



# CTF Magic

**Speakers:** Mark Denihan  
David Ryan  
Paul McCann

**Role:** Honeynet Ireland

**OWASP EU Tour 2013 - Rome**  
Rome, 27th June 2013

Copyright © 2008 - The OWASP Foundation  
Permission is granted to copy, distribute and/or modify this document  
under the terms of the GNU Free Documentation License.

**The OWASP Foundation**  
<http://www.owasp.org>

# Who are we?

Mark Denihan



Paul McCann



David Ryan



=



# What is the Honeynet Project?



Username	Password
admin	honeyn3t12
admin	honeyn3t@123
admin	honeyn3t@
admin	honeyn3t!!!
admin	honeyn3t.ie123
admin	honeyn3t.ie111
admin	honeyn3t.ie!
admin	honeyn3t.ie1
admin	honeyn3t.ie12
admin	honeyn3t.ie@123
admin	honeyn3t.ie@
admin	honeyn3t.ie!!!
admin	admin
admin	123456
admin	123456789
admin	password
admin	admin123
admin	1234567
admin	pass
admin	12345
admin	12345678
admin	test
admin	admin1
admin	abc123



# What have we done?

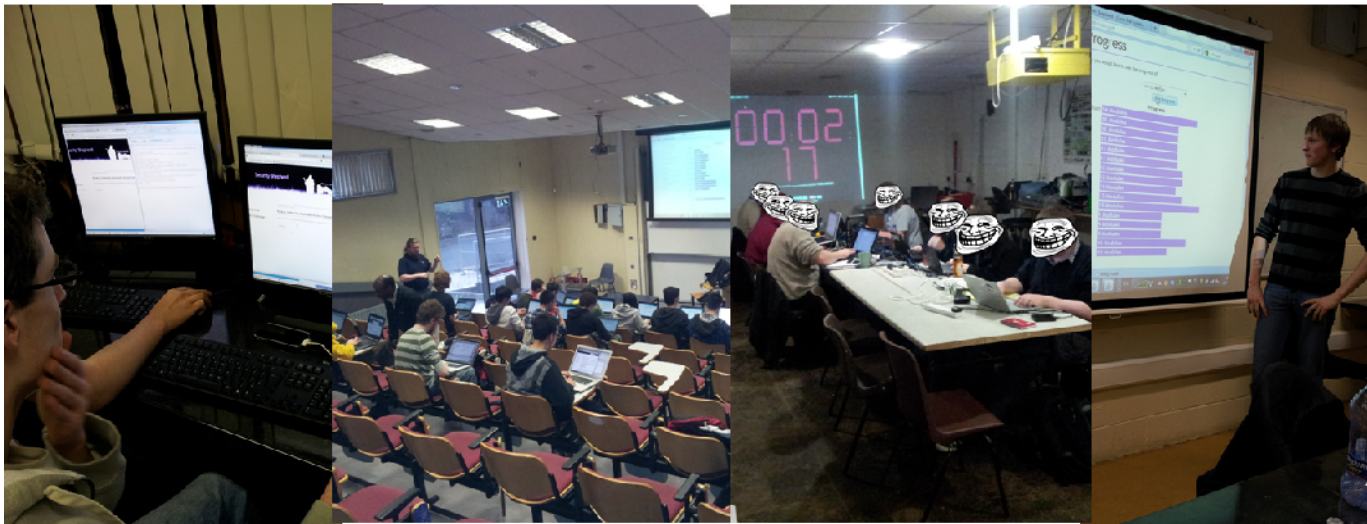


# OWASP Security Shepherd Project

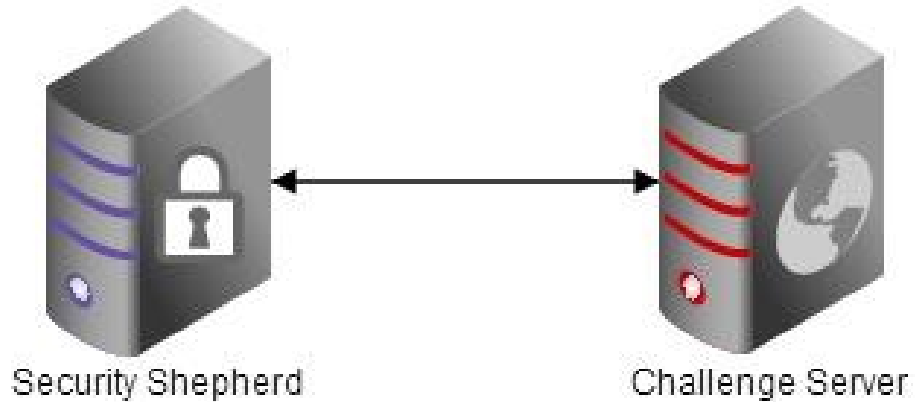




# Why use OWASP Security Shepherd?



# OWASP Security Shepherd as a CTF



## Scoreboard

Select the class you would like to show the scoreboard for

12/13 Hackathon ▼

This_is_Bananas!	1028
caoih	1007
AbePetrillo	1005
davo69	1004
gotomanners	1002
JustinCredible	954



# Traditional CTFs

Noobish

Super Fly

Bantom

Weltor

Heavyweight

X Shall we play a game?

X Whaddaya Say?

X Where?

90 points

Super Heavyweight

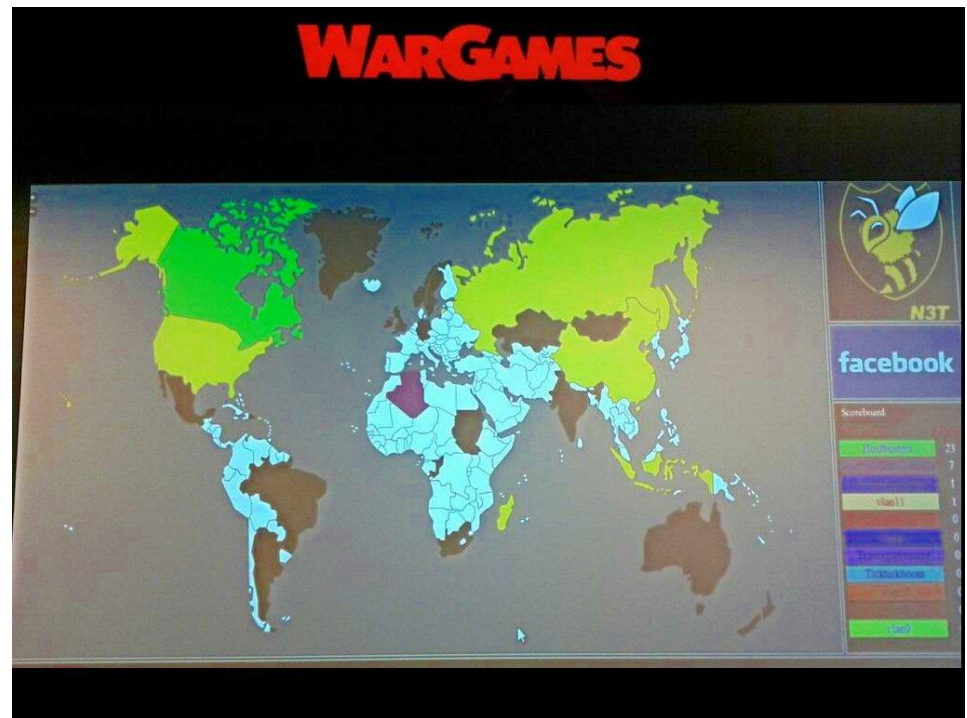
- Various Difficulty
- Mixed Bag of Levels
  - Network Forensics
  - Log Dump Analysis
  - Reverse Engineering
  - Any of the OWASP Top 10
- A Few Walkthroughs...





