immediately. As above, the copy status box will keep you informed as to which file is currently being copied and of the number of files remaining to be copied.
- that is the only method of copying files to or from Drive C.
- from Drive A or B, you can alternatively click on action copy with no files selected. This will automatically select all files on the disk and begin the copy process. It is important to note that Drive A will copy to Drive B, that Drive B will copy to Drive A.

Note: the copy menu item requires at least two drives. On one drive systems, the copy menu item is disabled.

Validating Disks

The validate option is used to make sure that the storage space for all files on the disk is properly allocated. It is generally wise to validate a new disk you have received to make sure that it contains no errors. You should also validate any disk which you have removed from a drive without first emptying the TrashCan - this will allow you to reclaim any blocks which may have been allocated to files which were placed in the trash, either through the erase feature or directly.

Erasing Files or Disks

A file or group of files is deleted by placing them in the trash can or by selecting the action erase menu item. Each file you place in the TrashCan remains there until you open a new disk, open a file, or validate the disk. Any of those actions will empty the trash.

To erase a file:

- select the file or files to be erased.
- drag the file icon or multifile icon to the TrashCan and click
- if you are erasing more than one file, a dialogue box will open to confirm your choice. Click on OKAY to continue

- alternatively, you may select the file(s) to be erased then select erase from the action menu. The file(s) will then be moved to the TrashCan.
- Note that the number of blocks free and used will not change until the TrashCan is emptied. This can be accomplished by opening another disk, or selecting empty trash from the special menu. Once the trash is emptied, the files cannot be recovered.

Undoing The Trash

Once there are files in the TrashCan, it can be opened like a regular disk. Simply click on the TrashCan and the files deposited there earlier will be displayed.

- to undelete a file simply double click in the filename region. The file will then be moved back into the filePad directory.

Erasing Disks

This feature is useful when you want to erase all the files on a disk. Erasing can be much faster than a multiple file delete, or formatting.

To erase a disk:

- open the disk whose contents you wish to erase.
- with no files selected, select erase from action erase
- a dialogue box will open confirming you attention to erase the disk. Click on OK to continue.
- after a short pause, the disk will be erased and the filePad reopened.

Formatting Disks

Before a disk can be used, it must be formatted. Note that formatting will destroy everything on the disk. For that reason, check a disk carefully before you format it.

To format a disk:

- select action format
- a dialog box will open asking you to insert a disk to be formatted and to enter a name for it.
- enter a disk name and hit return. Clicking on cancel will abort the action.
- alternatively, to format a 3.5 inch disk, open a unformatted 3.5 in disk.
- the gateWay will inform you that disk is unreadable and ask whether to format it
- enter a disk name as above, or click on cancel.

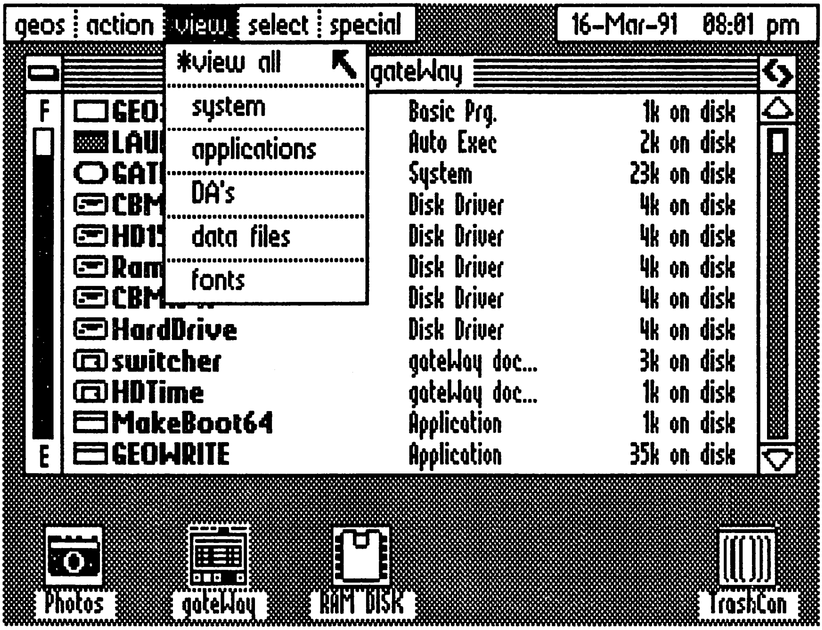
It is important to note that the gateWay will ask whether to format any seriously damaged disk it might find. Either click on OKAY or CANCEL to continue.

Printing Documents

Documents can be printed from the gateWay or from within the document's application. This assumes the correct printer driver is on the disk. Pulling down the action menu will confirm this. If the word print is not in italic, then the printer driver is present and the printing job can go ahead. In order to print the document, first select the file, then select action print.Printing will begin momentarily. The is no multiple file select for this action.

The View Menu

With the gateWay, you can choose which type of file you want to view. You can view by application, data file, font etc. This advantage makes file management easier by allowing you to perform actions on classes of files.



GEO	Basic Prg.	1k on disk
LAU	Auto Exec	2k on disk
GAT	System	23k on disk
CBM	Disk Driver	4k on disk
HD1	Disk Driver	4k on disk
Ram	Disk Driver	4k on disk
CBM	Disk Driver	4k on disk
HardDrive	Disk Driver	4k on disk
switcher	gateWay doc...	3k on disk
HDTime	gateWay doc...	1k on disk
MakeBoot64	Application	1k on disk
GEOWRITE	Application	35k on disk

The View Menu

To view only data files on a cluttered disk, select data files from the view menu. The only files then displayed on the filePad are data files. Any action now selected from the action menu will only be performed on those files.

