

TIME ZONE

ANNA YVARCH
L'AVVENTURA DI UN'AVVENTURA
CON
LE AVVENTURE
DELLA SCIENZA
E DELLA
TECNOLOGIA



ON-LINE

HOW I HACKED TIME_ZONE
TO USE 14 DRIVES

SO WHAT IS SO BETTER
ABOUT IT ALREADY

- 14 drives: no swaps
- 12 drives: one initial swap
- 2 drives: no save disk swaps
- Save disk can now be a standard .DSK rather than a .NIB

THE GOALS

- figure out how many drives are in the system
- display instructions on where to load each disk
- set correct slot and drive before RWT5 gets called
- make TZ use save disk volume 254 rather than 252
- suppress unneeded disk swap prompts

THE STEPS, BROADLY SPEAKING

- identify TZ's disk structure as DOS 3.3 without files or interpreter, and volume numbers to check for correct disk insertion
- create an "extension" in unused memory to specify slot and drive before calling RWTs, and provide onscreen disk loading instructions
- figure out how to install that extension during game load
- redirect TZ's RWTs calls to the extension

TOOLS USED

- Virtual II
 - 14-drive virtual Apple II (original integer basic ROM)
 - Copy II Plus 5.5 in separate virtual A2
 - debugger
- my own modification of HexEdit optimized for editing Apple II disk images

THE METHOD

- use Virtual II debugger to look for calls to RMTS
- reset into system monitor during game execution to look around and to try bits of new code
- once I had decided on new code, make it permanent by replacing old code using sector editor in C2P, or HexEdit
- load our extension at \$1600 during boot, then relocate to \$300
- execute init portion of code which checks for number of slots, and modifies extension code accordingly

THE RESULT

- Still haven't finished it...