# Wargame CTFs

- As Real to Life as Possible
- Different Skills
- Attack / Defend
- Anything Goes



# The Set Up

## Hardware

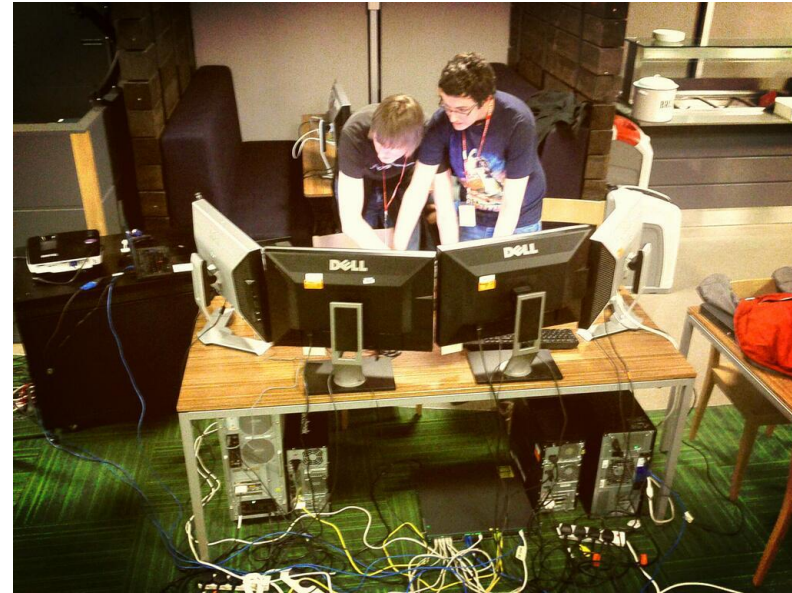
- 2 L3 Switches (1 Spare)
- 3 Servers (1 redundancy)
- 2 Nerds (1 keyboard)

## Software

- VMs
- HTTP Poller + Shell script
- SecurityOnion

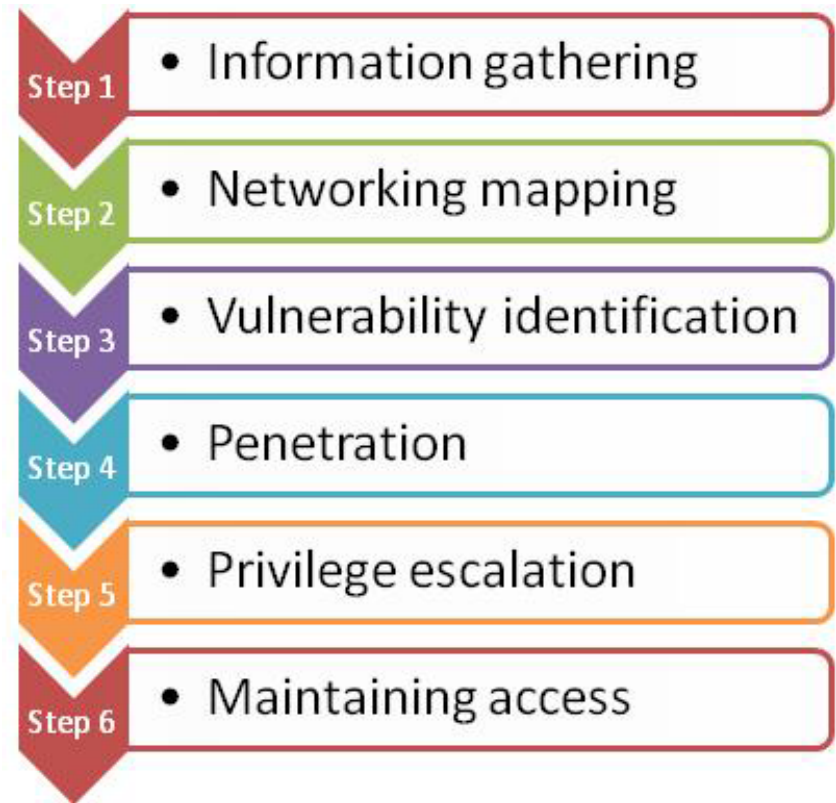
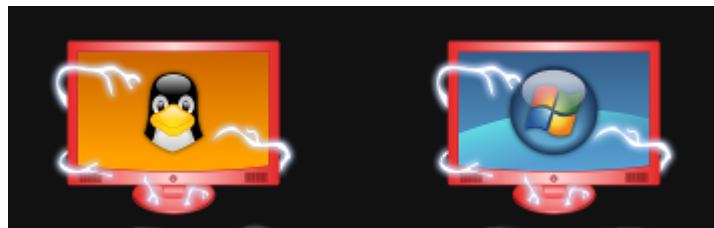
Events: IRISS & Source