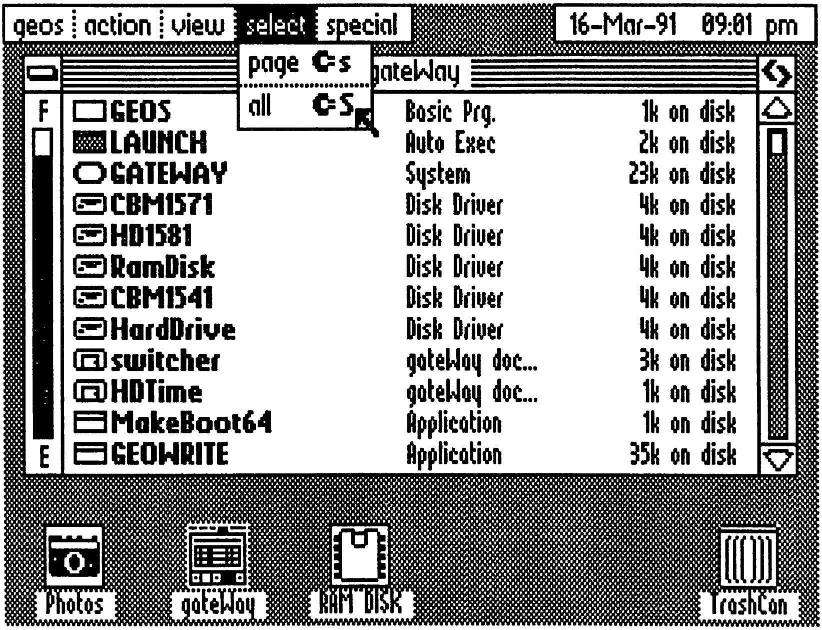
From the view menu you can choose to view by:

- view all: the default view mode - displays all files
- system: these are system files like the gateWay.
- applications: like geoWrite
- desk accessories: like the calculator
- data files: these are those files created by applications
- fonts

The gateWay "remembers" your view type from session to session. The view type can be confirmed by pulling down the view menu. The active view type is marked by an asterisk.

The Select Menu

This menu contains options which allow you to easily perform two standard multiple file selections. These selection methods can be used with many of the options contained on the action menu, and are also usable by some gateWay documents.



GEOS	Basic Prg.	1k on disk
LAUNCH	Auto Exec	2k on disk
GATEWAY	System	23k on disk
CBM1571	Disk Driver	4k on disk
HD1581	Disk Driver	4k on disk
RamDisk	Disk Driver	4k on disk
CBM1541	Disk Driver	4k on disk
HardDrive	Disk Driver	4k on disk
switcher	gateWay doc...	3k on disk
HDTime	gateWay doc...	1k on disk
MakeBoot64	Application	1k on disk
GEOWRITE	Application	35k on disk

The Select Menu

Selecting Page Files

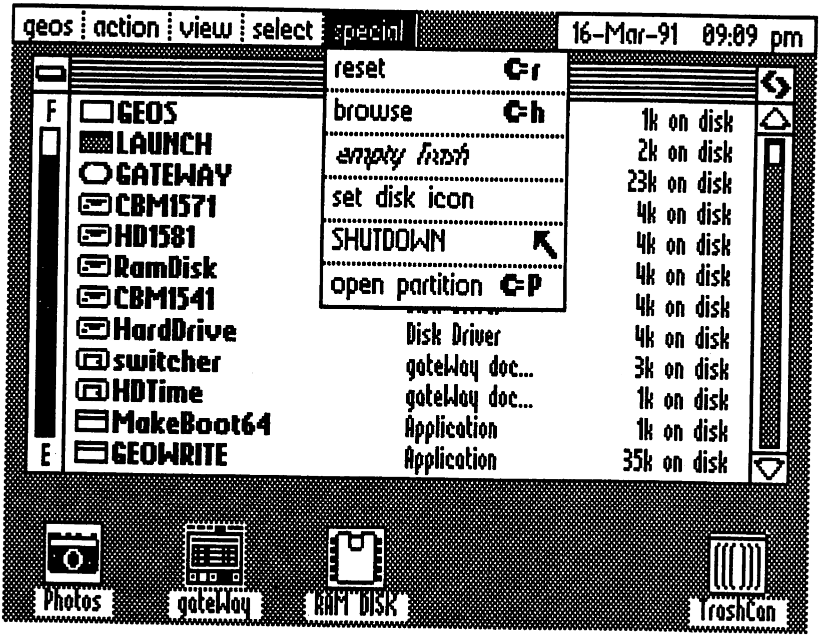
This option will allow you to select all of the files currently viewable in the displayed on the filePad. Only those files which can currently be seen on filePad will be selected.

Selecting All Files

This option allows you to select all files contained within the filePad's directory. If you you have a particular view mode established, only those files which match the view criteria are selected. Using this method makes it easy to copy all of your font files or desk accessories, etc., to another disk.

The Special Menu

The special menu contains a number of options which are unique to the gateWay. These features are part of what make gateWay special, and since most of them have little to do with performing an action on a selected item (the exception being the set disk icon option), this menu was created especially to help clarify the special nature of the options included on it.



geos
action
view
select
special
16-Mar-91 09:09 pm
reset C=r
browse C=h
empty trash
set disk icon
SHUTDOWN
open partition C=P
F
E
Photos
gateWay
RAM DISK
TrashCan

GEOS		1k on disk
LAUNCH		2k on disk
GATEWAY		23k on disk
CBM1571		4k on disk
HD1581		4k on disk
RamDisk		4k on disk
CBM1541		4k on disk
HardDrive	Disk Driver	4k on disk
switcher	gateWay doc...	3k on disk
HDTime	gateWay doc...	1k on disk
MakeBoot64	Application	1k on disk
GEOWRITE	Application	35k on disk

The Special Menu

Resetting the gateWay

This option reinitializes the gateWay, which causes it to reconfigure according to the parameters located in the current gateWay disk. This feature can be useful if you find yourself at the gateWay and one of your drives have disappeared, or if you have exited from an application to a disk which has no gateWay on it. Simply insert a disk with the gateWay on it into the current drive, and select this option.

