



David Evans
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11 Nov 2009

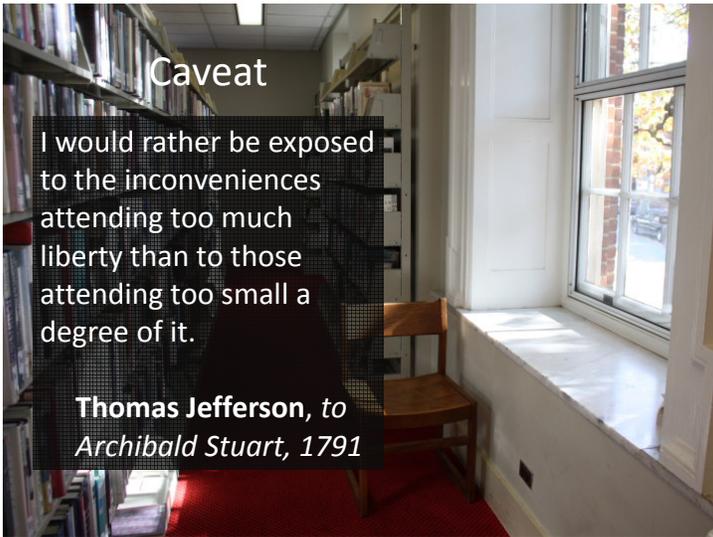


Public Computers

Open Wireless Networks

RFID

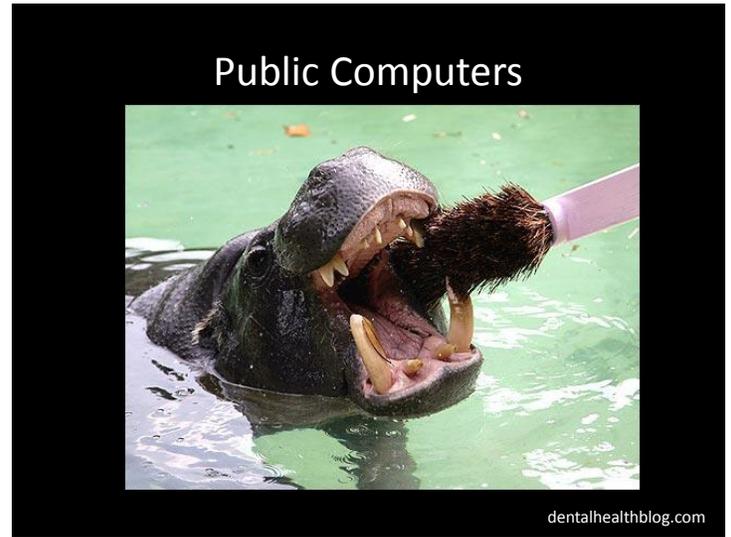
Digital Rights Management



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

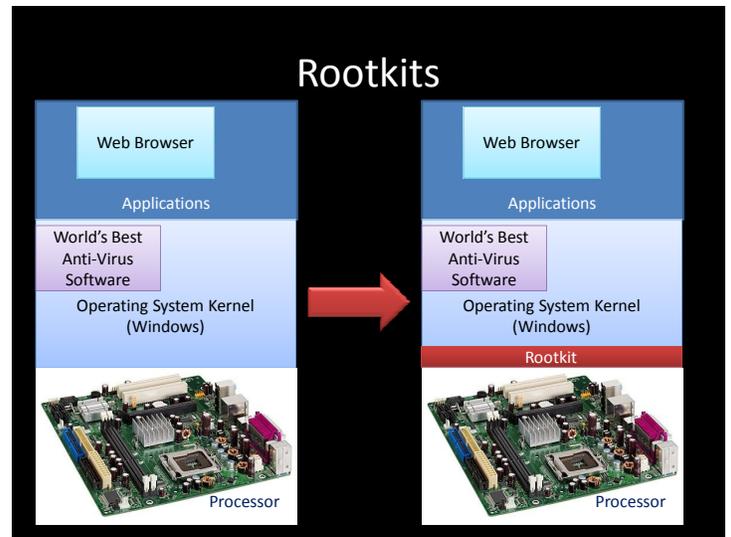


Public Computers

dentalhealthblog.com



Installing a Rootkit



Rootkits

Web Browser

Web Browser

Applications

Applications

World's Best Anti-Virus Software

World's Best Anti-Virus Software

Operating System Kernel (Windows)

