What Every Librarian Should Know about Computer Security

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Caveat

I would rather be exposed to the inconveniences attending too much liberty than to those attending too small a degree of it.

Thomas Jefferson, to Archibald Stuart, 1791

Installing a Rootkit

Public Computers

RFID

Digital Rights Management

Public Computers

dentalhealthblog.com

Installing a Rootkit

Rootkits

Web Browser
Applications
World’s Best Anti-Virus Software
Operating System Kernel (Windows)
Processor

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What's the worst that could happen?

Rootkit Keylogger

Open Wireless

Overly Open Wireless?

Rogue Access Points

“I am ‘Library’ send me your traffic.”
Objective #10: By June 2014, present the Library Board with a plan to migrate J-MRL to radio-frequency identification (RFID) technology.

from Jefferson-Madison Regional Library Five-Year Plan (July 2009-June 2014)

Optical Barcode
- ISBN 0-9553010-0-9

EPC Gen 2 RFID
- 64-128 bits (item identity)
- Circuit, Antenna ($0.05)

Reading
- Optical Scanner

Tag Cost
- Ink, Paper ($0.00001?)
- Circuit, Antenna ($0.05)

Protest at Texas Wal-Mart

Warrantless Searching

Photo by Bill Bryant
Profiling/Tracking

Solutions

Encryption
Only reader machine in library can identify books
Book tag response includes random values, so is not repeated

Horseless Carriages, Fabless Chipmakers, and Bookless Libraries?

Electronic Paper

Invented at Xerox PARC (1970)
Sony Librē 2005
Amazon Kindle 2007

eBooks in 2009

nook (Barnes and Noble)
Amazon Kindle 2
Bookeen Cybook Opus

“We did research, and found that the smell is mostly glue – glue and maybe mildew. We joked that maybe we should have a spritzer on the Kindle that would send out that smell.”
Jeff Bezos (Amazon.com)

http://smellofbooks.com/
Bookless Libraries

• “Lending” eBooks
  — Digital Rights Management
• Browsing eBooks
  — Proximity Digital Rights?
• Archiving electronic data
• Space!

Recommendations

• Short term:
  — Risks of openness are worth it!
  — Be vigilant, make visitors aware of risks (?)
  — Post official looking notices showing your SSID (network name)
• Long term:
  — Be careful and cautious with RFID privacy
  — View “bookless” libraries as an opportunity

Thank you!

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