Browsing for Files

The browse feature will allow you to search for the first filename on a disk which matches the pattern criteria entered into the browse dialog box. When you select this item, you will be presented with a dialog box requesting what you wish to browse for. You may enter either a specific filename, or you may use an asterisk at the of a string to find the first file that matches all of the characters before the asterisk.

Emptying the TrashCan

If you have placed files from the filePad into the TrashCan, and have not changed drives or disks since doing so, you can permanently delete these files from the TrashCan by selecting this option. This should always be done before removing a disk, to make sure that the blocks used by deleted files have been reclaimed. If you forget to do this before removing a disk, you should validate that disk when you wish to reclaim the unused blocks.

This option will be in italics if there is no trash in the TrashCan.

Changing a Disk's Icon

By using this option, you may assign any file's icon to a disk. This is a permanent change, and that disk will always appear with the icon you have assigned to it until you assign it a new icon with this option. To assign an icon to a disk, open the disk by clicking on it's icon, select a file icon to assign to the disk by clicking once in the filename region of the file which has the icon you wish to assign to the disk, pull down the special menu, and select the set disk icon option. After a couple of seconds, the new icon will appear where the drive icon used to be.

Shutting Down the System

Anytime you wish to turn off your computer after using the gateWay, or if you wish to exit from the gateWay to BASIC, you should use the SHUTDOWN option from the special menu. This will insure that the TrashCan for the currently active drive has been properly emptied, and will then exit to BASIC.

Opening Partitions on CMD Devices

Users of CMD's HD Series hard drive, RAMLink, or PPI's RAMDrive, can use this option to quickly switch from one partition to another with either CMD Native or 1581 Emulation Mode partitions. When this option is selected, a new filePad will open, showing the partitions available for selection. Only partitions of the type currently in use on that drive will be shown.

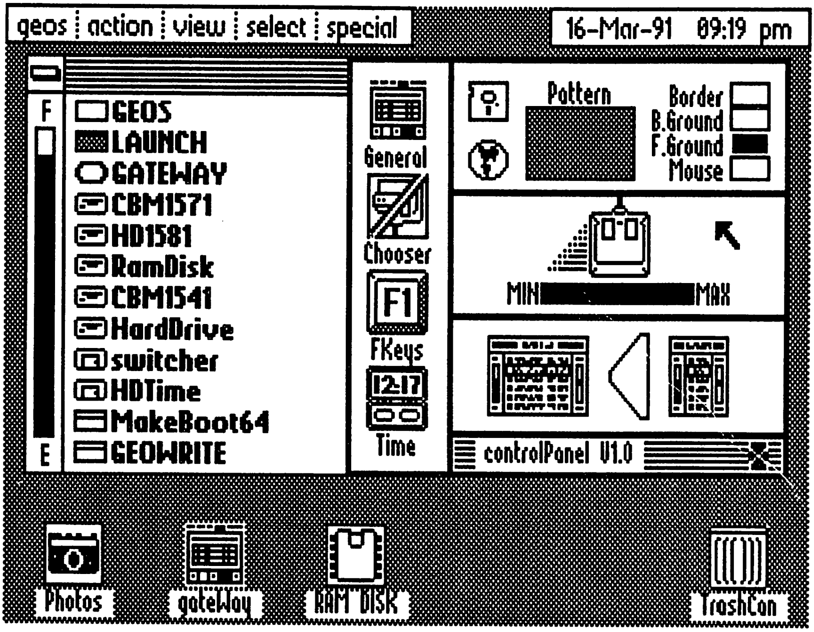
This means that if you are currently using a Native Mode disk driver (HardDrive or RLDrive), only Native Mode partitions will be shown, and if you are using a 1581 Emulation driver type (HD1581 or RL1581), then only 1581 Emulation partitions will be shown.

This option will be in italics if you are not using a supported device or driver at the time.

Section 4
gateWay Configuration

Configuring the gateWay

Configuring the gateWay is accomplished through the Control Panel. The Control Panel is available at all times under the geos menu item. Click on Control Panel. Immediately, on the right side of the screen, the Control Panel will appear. Please note that if you are using gateWay 128, the control panel can only be accessed in 40 column mode.


geos
action
view
select
special
16-Mar-91 09:19 pm
F
E
GEOS
LAUNCH
GATEWAY
CBM1571
HD1581
RamDisk
CBM1541
HardDrive
switcher
HDTime
MakeBoot64
GEOWRITE
General
Chooser
F1
FKeys
12:17
Time
Pattern
Border
B.Ground
F.Ground
Mouse
MIN
MAX
controlPanel V1.0
Photos
gateWay
RAM DISK
TrashCan

The Control Panel General Settings Area

The Control Panel is divide into two regions. To the left of the Control Panel and arrayed down its height are four icons which represent the configurable items. Each of those items can be thought of as a separate room or region. The first of these is the General controls area.

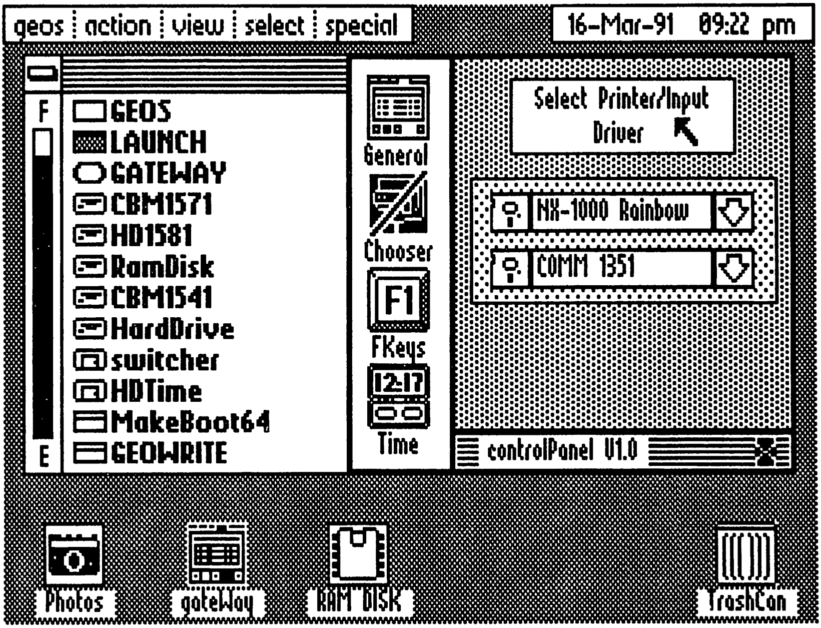
Immediately to the right of the icons is the display region. Clicking on each of the four icons will bring up a different set of options in the display

