Hacker-Praktikum — SS 15
Advanced Binary Exploitation

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Time and place

When?  
Tuesday, 15:00

Where?  
01.05.013
Registration

- Short **letter of motivation** (about one page)
  - Submit to {kirschju,vogls,panny}@sec.in.tum.de until 8 February, 23:59
  - What is your previous experience related to exploitation and low-level programming (C, Assembler, Kernel, ...)?
  - What do you expect to learn in the practical course?
  - Why are you particularly interested in *this* practical course?

- Registration using the **matching system**

- **14 slots**
Process

Phase I (11 weeks):
  ▶ “Usual” practical course (weekly meetings and exercise sheets)

Phase II (2 weeks):
  ▶ Final project (short paper and presentation)
Process — Phase I

- Teams of two
- Every week: Introduction to a new topic
- Weekly exercise sheets
  - Submission of solutions until the following week before the meeting
  - Private demonstration and short explanation of solution during the meeting
Process — Phase II

**Final project**

- Development of a vulnerable application
- Creation of an exploit (ab)using the vulnerability/ies
- Short paper
- Presentation
- Details follow when the time has come
Contents

- Bypassing advanced protection mechanisms
- Real-world vulnerabilities
- Exploitation of platforms other than x86(_64)
- Exploitation of operating systems other than Linux
- Kernel and browser exploitation
- Windows exploitation
Questions?