Free Software Matters: Untrustworthy Computing

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"Ideas are not often hard," the great American judge Oliver Wendell Holmes, Jr., once wrote, "but words are the devil." Particularly when the words are deliberately twisted. One word that's going to sustain a good deal of devilish twisting this coming year is "trust."

The software monopoly and the content industries, as I have said here before, are now very tight allies: Hollywood and the recording industry need to keep users from having control over the sharing of data, and Microsoft needs to keep users from being able to choose free software. The solution for each of their problems is easy, if only one little word can be turned into its opposite. Enter the concept of "trusted computing."

A "trusted computer" is one that you, the user, can't trust at all. It won't run any programs that haven't been "certified" by someone else. Each data file that enters or leaves the computer is "marked" with instructions that say exactly what can be done with it—if anyone tries to do something that the data has been marked not to permit—if you try to copy, or modify, or share—the "trusted" programs that are the only ones your "trusted" computer will run, won't let you.

"Trusted computers," in other words, are computers that can be trusted by oligarchs to reduce the user to slavery. Special hardware embedded in the computer checks digital signatures of "permitted" software, and won't boot any operating system that hasn't been certified to eliminate user choice. Such operating systems will also prevent you from modifying the clock, or sharing data between programs without the permission of the data itself. Microsoft, you will be surprised to hear, was awarded a US

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patent last year on what it claims are novel and nonobvious components of such a "trusted" operating system, so if such a "trusted computing" system comes into being, Microsoft might have not just a de facto but also a de jure monopoly on operating system software for the next generation.

Some corporate buyers of computers like the idea of trusted computing. No more leaks of company documents containing evidence of financial fraud, bribery or crime—workers using "trusted computers" couldn't remove such documents from their office computers, or email them to a reporter. The recording industry loves the idea that songs could be instructed to erase themselves after you've listened to them, and everyone's computers could be "trusted" not to do any sharing. Intel wouldn't mind making the chips that would create "trust," while IBM, Hewlett-Packard, and the other large hardware manufacturers, who have joined with Intel and Microsoft, among others, in the "Trusted Computing Platform Association" are willing to play along, if the price is right. Microsoft, which last month announced "Palladium," its vaporware "trusted computing" software, sees a way to eliminate free software, thus defeating the only competitor it has and completing Mr Gates' plan of world domination.

But couldn't someone make a "trusted" free software OS? IBM or HP could release a version of the Linux kernel and the GNU operating system components that were "certified" by their public keys, right? Well, it might be an operating system, but it wouldn't be free software. Users couldn't modify the system and still have it run, and without the power to modify all freedom (as well as the associated technical innovation that comes from freedom) would cease. Free software would have been taken captive, and become a "trusted" slave.

There are some serious technical difficulties in this concept of "trusted" computing, which I will write about in a future column. The proposals are slick, and—for all the various powers that hate freedom—very inviting. But it isn't utterly simple to achieve. Which gives us time to fight back. Consumers everywhere have to make clear to hardware manufacturers that a computer *they* can't trust isn't a trusted computer. A computer that can be trusted to betray you, to disempower you, to keep you from doing what you want, isn't a computer you're going to buy. And if they know you won't buy untrustworthy computers, then they're not going to make them.

This aspect of the free software movement's program isn't revolutionary, it's conservative. For the last generation we have had *personal* computers—computers designed to serve people. Now we are threatened with entering a brave new world, where *im* personal computers serve everyone except the people who use them. And in the newspeak of the fascistic radicals trying

to control the future of the human mind, that's "trust." If their plans are achieved, technology will begin to strangle human freedom. If we wait too long to begin, our protests will be unavailing. We have to start now. Send email to the manufacturer from whom you bought your last computer, pledging never to buy another from them if they make untrustworthy computers. Speak up loud, lest we all lose our voices. As a great American conservative politician, Barry Goldwater, said, "eternal vigilance is the price of freedom."

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