Altering the gateWay presentation settings

From General, you can change the gateWay pattern, as well as set the border, background, foreground and pointer colors. Changing the default mouse speed is as easy as clicking on the speed bar. Lastly, the default filePad size can be set by clicking on either the large or small pad.

- to change the pattern click on the pattern box. The pattern will change to reflect the next system pattern. The gateWay sports an additional, this is the gateWay pattern.
- to change any color set, click in the appropriate box, the color will be incremented to the next in the list.
- to save changes made while at the General screen, click on the disk icon. Your changes will then be effected when you exit the Control Panel.
- to reinstall the default colors, pad size and pattern, click on the system globe.

Below the General icon is the Chooser. Clicking on the icon will open the Chooser in the display region of the Control Panel. The Chooser will allow you to change the currently active printer drive or input driver.


geos
action
view
select
special
16-Mar-91 09:22 pm
F
E
GEOS
LAUNCH
GATEWAY
CBM1571
HD1581
RamDisk
CBM1541
HardDrive
switcher
HDTime
MakeBoot64
GEOWRITE
General
Chooser
F1
FKeys
12:17
Time
controlPanel V1.0
Photos
gateWay
RAM DISK
TrashCan

Select Printer/Input Driver

NX-1000 Rainbow

COMM 1351

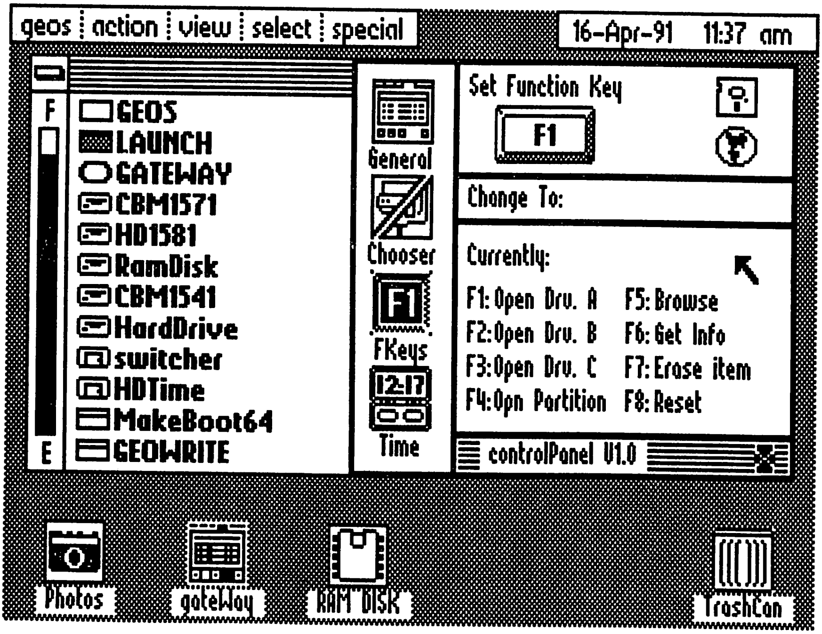
The Chooser

To change your printer driver:

- click on the down arrow, the next printer driver will appear.
- to select this printer driver, click on the disk icon. This will set the current printer driver to the one displayed.
- this change is only for the session. The next time you boot GEOS, the printer driver on you boot disk will be the active driver.
- to change your printer driver permanently, replace the printer driver on your boot disk with the new one.

To change your input driver:

- click on the down arrow, the next input driver will appear.
- to select this input driver driver, click on the disk icon. This will set the current input driver to the one displayed.
- this change is only for the session. The next time you boot GEOS, the input driver on you boot disk will be the active driver.
- to change your input driver permanently, replace the input driver on your boot disk with the new one.


geos
action
view
select
special
16-Apr-91 11:37 am
F
GEOS
LAUNCH
GATEWAY
CBM1571
HD1581
RamDisk
CBM1541
HardDrive
switcher
HDTime
MakeBoot64
GEOWRITE
E
General
Chooser
F1
FKeys
12:17
Time
Set Function Key
F1
Change To:
controlPanel V1.0
Photos
gateWay
RAM DISK
TrashCan

Currently:

F1:Open Drv. A
F2:Open Drv. B
F3:Open Drv. C
F4:Opn Partition
F5:Browse
F6:Get Info
F7:Erase item
F8:Reset

