

A close-up photograph of a person's hand holding a golden key. The hand is positioned on the left side of the frame, with the thumb and index finger gripping the key's head. The key is held horizontally, pointing towards the right. The background is a dark blue gradient. The overall image is framed by a white border.

Mobile Hacker Spaces

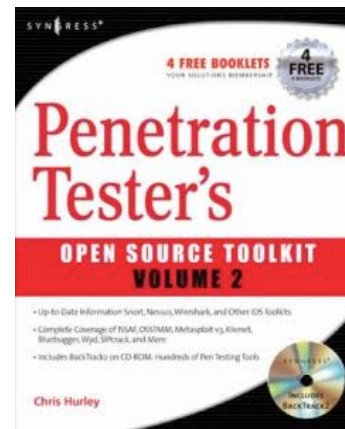
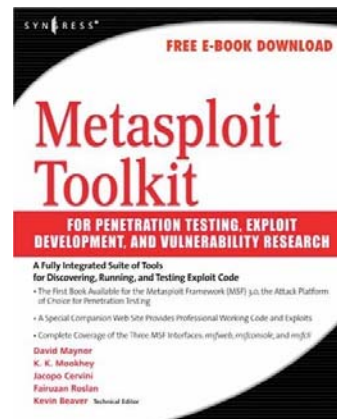
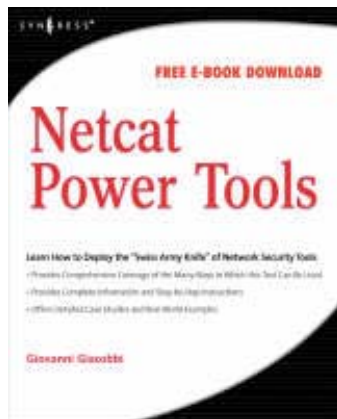
Thomas Wilhelm

About the Talk

- Concept behind Hacker Spaces
- (Dis)Advantages of Mobile Hacker Spaces
- Real-World Example

About the Talker

- Thomas Wilhelm
–Contributing Author:



About the Talker

- Thomas Wilhelm
 - Certifications: ISSMP CISSP SCSECA...
 - Work:
 - Fortune 50 Company
 - Penetration Testing & Risk Assessments
 - Adjunct Professor
 - Education:
 - PhD Student (IT - Information Security)

Concept Behind Hacker Spaces

(Sorry if you know this already)

- **Definition** (hackerfoundation.org):
 - Any gathering of Hackers as a community to share ideas, collaborate on projects or merely enjoy each other's company could be considered a hacker space.
 - 4 Types:
 - Local Gatherings
 - Conventions
 - Hacker Group Living Situations
 - Fixed Hacker Research Spaces

My mind – “Oooh! I want one!”

Hacker Spaces

- A Few Hacker Spaces:
 - CCC: Chaos Computer Club
 - 2k+ members
 - C-Base
 - 300 members
 - NYC Resistors
 - 18 members

My Mind – “Larger than what I’m willing to do”

Cost of a Hacker Space

- Cost:
 - C-Base (300 members)
 - July – Almost went bankrupt
 - Received “20,000 of the needed 30,000 Euros needed in 6 weeks”¹
 - NYC Resistors (18 members)
 - “can get a place near Lemur, looking at around \$2,250”²
 - Local Rent: 1250 sq.ft. @ \$800/mo

My Mind – “Just too expensive”

Hacker Spaces - Ideas

- Garage

- Advantages:

- Free (not really, but at least not extra)
 - Power
 - Convenient

Hacker Spaces - Ideas

- Garage
 - Disadvantages:
 - Cold in winter (live in Colorado)
 - Availability to users
 - ...and (yes, you guessed it)...

Hacker Spaces - Ideas

What... a... dump.



My Mind – “ Yeah... I’m not cleaning that.”