Operating System Kernel (Windows)

Rootkit

Processor

Processor

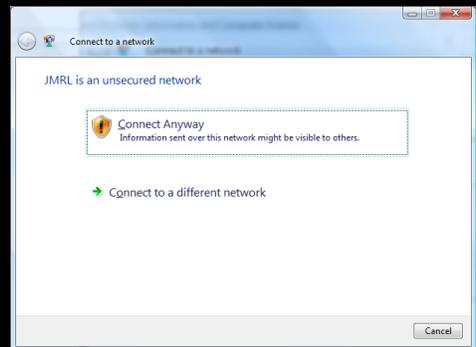
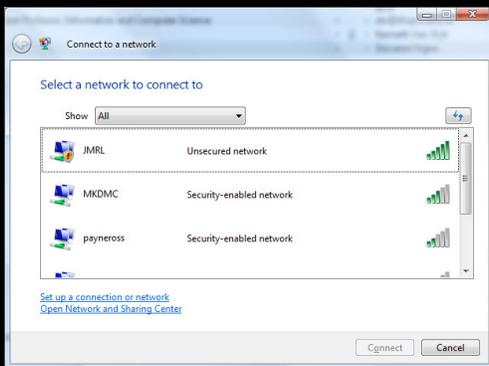
What's the worst that could happen?



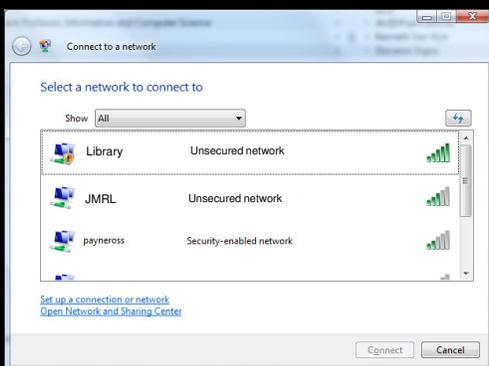
Rootkit Keylogger



Open Wireless



Overly Open Wireless?



Rogue Access Points



"I am 'Library' send me your traffic."



Solutions?

- None of these risks have easy solutions

RFID

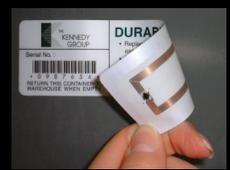


Objective #10: By June 2014, present the Library Board with a plan to migrate J-MRL to radio-frequency identification (RFID) technology.
 from *Jefferson-Madison Regional Library Five-Year Plan*
 (July 2009-June 2014)

Optical Barcode



EPC Gen 2 RFID



Identities

8-12 digits
(book identity)

64-128 bits
(item identity)

Reading

Optical Scanner

Wireless Reader

Tag Cost

Ink, Paper
(\$0.00001?)

Circuit, Antenna
(\$0.05)



Protest at Texas Wal-Mart

Photo by Bill Bryant

Warrantless Searching



Profiling/Tracking



Solutions



Encryption

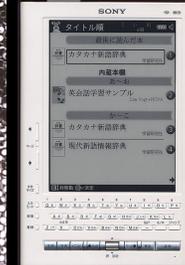
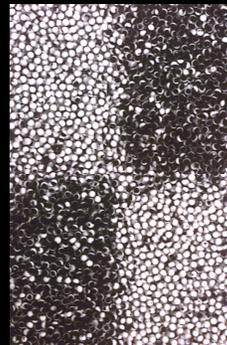
Only reader machine in library can identify books

Book tag response includes random values, so is not repeated



Horseless Carriages,
Fabless Chipmakers,
and Bookless Libraries?

Electronic Paper



Sony Librie 2005



Amazon Kindle 2007

Invented at Xerox PARC (1970)

eBooks in 2009



nook (Barnes and Noble)



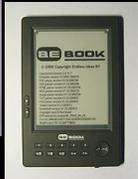
Amazon Kindle 2



Bookeen Cybook Opus



iRex Illiad



"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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