Encryption

Exercise 5.1 (> / 2 / 1 / 1)

- 1. Split into working groups of 3 or 4 students
- 2. Each group is assigned one of the topics (by consensus or randomization) described on the following slides
- 3. Every group prepares a digital presentation of 15-20min on their topic
- 4. At least 2 days before the presentation a PDF export of their slides is sent to bjoern.kimminich@nordakademie.de
- 5. All groups present their topic to all their classmates who can ask questions afterwards

Presentation Format

- 15-20min presentation
 - o every group member has to present for at least 5min
- 5-10min Q&A
- ii The presentation can be written and held in \mathbb{H} or \blacksquare based on each group's own preference. Just do not mix English and German slides. English slides but presentation held in German is fine.

Presentation Topics

- 1. WEP **FMS** & Chopchop
- 2. WPA2 \neq KRACK
- 3. PGP \neq EFAIL
- 4. SSL/TLS ≠ POODLE & DROWN
- 5. BitLocker \neq TCG Opal
- 6. PDF ← Breaking Encryption & Signatures
- The links provided are some documentation/specification (if publicly available) as well as vulnerability research papers. Each group is supposed to gather additional references as needed.

Presentation Structure

- 1. Introduction of the protocol/system
- 2. Explanation of the attack(s)
- 3. Mitigation of the attack(s)
- 4. Recommendations or related information
- i Please provide a list of sources referred to in the presentation as the final slide.

Timeline

- Fri, 19.11.2021 (today)
 - Group building & topic assignment
- Tue, 07.12.2021 (+2.5 weeks)
 - All PDF-exported presentations delivered to bjoern.kimminich@nordakademie.de
- Fri, 10.12.2021 (+3 days)
 - All groups present their topics between 14:30 and 17:15