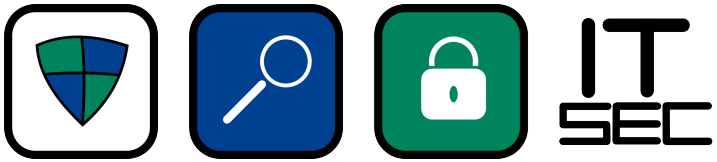
Selected Topics on IT-Security

Initial Meeting

June 25th, 2012



First things first

Supervision Prof. Dr. Michael Meier

Organization Arnold Sykosch

Website http://net.cs.uni-bonn.de/wg/itsec/teaching/st-2012/seminar-itsecurity/

Goals

- Getting familiar with a topic in a limited time frame.
- Writing a good report.
- Giving a good presentation to a group.

Due Dates

August 3rd, 2012 Written report (approx. 12 pages continuous text).

August 20th, 2012 Set of slides for your presentation.

August 27th, 2012 The talk (approx. 30min) and subsequent discussion (approx. 15min).

Submission

- Per email to the regarding advisor
  - Complete and on time
  - In PDF
  - For email addresses and PGP-Key id see

    http://net.cs.uni-bonn.de/wg/it-security/staff/

The Report

- Use LaTeX!
  - Use the template on the seminar website
- Approx. 12 pages continuous text.
  - Look for more literature!
- Ask your advisor
- Respect the Guidelines

  -> Seminar website

Citation

- Copying original work without citation may result to a failed seminar.
- Simply translating from other work may result to failed seminar.
- Excessive citing may result to a failed seminar.
- Images have to be cited, too.

- Ask your advisor

The Presentation

- Talk freely
  - Use index cards
  - Use the presenter view
  - Rehearse!
- Use LaTeX! (recommended)
- Submission in PDF!
- Bring you own device (VGA connection required)
  - For presenting a PDF a device will be provided.

Grades

- Master: graded
  - approx. 50% report
  - approx. 50% talk

- Diploma: Not graded

QUESTIONS?

TOPIC SELECTION

Topics

1. Automatic analysis of malware behavior using machine learning.
2. Grammar-Based Interpreter Fuzz Testing.
3. ~~Security Metrics and Security Investment Models.~~
4. Detecting Hidden Storage Side Channel Vulnerabilities in Networked Applications.
5. ~~The Socialbot Network: When Bots Socialize for Fame and Money.~~
6. Don't Trust Satellite Phones.
7. BotHunter: Detecting Malware Infection Through IDS-Driven Dialog Correlation
8. Automatically generating models for botnet detection
9. Return-Oriented Programming: Systems, Languages, and Applications.
10. t-Closeness: Privacy Beyond k-Anonymity and l-Diversity