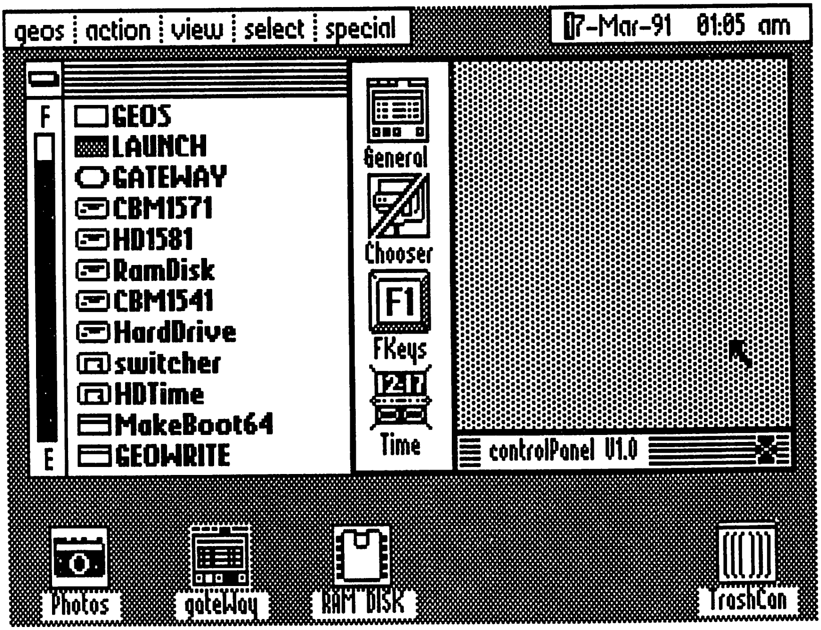
The FKey Definer

Below the Chooser, you will find FKeys. FKeys allows you to set the 8 functions to often used C= shortcuts. When first opened, FKeys displays the current function key settings. The first time you boot, these will be set to the defaults.

To alter a function key:

- press the function key you wish to modify. The displayed function key will change, reflecting your choice.
- press the C= shortcut sequence you wish the function key to have. The 'Change To:' information area will reflect the new assignment.
- to save your settings, click on the disk icon.
- to reassert the defaults at any time, click on the system globe.

Lastly, the Control Panel allows you to set the date and time. You will need to set the time and date each time you enter the GEOS. Fortunately, this is made easy by the gateWay.


geos
action
view
select
special
17-Mar-91 01:05 am
F
E
GEOS
LAUNCH
GATEWAY
CBM1571
HD1581
RamDisk
CBM1541
HardDrive
switcher
HDTime
MakeBoot64
GEOWRITE
General
Chooser
F1
FKeys
12:17
Time
controlPanel V1.0
Photos
gateWay
RAM DISK
TrashCan

The Time Setter

To set the time and date:

- select Time and a cursor will appear in the clock region of the gateWay.
- type in the current date and time.

- select Time and a cursor will appear in the clock region of the gateWay.
- type in the current date and time.
- press return when you are finished setting the time and date. The pointer will reappear and you will be able to exit the Control Panel or enter another region.

If you own a CMD HD, the time and date will be upload automatically from the Hard Drive each time you boot.

To exit the Control Panel, click on the close icon in the lower left hand corner. You will be taken back out the gateWay. For users with RAM expansion, feel free to copy the gateWay to your other disks. For those without, please read the section concerning the GWMover before you proceed.

gateWay Disk Drivers

The gateWay has taken a new approach to disk drives under GEOS. Under the deskTop, only 3 drive formats where supported: the 1541, 1571, and 1581, even the RAM Disk is a variation on one of these formats. Part of the reason for this was that drive support was built directly into the deskTop - the deskTop needed specific information about the disk devices it supported. Without this information, it is impossible for the deskTop to support the device.

This created problems, ironically, with RAM expansion. Users with 512K of RAM expansion find that only 331k is available as a RAM DISK. Now with the advent of 2 Meg REU's, of RAMDrive and RAMLink certainly, a larger capacity RAM device needs to be supported. Of course, we've done that.

Better RAM support is possible because the gateWay handles storage devices in a strictly legal fashion. Nothing is assumed known about the device, not the capacity of the device, the location of its BAM, the track and sector layout. Consequently, the gateWay deals with disk devices in two distinct fashions. The first of these is through the disk driver and GEOS kernal. actions such as renaming a file, deleting a file, or simply opening a disk can be handled in this fashion.

However, certain other device management functions are unavailable via these resources. For example, there is no format function available through GEOS. In order to accomplish this, the gateWay accesses the device directly.

Devices which do not support the Commodore DOS command group cannot be formatted or validated. In both of these cases, the DOS command is issued first, then the gateWay finishes. In the case of a format, the GEOS format string and off page directory is written out. With a validate, the header block and VLIR records are validated.

The gateWay handles drives without CONFIGURE. LAUNCH and a group of other programs have replaced it. This group of files are called disk drivers. Each disk driver supports a specific device - for example the CBM1541 driver supports the 1541. Whether you own a RAM expansion device or not, these files need only be on your boot disk.

In all, ten disk drivers are supplied with the gateWay:

• CBM1541	for the Commodore 1541 (165K)
• CBM1571	for the Commodore 1571 (331K)
• CBM1581	for the Commodore 1581 (790K)
• HardDrive	for CMD HD Native Mode partitions (up to 16 Mb)
• HD1581	for CMD HD 1581 partitions (790K)
• RLDrive	for RAMLink or RAMDrive Native Mode partitions (up to 16Mb)
• RL1581	for RAMLink or RAMDrive 1581 partitions (790K)
• RAMDisk	for Commodore 17xx series REU and GEORAM (up to 2 Mb)
• GRAMDisk	for GEORAM (up to 2 Mb)
• RAM41_71	supports the smaller capacity RAM 1541, RAM 1571 RAM devices

Note: All gateWay 128 versions of these drivers are identified by the suffix "_128".

Integrating Disk Drivers

Before the gateWay can access a storage device, it must first be mounted. This is generally achieved by double clicking on the disk driver, or alternatively, by highlighting the desired driver and selecting action open. If you want the device to mount on boot up, its disk driver must be one of the first three disk drivers on you boot disk.

If you have RAM expansion, the disk drivers are stored in the expansion RAM. If, however, you wish to use more than one drive, and do not have RAM expansion, it will be necessary for gateWay 64 owners to integrate your device drivers into the gateWay. This is done with the Integrator, an auto-exec file supplied with the gateWay.

