

# Social Engineering Fundamentals

Exploiting the Human Bugs

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# Social Engineering

*“... the social engineer is able to take advantage of people to obtain information with or without the use of technology.”*

***Kevin Mitnick**, *The Art of Deception**

# Case Study 1: Taking Control of Munich Airport

- Voice: "Who are you?"
- Kimble: "We are with the company Data Protect and we would like to check your computers."
- Voice: "What company?"
- Kimble: "Data Protect!" (holding his card in front of the camera)
- Voice: "Okay, please take the elevator to the third floor, first door on the left-hand side."

<http://www.kimble.org/airport/airporteng.html>

# Case Study: Taking Control of Munich Airport







# Social Engineers: a big family!

- Politicians, Salespersons, Law Enforcement, Corruptors, Intelligence People, Crooks, Actors, Playboys, Hackers, Phreakers, Phishers, You...



# Social Engineering the FBI

- *"In 1994, a french hacker named Anthony Zboralski called the FBI office in Washington, pretending to be an FBI representative working at the U.S. embassy in Paris. He persuaded the person at the other end of the phone to explain how to connect to the FBI's phone conferencing system. Then he ran up a \$250,000 phone bill in seven months."*, **Bruce Schneier**, *Secret and Lies*, Page 266, *Beyond Fear*, Page 143
- *Jurisprudence ZBORALSKI-FBI, LAMI Informatique*



# SE as a Phreaking Tool

- calling cards
- X25 NUI
- PBX passwords... (AT&T System 75)
- Making free phone calls...
- Making taking teleconference calls...
- Collect calling your ISP

# SE as a Hacking Tool

- Taking over the Domain Name of a Bank
- Changing someone's password at an ISP
- Dropping CDROM
- Delivering a USB Thumb Drive
- Stealing the content of USB Thumb Drive

## SE as a Hacking Tool (2)

- Offering a free hotspot internet...
- Taking an internet host down
- Profiling a target

# Robbing a Bank

- Stealing source code from development:
  - ATM Source Code
  - Online Banking Source Code
  - Core Banking Source Code
  - Payment Gateway...
- Committing backdoors...
- Backdooring Operations and Promotion

## Robbing a Bank (2)

- Stealing Password from HR and Accounting
- Dropping CDRROMs...
- "Do you have a windows 2k or XP? I am trying to open this file, I think it's corrupted... Can I try to open it on your computer?"
- Asking many trivial questions to build trust

# More SE Attacks

- Free Wireless Internet
- Offering a Golf Tournament Ticket
- Depositing money on a bank account
- Being the computer “expert” of a charity club
- Posing for a journalist
- Flattering and seducing people

## More SE Attacks (2)

- Posing as a policeman
- Job Interviews... work both way
- When Internet is down... pose as ISP Technician
- Compromising Open Source projects...
- Hacking someone who doesn't have internet or a computer...

# How to Improve SE Skills

- Learning languages and jargons
- Learning “Savoir-Vivre” (good manners)
- Learning to be confident and rational
- Fighting fear and stress
- Wearing a tie or make-up
- ...



# Protecting yourself

- Challenging people
- Pointing to policies and procedures
- Segregation in duties.. Security Management
- Transferring risk... to your superior...
- Security Awareness and Technology watch
- Hanging up...

# Thank you!

## Any questions?



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