8-10 teams of 4



# Pwning a Box

- Misconfigured Applications
- Web App Vulnerabilities
- As Simple as...  
point and click
- Video...



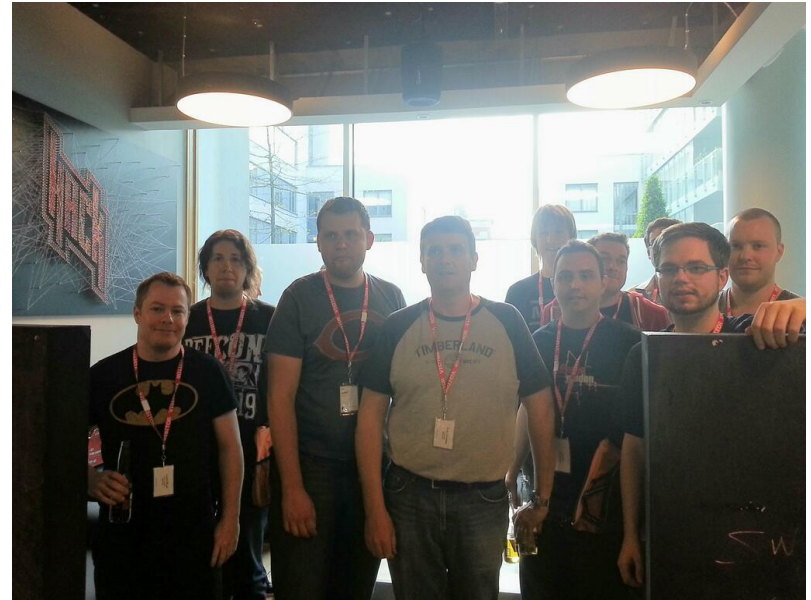
# Hardware Arena

- Mobile Phone
- Future Challenges...
  - Arduino
  - Raspberry Pi
  - Quadcopters
  - Vending Machines



# Running a CTF - Secrets to a Successful CTF

- No1. Good Team
  - Dedicated Specialists
  - Collaborate
- Time  
(9-5, College, Life!)
- Working Tested Platform
  - Security Shepherd
- Strictly Define Rules & Boundaries
- Test
- KEEP IT FUN!





# Keep In Mind

- Who is your Target Audience

## Technical Setup

- Network Topology
- No wireless, No DHCP
- Separate VLANs for Each Teams
- Monitor and Log everything
- Redundancy - UPS, Spare Hardware, BACK UPS!!!





# CTF Benefits

- Increase Knowledge
- Better Reputation
- Job Opportunities
- Cash Prizes



# How to Win a CTF

- Create a diverse team with multiple skill sets.
- Set up a private IRC.
- Socially engineer the room.
- Bribe the organisers ;) (We like Alcohol)



# The Winner Is



Player	Progress
stor_	777 Points
disti	777 Points
theBro	432 Points
kikujiro	431 Points
clicache	430 Points



# The Winner Is



stor\_

777 Points

12.14 Days in Total

disti

777 Points

22.23 Days in Total



# Contact Us!



@honeyn3t



honeyn3t@gmail.com



<http://honeyn3t.ie>



@markdenihan



mark.denihan@owasp.org



@ismisepaul



No Online Presence