Make sure that the Integrator is on your boot disk the first time you boot the gateWay, and that the drivers for the device types you wish to use are the first two drivers on your boot disk. Once the gateWay has started, the

Integrator will automatically integrates these device drivers directly into your gateWay. This copy of the gateWay then will need to be on every disk you intend to access. Later, if you change one of the drives on your system for one of a different format, change the order of the drivers on your boot disk, and the Integrator will sense the change, and reintegrate the proper drivers. As well, if at a later date, you purchase some form of RAM expansion, the Integrator will strip the drivers from the gateWay. Again, this will happen automatically - sensing the presence of RAM expansion, the Integrator will strip out any drivers it finds.

Note: If you have RAM expansion, you do not need the Integrator - in fact with the exception noted above, the Integrator will do nothing on RAM expanded systems other than return you to the gateWay.

Configuring RAM Expansion

Recognizing the new capacity RAM expansion alternatives, we have developed a new RAM DISK driver - one that takes full advantage of all RAM expansion that might be present. It formats out all expansion RAM as a RAM DISK. A 1750 REU for examples now offers a 384K RAM DISK. A special control panel allows the RAM DISK to be configured.

To configure the RAM DISK:

- opening RAMDisk or GRAMDisk, the control panel will appear.
- click on the A, B or C icon to install at that address
- clicking the down arrow will set the size of the RAM DISK, the size indicator wraps around when it reaches the lowest allowable size
- click on SAVE to remember the configuration.
- click either of the close icons to return to the gateWay.
- or click on format to install the drive.

The new RAM DISK driver offers a new feature - before the RAM DISK is mounted a check is performed to determine whether the device is formatted. If so, the device is not reformatted, and its contents are left intact. However, a format can be forced from the configuration window by clicking on format.

In all but the 1764 REU, two 64K banks of expansion memory are allocated to the system - one to GEOS. The other is allocated to the Switcher - the gateWay multitasker. The gateWay will only allocate the first 64K bank for GEOS on REU's with 256K

Also for those with only 256K (Commodore 1764) of RAM expansion, the RAM41_71 driver has been provided. This driver creates a RAM 1541 with a capacity of 166k. As well, because certain PD programs may be incompatible with the new RAM DISK driver, the RAM41_71 has been provided until such incompatibilities have been resolved. Unlike the RAM DISK driver, the RAM41_71 reformats every time it is mounted.

Hard Drive Support

Two drivers have been supplied to support the CMD HD Series hard drives - HD1581 and HardDrive. Both of these drivers take advantage of the CMD HD's built in clock to upload the time and date to GEOS. As well, on RAM expanded systems, it is possible to switch back and forth between these two drivers and partition types. Simply double click on the disk driver of the partition type you wish to enter. If later you wish to enter the other partition type - simply do the same.

RAMLink and RAMDrive Support

Two drivers have also been supplied to support the use of CMD's RAMLink and PPI's RAMDrive - RLDrive and RL1581. To configure your system for use with RAMLink or RAMDrive, see the section called System Considerations in Section 1.

gateWay Documents and GWMover

A new file type is supported by the gateWay. This is the gateWay document. These documents are unique in that they can only be run from the gateWay, and that they can take advantage of the gateWay's resources. In fact, although gateWay documents can be viewed as stand alone programs, they are really intended to be an integral part of the gateWay itself.

In order to keep the gateWay small, only those commands and actions that were considered vital, or difficult to support in another fashion were included. The result is that the most used actions are available but certain others are not - for example, the gateWay does not support creating folders (subdirectories) within Native Mode partitions on the CMD HD Hard Drive, RAMLink or RAMDrive. In most of our day-to-day dealings with the gateWay, this would not be a problem.

However, it must also be recognized that on occasion users of the devices mentioned above may desire the ability to create folders directly from within the gateWay. In order to accomplish this, the gateWay document was created. gateWay documents are gateWay extensions which, with the aid of the GWMover, can be integrated directly into the gateWay. Once a gateWay document has been integrated into the gateWay, it is available under the geos menu. If you were to pull down the menu, you would see at least one gateWay document - that is the Control Panel. However the Control Panel is unique - it is the only gateWay document that cannot be removed from the gateWay.

Six additional gateWay documents can be integrated into the gateWay. Of course, each time one is integrated into the gateWay, it grows larger - reflecting the addition of the document.

gateWay documents can be as simple or complex as the programmer desires. The Control Panel is an example of a complex document, so too is the switcher. HDTime on the other hand, or PeekScrap are relatively simple.

Some gateWay documents may use the resources of the gateWay itself. Some gateway documents, for example, may require you to highlight a file or group of files on the filePad before opening the gateWay document itself. The gateWay document then performs some action on that file or group.

Using GWMover

At the heart of the gateWay is the GWMover. With the GWMover, it is possible to move documents in and out of the gateWay. The GWMover itself is an application. To open the GWMover, simply double click on its filename, or alternatively, highlight its filename and select the open option from the action menu. When the GWMover opens, it is in copy mode. In this mode, gateWay documents can be integrated into the gateWay.

The left hand side of the GWMover window is occupied by the select window. If there are any gateWay documents either on the disk, or already integrated into the current gateWay, these documents will appear in this area. Clicking on a document's name will select it. Up to twelve document names can be viewed at a time. A slider mechanism allows access to other documents if there are more than twelve. Below the file select window is the drive button. Clicking the button will move you to the next drive. On single drive systems, inserting a new disk and clicking the drive button will open the new disk.

In copy mode, two additional buttons on the righthand side of the window control the actions of the GWMover. Copy causes a selected document to be integrated into the gateWay.

Open will open the gateWay on the current disk. Clicking this button will move you into open mode. Once in open mode, two buttons control the action. Delete will remove the selected gateWay document from the gateWay. Close will return you to copy mode.

Quit will return you to the gateWay.

To add a document to the gateWay:

- open the GWMover. When the GWMover opens, you will be in copy mode.
- select the gateWay document you wish to add by clicking on its filename. The filename will become inverted.

