

Lecture 3, April 5

Reading: [Bis11]¹, §29

Assignments due: Homework #1, due April 12, 2013

Discussion question. In 2003, Sen. Orin Hatch said he wanted copyright holders to be able to use special-purpose hardware to prevent piracy. The following paragraph is quoted from the PoliTech mailing list, and is dated June 19, 2003, at 10:12AM:

Sen. Orrin Hatch, R-UT, said he was drafting legislation to require devices in PCs permitting the destruction of hardware used for widescale copyright infringement by sending a secret command to the remote computer. A copyright holder would be required to offer two warnings before the “kill switch” was activated and the computer destroyed or permanently disabled, Hatch said.

1. What are the arguments in favor of Sen. Hatch’s proposal?
2. What are the arguments against Sen. Hatch’s proposal?
3. If this proposal had been adopted, what safeguards should have been put into place to prevent unauthorized activation of the “kill switch”?

Lecture outline.

1. Greetings and felicitations!
 - a. If you have not completed the prerequisites *in an earlier term*, please fill out the waiver form and send it to me — otherwise the department *will* drop you from the course!
2. Robust library
 - a. Interface
 - b. Internal structures
 - c. Tokens and their generation and analysis
 - d. Functions
3. Some common vulnerabilities
 - a. Insecure interactions among components
 - b. Risky resource management
 - c. Porous defenses

¹This is available in the Resources area of SmartSite; look in the folder “Handouts”