Organising monkeys or How to run a hacking club

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Introduction

Marco Cova + Tom Chothia =

~ 20 active members

2014 CTF rankings:
1st UK academic team
33rd world-wide academic team

Monkeys s.t. $|\text{Monkeys}| < \aleph_0$
Hacking club vs CTF team

Hacking club participants

CTF participants

alumni
Hacking club
Organise the Monkeys

Senior lecturer (Shadow monkey)

Organiser

Network admin

Hacking challenges trackers

Web designer
Meetings format

Weekly meetings ~ 2 hours, Friday afternoon
(best attendance rate is during term time)

Always send **notification** before the club meeting
(people forget / are busy elsewhere…)

Layout:
• Presentations (10-30 mins) : tutorials, write-ups
• Choose from the list of hacking challenges prepared

After-club : food/drinks
Organisational challenges

Hacking club attendance vs coursework

Starcraft … (?)

Alumni engagement

Difficulty level

Competition participation
CTF Competitions
Capture-The-Flag (CTF) team
- Jeopardy CTFs
- Attack-Defence CTFs

Tools and helpers:
- IRC
- Rizzoma
- mailing-list

After CTFs, the members do write-ups for the challenges they solved.

Latest CTFs: VolgaCTF 2015 Quals, Boston Key Party 2015 Ghost in the Shellcode 2015, SECCON CTF 2014 Quals
CTF Challenges

Diverse categories:
• Cryptography
• Exploitation
• Reverse engineering
• Web-based

But, main tool will always be the BRAIN

Tools used for solving:
• WireShark
• IDA Pro
• OllyDBG
• Burp Proxy

(preferences differ)
Demo

Ghost in the shellcode - Lost in Time
Conclusion

Teaching defensive security is important, but offensive security is just as important

There is no set successful formula for running a hacking club … but enthusiasm and perseverance are the key to success!

Our advice for starting a hacking club:
• Informal works great
• Setup meetings
• Advertise the club (in security-related modules)
• Practice on challenges (many available online!)
• **Do not give up!** Keep meeting even if only few students attend. Keep participating in CTFs, even if you score low.