- click on copy. Your drive will whir a few moments as the document is integrated into the gateWay.
- the filename is now missing from the select window, reflecting its addition to the gateWay.
- you can confirm its addition to the gateWay by clicking on open. The document will appear in the file select window

It's important to note that the actual document, not a copy of the document, is integrated into the gateWay. For this reason, always use a copy of the gateWay document. Once a document has be integrated, it cannot be restored, it can only be deleted.

Up to six documents can be integrated into the gateWay. If, after attempting to copy a document into the gateWay, it still appears in the select window, then the copy process has failed. There are two reason for this. First, the gateWay may be full. Check this by going into open mode and counting the number of documents. If there are six, the gateWay is full and further documents cannot be added until others have been deleted.

Second, the disk may be write-protected. If this is the case, remove the write protect tab, and try again.

When there are no documents to copy into the gateWay, the copy button will be ghosted. If there is not a gateWay on the current disk, the open button will be ghosted.

To remove a document from the gateWay:

- open the GWMover. You will be in copy mode, so click on the open button. This will place you in open mode.
- the integrated gateWay documents will appear in the select window. Click on the file you wish to delete and click on the delete button.
- the drive will whir a moment while the document is removed and the disk is updated. When the window reinitializes the file will be gone.
- if there are no further gateWay documents, the delete icon will be ghosted. Click on close to return to copy mode.
- otherwise, repeat the above procedure to delete further documents.
- Clicking on quit will return you to the gateWay.

It is important to understand that when a document is removed from the gateWay, it is deleted from the disk and is not restored. For that reason, we stress the importance of backing up all gateWay documents before integrating them into the gateWay.

Section 5
Task Switching

Using switcher

Switcher is our answer to multitasking under GEOS. Although not true multitasking, switcher allows quick and convenient switching between two separate applications. When access to either task is desired the task can be simply switched in.

Switcher requires 64k of expansion memory, and consequently, will only install itself on systems with at least 512k of expansion memory. On systems with less than 512k, switcher is unavailable.

In order to activate switcher, switcher must be on your boot disk. As LAUNCH executes it will seek out switcher. If switcher is found, it will be loaded and told to initialize itself. It is only at this time that switcher can completely initialize itself. The switcher cannot be installed after boot up.

When the gateWay comes up, a switch can be effected at any time by holding down the Commodore key, and while it is depressed, pressing the RESTORE key. We call this the option/RESTORE sequence. The first time this is done, nothing will seem to happen, perhaps you may notice the pointer flicker. However, what has happened is that the switcher has stashed away the first context in the REU.

On subsequent uses of the option/RESTORE sequence, the current environment is swapped with the one stored away in the REU. It is now possible to run geoPaint in one context, geoWrite in the other, and be swapping paint scraps easily into your geoWrite document. Or for that matter, geoPublish - the combination of applications or DA's running is limited only by your resources.

If you ever need to check on the status of switcher, simply open it by double clicking on its name. Shortly, the switcher STATUS box will appear. The STATUS box offers you three pieces of information, the amount of RAM expansion, DMA status, and whether switcher is currently active.

For GEORAM, RAMLink and RAMDrive systems DMA status will always be off, and has no effect on how the RAM expansion is utilized by the system. However for those systems with a Commodore REU, DMA status reflects whether the high speed direct memory access option is enabled. Most often, you will want this to be on - especially when dealing with geoPaint. However, it should be noted that only one context should have DMA enabled. Should both have this option enabled, there is the possibility that data could be lost while temporarily stashed to the REU.

The STATUS box will always show switcher as inactive until the option key sequence is pressed the first time. From that point on switcher is active - pressing the option key sequence will effect a switch.

Three buttons across the bottom of the STATUS box offer some measure of control over switcher. The first of these, install, will return switcher to the inactive state. These may be desirable after swapping drives or mounting another disk driver. Because switcher does not manage disk drivers, it would be necessary to reinitialize switcher at that point.

The middle button controls the DMA option. Only on REU systems will this button effect the system. The final button, kill, does just that - it kills the switcher - switcher will not be available until the system is again booted.

There is only on situation under which the switcher is not available, this is when the NMI vector has been repointed by another program - to my knowledge there are only two that do this. The first is geoDebugger, the other is geoTerm. Both programs utilize the NMI vector to their own ends, and in both cases the NMI, and with it Switcher, is restored on exit.

Let's take a look at a sample session using switcher:

- boot the gateWay system with switcher present on your boot disk - this will install switcher.
- with the gateWay, create a work disk with both geoWrite and geoPaint and a geoPaint and geoWrite document if you have one.
- perform the option/RESTORE sequence (hold down the Commodore key and press RESTORE) for the first time - the pointer may flicker a moment - but that is all.
- open geoWrite by double clicking on its file name. Once geoWrite has opened, either go on to open an existing document or create a new one.
- once you document has opened, perform the option/RESTORE once again - you will be back at the gateWay.
- use the option/RESTORE sequence once again and you will be back in geoWrite.
- press the option/RESTORE sequence to return to the gateWay and launch geoPaint. Once geoPaint has opened, either go on to open an existing document or create a new one.
- using the Edit tool, select a region to copy. Click on the edit copy menu thereby creating a photo scrap.

- using the option/RESTORE sequence will bring in geoWrite - pressing the Commodore key and the 'W' will paste the photo scrap just cut into the geoWrite document.
- another option/RESTORE sequence will bring back geoPaint where the sequence of events can be repeated to paste another scrap into geoWrite.

The above technique can also be used to paste multiple scraps into geoPublish. And for programmers a variation on the above technique might prove useful. Much of the gateWay's Control Panel was first designed in geoPaint. Once this was completed, certain graphic elements were easily pasted into a geoWrite document for assembly. The rest of the Control Panel was carefully measured for graphic strings by switching back and forth between geoPaint and the geoWrite document where the measurements were inserted. A usually time consuming, paper and pencil task, was completed in very little time.

