

EXHIBIT 8

Hack (technology)

From Wikipedia, the free encyclopedia

Hacking (English verb **to hack**, singular noun **a hack**) refers to the re-configuring or re-programming of a system to function in ways not facilitated by the owner, administrator, or designer. The term(s) have several related meanings in the technology and computer science fields, wherein a "hack" may refer to a clever or quick fix to a computer program problem, or to what may be perceived to be a clumsy or inelegant (but usually relatively quick) solution to a problem, such as a "kludge".

The terms "hack" and "hacking" are also used to refer to a modification of a program or device to give the user access to features that were otherwise unavailable, such as by circuit bending. It is from this usage that the term "hacking" is often used to refer to more nefarious criminal uses such as identity theft, credit card fraud or other actions categorized as computer crime.

Contents

- 1 Origin of term
- 2 History
- 3 See also
- 4 References
- 5 External links

Origin of term

The term was used pejoratively by mathematician John Nash. When he became a C.L.E Moore Instructor at Massachusetts Institute of Technology (MIT) in 1951, he brought this term with him.^[1]

The term achieved widespread use in the 1960s and its meaning then evolved to a quick, elaborate and/or bodged solution students devised for a technical obstacle; it was used with *hacker*, meaning one who discovers and implements a hack. The Jargon File, a glossary of slang from technical cultures at the MIT AI Lab, the Stanford AI Lab, Bolt, Beranek and Newman, Carnegie Mellon University, Worcester Polytechnic Institute, and others gave the tongue-in-cheek derivation "German word meaning 'someone who makes furniture with an axe'". This derivation was carried through when the Jargon File was eventually published as "The Hacker's Dictionary" in 1983 and later republished as "The New Hacker's Dictionary". However any student of German will know that the German word 'Hacker' (literal translation: "someone who chops") has nothing to do with making furniture, and that the derivation was intended as a wise-crack.

See: MIT hacks

Over time, the meaning of the word there was expanded, perhaps through contact with the amateur radio community. It came to mean either a kludge, or the opposite of a kludge, as in a clever or elegant solution to a difficult problem. In the term "hack value" it also acquired a meaning of anything that was simultaneously fun and clever.

The initial hacker community at MIT, particularly those associated with the Tech Model Railroad Club, applied this pre-existing local slang to computer programming, producing the variant which first came into common use outside MIT.

History

The term "hack" was first used by US university computing centre staff in the mid-1960s. The context determined whether the complimentary or derogatory meanings were implied. Phrases such as "ugly hack" or "quick hack" generally referred to the latter meaning; phrases such as "cool hack" or "neat hack", to the former. In modern computer programming, a "hack" can refer to a solution or method which functions correctly but which is "ugly" in its concept, which works outside the accepted structures and norms of the environment, or which is not easily extendable or maintainable (see kludge). The programmer keeps beating on it until a solution is found. The jargon used by hackers is called "Hackish" (see the Jargon file). This should not be confused with "1337" or "leetspeak."

In a similar vein, a "hack" may refer to works outside of computer programming. For example, a math hack means a clever solution to a mathematical problem. The GNU General Public License has been described as a copyright hack because it cleverly uses the copyright laws for a purpose the lawmakers did not foresee. All of these uses now also seem to be spreading beyond MIT as well.

On many internet websites and in everyday language the word "hack" can be slang for "copy", "imitation" or "rip-off."

The term has since acquired an additional and now more common meaning, since approximately the 1980s; this more modern definition was initially associated with crackers. This growing use of the term "hack" is to refer to a program that (sometimes illegally) modifies another program, often a computer game, giving the user access to features otherwise inaccessible to them. As an example of this use, for Palm OS users (until the 4th iteration of this operating system), a "hack" refers to an extension of the operating system which provides additional functionality. The general media also uses this term to describe the act of illegally breaking into a computer, but this meaning is disputed.

The term is additionally used by electronics hobbyists to refer to simple modifications to electronic hardware such as a graphing calculators, video game consoles, electronic musical keyboards or other device (see CueCat for a notorious example) to expose or add functionality to a device that was unintended for use by end users by the company who created it. A number of techno musicians have modified 1980s-era Casio SK-1 sampling keyboards to create unusual sounds by doing circuit bending: connecting wires to different leads of the integrated circuit chips. The results of these DIY experiments range from opening up previously inaccessible features that were part of the chip design to producing the strange, dis-harmonic digital tones that became part of the techno music style. Companies take different attitudes towards such practices, ranging from open acceptance (such as Texas Instruments for its graphing calculators and Lego for its Lego Mindstorms robotics gear) to outright hostility (such as Microsoft's attempts to lock out Xbox hackers or the DRM routines on Blu-ray Disc players designed to sabotage compromised players).



A DIY musician probes the circuit board of a synthesizer for "bends" using a jeweler's screwdriver and alligator clips

See also

- Hack value
- Hacker

- HAKMEM
- Haxie and Extension (Mac OS)
- History of "hacker"
- Kludge
- MIT hack

References

1. ^ A Beautiful Mind, by Sylvia Nasar. Simon & Schuster, Touchstone Edition, published in 2001. Pages 141, 142, 156

External links

- MIT gallery of hacks
- How to Become a Hacker by Eric Raymond
- History of Hacking Video Series by Discovery Channel
- "Bit Twiddling Hacks" By Sean Eron Anderson

Retrieved from "[http://en.wikipedia.org/wiki/Hack_\(technology\)](http://en.wikipedia.org/wiki/Hack_(technology))"

Categories: Computer programming

- This page was last modified on 10 June 2010 at 01:49.
- Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. See Terms of Use for details.
Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.
- Privacy policy
- About Wikipedia
- Disclaimers