



# Introduction to GEOS

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## What I'll Cover

- "classic" GEOS 2.0
- brief description of what GEOS is
- how to install and configure GEOS
- tour of the major GEOS applications

## What I Won't Cover

- GEOS programming (another day...)
- GEOS 128 (never owned one)
- alternate versions (Wheels, MegaPatch...)



# What is GEOS?

GEOS is *an operating system* (not a shell), with

- proportional fonts
- drop-down menus
- clickable icons
- double-buffered graphics
- cooperative multi-threading
- uses ASCII, not PETSCII



## GEOS is for Power Users!

- using only a 1541: you get what you deserve!
- what you need is fast disk and an REU
- GEOS is not as much CPU-bound as I/O-bound
- for most use cases, an accelerator is overkill



## What Causes Disk Access?

- font changes
- program overlays
- VLIR documents
- cut and paste
- desk accessories

*in other words, almost everything...*



# What Can I Use for "Fast Disk"?

- RAM disk in REU (up to the size of a 1581)
  - fastest option, but must copy back to real disk
- CMD hard drive
  - emu. partitions only, switch partitions on the fly
  - make sure to use CONFIGURE 2.1
- $\mu$ IEC (D81 images)
  - use uIecSwitcher to change D81 images on the fly



# Why Do I Need an REU?

- disk drivers cached for multiple device types
  - otherwise you need CONFIGURE on every disk
- DMA for MoveData
  - speeds up the MoveData API (no overlap check)
- system is cached there
  - fast reboot from BASIC
- for GEOS programming
  - geoDebugger is almost useless without an REU

# Installing GEOS

- original viciously copy-protected and keyed
- best to boot from a cracked copy
- can take a snapshot of a running system
- *start* with a single drive on device #8
- make sure everything works before going on
- run CONFIGURE to set up your drives
- *Learn the basics first!*



# Configuring GEOS

- configure up to three drives (A, B and C)
- don't have anything set to device #11
- with no REU, put CONFIGURE on every disk
- always have to have a copy of the deskTop
- SYS49152 is your friend



# The GEOS file system

- uses standard C= low-level format
- but GEOS uses additional metadata
- file structure is different (VLIR)
- OK to put non-GEOS files on a GEOS disk...
- but *never validate a GEOS disk from BASIC!*

# DEMO

- tour of the major GEOS applications
- other available GEOS software
- <http://www.lyonlabs.org/commodore/geos.html>
- ##geos channel on irc.freenode.net
- "Commodore GEOS" Google group
- lots of good articles in Commodore World