Essence of the Hack

A near-random set of notes which may be of some use to you when thinking about writing a hack… Brought to you by Scott Boyd and Greg Marriott at MacHack 92.

Material to spark conversation and questions with and from the audience.

Why?
- Home improvement
- Something new
- Fun
    - the surprise
    - the enriched experience
        - visual excitement
        - sonic excitement

How
- Patching traps
- Hooking into vectors
    - jGNEFilter
    - jCheckLoad
- Resource imposition
- Slamming code or data

How to win a hack contest

Parenthood — how to let go

Don'ts

Hacks of the past — Siskel and Egbert's Top Ten or So…

- Façade
    - Can you really patch CopyBits without sacrificing the performance of the machine?
    - Yes, if…
        - Bail out as soon as possible if this isn't your turn
            - check CurApName
            - check the most convincing parameters
                - source rect, dest rect
            - find other ways to know when to bail out by getting to know the specific situation you are patching.
                - can you count on what's on the stack?
                - can you patch some other trap that gets called only when you need to trigger?
        - Use good algorithms
            - If you're going to do something silly like test for icon equivalence, do something cool like sorting the icons first, then do a binary search.
            - Find a fast way to reject an icon as a match.
- ColorFinder
- FinderKeys
- ColorDesk
    - if it's not fast, it's not worth doing
- NetBunny
    - crashability takes the fun out of leaving a hack on someone else's machine (or your own, for that matter)
- Oscar
    - it seemed so obvious, why didn't someone do it earlier?
- Oscar the Grouch
    - painful lesson number two
        - if it's cute and little kids like it, make sure that it doesn 't involve throwing things in the trash.
- MountImage

- FinderPict
- Bully
- SuperClock
    - Don't do more work than you have to. Drawing every time through works fine, but it isn't necessary. It draws once a second whether seconds are showing or not.
    - Patch the extra stuff if it avoids the unpleasant or unexpected disappearance of your enhancement. SuperClock patches DrawMenuBar and makes sure that it stays around.
    - You might not even notice the problem unless you turned off seconds display and did your drawing only once a minute, but then you'd notice entire minutes without the clock showing.
- CommanderTabs
    - it's always a good clue when someone tells you it can't be done.

More Disk Space
- Do not use facilities of the machine which Apple has not published.
- Do not put your customers at risk of unpleasantness.

AshTray
- a cool hack can be written overnight

Boomerang

VideoBeep

DoubleTrouble
- we need more hacks that help us understand better what our machines are doing
- they help us write better, longer-lasting code
- why write it if it ain't gonna last?

DisposeResource

Switcharoo

Dimmer

AfterDark
- how many bad things can we say about this? maybe we can get Tom Dowdy incited!

NoComment

MobalDialog

StandardGetFiles

How many ways can you do the same hack?
- Darin's rule: A good programmer can always think of at least three different ways to do a hack.
- Scott's corollary: A good programmer always thinks of at least three different ways to do a hack.

Do's
- Check your error codes
- Remember that there is more than one model of machine out there
    - Color vs. B/W
    - Monitors
    - Big screens vs. little screens
    - Machines with horsepower and those without
    - These differences can be both opportunities and limitations

Dues
- Hacks are one way to pay your dues

Style
- Hack and slash
- Finesse
- Perfection
- Pure pragmatism

SIG(H)ack!

SIC(lub)Hack

Packaging
- Number of files
- User configurability

Hack Classification
- Cool stuff that should have been in the system to begin with
    - RearWindow
    - OK, OK, OK
- The existence proof
- Neat toys that get annoying after five minutes
    - OK, OK, OK
- Bug fixes for other people's boneheaded software
- Stuff that you like
- Stuff that you use
- The hack that became system software