Hacker Spaces - Ideas

- Other ideas:
 - Room in house
 - Too Stressful
 - Diners / Restaurants
 - No permanency
 - Local College
 - Scheduling / Sponsorship

Brainstorming

- What did I want:
 - Cheap (I'm a student, remember?)
 - Isolated from neighbors
 - Modular
 - Place for classes
 - Cool (optional.... VERY optional)

Mobile Hacker Space

- **Used Buses**

- Minibus Chevy 3500 Diesel 1999 USD \$15,900
- Charter bus Chevy P-30 1995 USD \$4000
- Minibus GMC Shuttle Bus 2002 USD \$22,950
- Minibus International Goshen 1999 USD \$23,000
- Minibus Ford E-350 Diamond 1999 USD \$14,500
- Charter bus Prevost/LeMirage 1989 USD \$ 30,000
- Minibus Ford Krystal KK28 2003 USD \$ 39,000
- Charter bus Eagle/Series 15 1989 USD \$ 19,000
- Charter bus Jonchere 1984 USD \$ 12,000

Mobile Hacker Space

- Class B Motor home
 - A van-sized camper



Let's Get These Out of the Way, Now...

- Answers to FAQs:
 - YES, I know the 70s want it back
 - NO, there is no shag carpet in it... (now)
 - NO, I do NOT live down by the river
 - NO, I don't have candy in there for little kids

Mobile Hacker Spaces

- Advantages

- Mobile (duh!)

- Park it anywhere

- Park, coffee shop, friends house, Restaurant

- Go to where the hacking opportunities are

- Wardriving, conventions, gatherings

- Mobile classroom

Mobile Hacker Spaces

- Advantages
 - Cost is minimized
 - Purchase price + gas + insurance
 - Supports large range of people
 - Small groups inside (max 8)
 - Large groups outside (based on hardware)

Mobile Hacker Spaces

- Advantages
 - Modular
 - Equipment can be switched out
 - Interior can be changed depending on project needs
 - Storage space for hauling
 - Events, long distance travel

Mobile Hacker Spaces

- Disadvantages

- Mobile (duh!)

- Gas is ridiculous
 - Insurance costs
 - Wear and tear
 - Theft

- Limited Space

- Cannot buy more square footage

Mobile Hacker Spaces

- Disadvantages
 - Electricity (HUGE limiter)
 - Batteries
 - Square footage is limited
 - Expensive / Expansive
 - Plug into the grid
 - Limits your mobility

Mobile Hacker Spaces

- Disadvantages
 - Subjected to the elements
 - Air circulation varies
 - Heat of equipment
 - Unwashed bodies
 - Colorado = Friggin' Cold
 - Las Vegas = Friggin' Hot
 - No fun hacking in the rain

Making a Mobile Hacker Space



Making a Mobile Hacker Space



Making a Mobile Hacker Space

- Different Interior Configurations
 - Workspace
 - Laptops
 - Lecture
 - Video Presentations
 - Demonstrations

Making a Mobile Hacker Space

- **Workspace** (2 people)
 - Pegboard
 - Shelving Unit
 - Power Strip
 - Switch
 - Plenty of wall space for whatever else



Making a Mobile Hacker Space

- Lab Space
 - Overhead “bunk”
 - 20+ sq. ft
 - Needs to be secured during travel



Making a Mobile Hacker Space

- **Cost Breakout:**
 - Original Purchase Price: \$2,000
 - Cost of Interior Components: TBD
(No Computer / Network Gear)
 - 5 Panels w/ Shelving: TBD
 - Hanger Framework: TBD
 - Flooring: TBD
- **Total: TBD**

Making a Mobile Hacker Space

- Lab (currently) fully loaded:
 - 4 networks
 - 2 Wireless (1 Internet, 1 Intranet)
 - 2 Hardwire (1 Internet, 1 Intranet)
 - 2 Servers
 - VMware (if Windows is OS)

Mobile Hacker Space Projects

- Hardware/Software
- Vehicle
- Interior / Special projects

Mobile Hacker Space Projects

- Hardware/Software
 - Wireless
 - War driving
 - Honeypot
 - Hardwire
 - De-ICE.net Pentest LiveCDs

Mobile Hacker Space Projects

- Vehicle
 - Electrical Improvements
 - Battery bank under vehicle
 - Invertors
 - Solar Panels / Wind Generator

Mobile Hacker Space Projects

- Interior / Special projects
 - Solar Power
 - 24x7 power for lab
 - Wired / Wireless sound system
 - Internet Security System
 - Voice Activation System

Conclusion

- Questions?
- Contact: twilhelm@herot.net
- Project Site: <http://De-ICE.net>