It is important to note that switcher manipulates the GEOS environment in ways not intended by Berkeley Softworks - GEOS is not a multitasking kernal and has no provisions for being utilized as such. Consequently, there are some things to be aware of while using the switcher.

Switcher will handle (and handle well) two Desk Accessories being open at the same time. This is possible because each context has a unique name for its swap file. However, both the deskTop and the gateWay will delete a swap file if one is encountered when opening a new disk. So, the warning - don't open or reopen a disk while the alternate context has saved its swap file there. On returning to the alternate context and closing out of the DA, the system will crash.

For similar reasons, don't delete the file you're working on in the other context. Applications don't like to discover that their documents have disappeared!

Never work on the same document in both contexts - the results are unpredictable and generally not fun.

If you've made any changes in a document, try to update before you switch. Most applications will offer you this option. This way, should you be unable to make it back to a previous context, nothing is lost.

Switcher has only two error messages. The first is a requestor asking that disk such and such be placed in drive whatever. This occurs because the disk currently in the drive are not those in the drive when the switch was made. Insert the correct disks and press Commodore key. If it is not necessary to replace the disk in the drive (i.e. that drive wasn't being used), then press the RUN/STOP key.

The second error message might be considered fatal: drive order cannot be restored. This error message occurs for one of two reasons: either drive order has been swapped or, a new drive type has been mounted. In either case, the switch will not be effected. Press the Commodore key to return to your current context. To get back to your swapped context, either correct the drive order, or remount the correct drivers and attempt to switch.

Section 6

Advanced Topics & Information

Making Additional Boot Disks

To make additional boot disks, simply copy all of the files from the first boot disk you made onto another formatted disk. If this disk is of a different type, you may wish to place disk drivers in a different order than they were on your original boot disk.

You may wish to make a separate boot disk if you often use a different type of input device - remember that the input device driver located first on the boot disk will determine which input driver must be used with that disk, unless you enter the control panel and change the selected input driver. To make this change, you must use the input device associated with the currently active input device driver.

Booting From CMD Devices

If you own a CMD HD Series hard drive, RAMLink, or PPI RAMDrive, you may set up your gateWay to boot from these devices. You must first select a partition on one of these devices to boot from. Then copy all of the files from the boot disk you made (in Section 2) to this partition. If you are using a CMD HD hard drive, double click on the appropriate driver for the type of partition you are using to make sure that that driver is resident (this is necessary because of differences between the original CMD HD drivers and the ones used in the gateWay). Now, make sure you the device you wish to boot from is the currently selected device, and double-click on MakeBoot. When MakeBoot is finished, you will have a bootable version of gateWay on your device.

CMD HD owners who also own RAMLink please note that before booting the gateWay from the HD, you must disable the parallel by using the '@P0' command. If you do not, the gateWay will lockup during the boot process.

Optimizing the gateWay

If after a while, you notice that the gateWay takes longer to open than it earlier did, or, that some disks take an especially long time to open under the gateWay, there maybe a few reasons for this and something you might be able to do about it.

First you need to know that on every disk used under the gateWay, there is an additional file. This is the gateWay file - in it is stored such information as the disk icon, the view mode, the size of filePad, the status of the trash can, etc. The gateWay file, called .info_gw, is generally invisible and cannot be viewed from the gateWay.

On disks formatted under the gateWay, the info file is always placed as the ninth file entry. However on crowded disks, it is possible the gateWay file could be placed at the end of an already long directory. Consequently, when a disk is opened, the directory must be searched to locate .info_gw - the further from the start of the directory the file is placed, the longer the search will take.

If such is the case, the only way to solve the problem is to format a new disk under the gateWay and copy the files from the offending disk over to the new disk.

Its worth noting that this problem will be especially evident on crowded 1541's. Generally, forcing .info_gw to the ninth entry will show an improvement. Just how much depends on how far down the list the file was.

To further improve the speed of the gateWay, narrow the view mode to only those files you want to see. This will speed the up the directory routines - because they don't have to load in every file.

Finally, to improve the speed of the gateWay, place the gateWay itself toward the top of each directory. Every time a disk is opened, a gateWay is sought out. If one is found, the gateWay document list is pulled from the gateWay and used to develop the geos menu listing. The color preferences for that disk are also determined at that time as are the function key settings.

Technical Info on gateWay Documents

Simple or complex, all gateWay documents share certain traits - they all load in at address $6000. Each gateWay document starts with a vector pointing to its intialization routine. Following the vector, is the NULL terminated name of the document. The name can be up to 16 characters long. Once the document has been integrated into the gateWay, it is this name that appears under the geos menu. Typically to avoid confusion, this name will be the same as the filename.

The gateWay starts with a jump table holding 20 or more calls. Utilizing this Jump Table, gateWay documents have access to an additional system font, to routines for fetching directories, and opening devices for access etc.

gateWay Shortcuts

Open File	C= O
Close Disk	C= C
Get Info	C= I
Rename	C= N
Copy	C= K
Erase	C= E
Select Page	C= S
Select All	C= SHIFT S
Reset	C= R
Browse	C= H
Open Partition	C= P

Page Up	CRSR LEFT
Page Down	CRSR RT
Scroll Up One Item	CRSR UP
Scroll Down One Item	CRSR DN

Open Drive A	C= A
Open Drive B	C= B
Open Drive C	C= C
Swap Drive A with C	C= SHIFT A
Swap Drive B with C	C= SHIFT B

Task Switch	C= RESTORE

2
1. Change HD to 9
2. Change RL to 10
3. Change Autofile editor — HD-9
4. Change 1581 to 9

1
Boot writing
Format disk on 1581
Copy files to 1581 DISK

Creative Micro Designs, Inc.
PO Box 646
East Longmeadow, MA 01028
(413) 525-0023

GW-300002
04/91
Printed in U.S.A.