geoTips

Issue #1 (ECCC 2013 edition) | Yesterday's Desktop... Today! | Editor: ShadowM | Administrative Assistant: Wizard

What Is GEOS?

GEOS is a full-fledged operating system for the Commodore 64 with many of the same features we take for granted in modern operating systems:

- proportional fonts
- drop-down menus
- dialog boxes
- drag and drop
- multi-threading
- permanent file names
- undelete

If you're ready to enter the world of GEOS, read on!

Setting Up GEOS

- GEOS 2.0 uses only drives 8, 9, and 10 (A, B, and C)
- only drives A and B are active, but you can swap one of them with drive C
- drive 11 is reserved for doing the swap, so don't have a drive at that address
- boot GEOS from the same configuration you last saved

It's all about Fast Disk

You can run GEOS on a stock '64 with a single 1541 drive, but you'll be disappointed. And you'll never know what a Commodore 64 running GEOS can *really* do. What you want is more than one drive, with at least one of them being a high-speed device.

Why Fast Disk Drives Matter

Surprisingly, GEOS it not as CPU-bound as it is I/O-bound. The reason is that because of the tiny amount of memory on a '64, GEOS is constantly loading little bits of code and data from disk. Switch to a different page of a geoWrite document: a disk access. Copy and paste: a disk access. Switch drawing tools in geoPaint: a disk access. GEOS is designed to make up for limited memory by swapping from disk.

So the best thing you can do for GEOS is to give it fast disk. years ago, the preferred solution was a CMD hard drive, but those drives have passed into the realm of the collectors. The good news is that the popular uIEC device is now usable with GEOS. The easiest way to use it is with D81 images, and there's an app for switching between them on the fly. Since many Commodore users own a uIEC, the world of GEOS is now open to most anyone.

The fastest "disk" of all is a RAMdisk. If you get an REU and set it up as a RAM disk, the difference will be like night and day. The downside is that you have to copy programs and data to and from the REU for each work session (although there's an app for that, too). Of course, REUs are not as easy to come by as they used to be, either.

But there are other reasons to have an REU as well. Without one, if you're using more than one type of disk drive, you need a copy of CONFIGURE on every disk. That's because CONFIGURE is where the disk drivers are loaded from, and only one of them is in memory at a time. But if you have an REU, GEOS reserves one bank for itself and caches the disk drivers there. In fact, the entire operating system is cached there for quick reloading if you need to drop back to BASIC. Just type SYS49152 or run RBOOT, and the system comes right back up.

GEOS Application Tips

geoWrite:

- Create a draft copy in BSW9 font with margins set so everything fits on the screen; add fonts and margins later when you are ready to print or preview.
- Use preview mode to get an idea of your document's page layout.
- Start a big insert on its own line to minimize screen redraws.
- Swipe with the mouse to select; double-click a word to select it.
- Use the little box in the page indicator to move around a document quickly without screen redraws.
- If you have a lot of fonts on your disk, they won't all appear in the menu. Use the FontSwap DA to change which eight will be visible.
- If you're writing code for geoAssembler, use a footer with the page number; it makes finding assembly errors easier.

GEOS

or GTFO

geoPaint:

- Remember that you can only cut and paste on card boundaries (8 x 8 pixels).
- Preview mode is very effective in this app, too; it's the only way you can see the whole document at once.
- Use pixel edit mode for fine-tuning your graphics.

geoPublish:

- Learn what the various modes are for: master pages, page layout, page graphics.
- Make sure you know what all the icons in the toolboxes do before you click them! There are diagrams in the manual.

Keyboard Shortcuts

common GEOS keyboard shortcuts

GEOS has a lot of keyboard shortcuts to make life easier. Here are some of the more common ones:

the deskTop

C=A, C=B: open drive A or B
C= shift A/B: swap drive A or B with C
cursor down/up: next/previous page
1..9: go directly to deskTop page
shift 1..8: as above, pages 11-18
C=Q: show file's info block
C=H: duplicate a file
C=M: rename a file

geoWrite

C=S: search
C=+: next page
C=backarrow: previous page
C=C: copy
C=T: paste text
C=W: paste graphics
C=V: select entire page
C=L: page break