

Hacking attacks

Cyber crime

In the start of 21 century, the new era started. The era of technologies.
However, with technologies, new types of crime developed.



Hacking

- ▶ Nowadays, a major concern that has emerged among computer or smartphone users is the threat of hacking. Hackers can easily hack the security systems, bank systems, any program and earn a lot of money.



Hacking

- ▶ For example, hacking mobile phones has become a real business in Russia, Asia, and other places where pre-paid phone calls are common. Analytics estimated that criminals, hackers who target mobile phones earn from \$1000 to \$5000 per day per person.

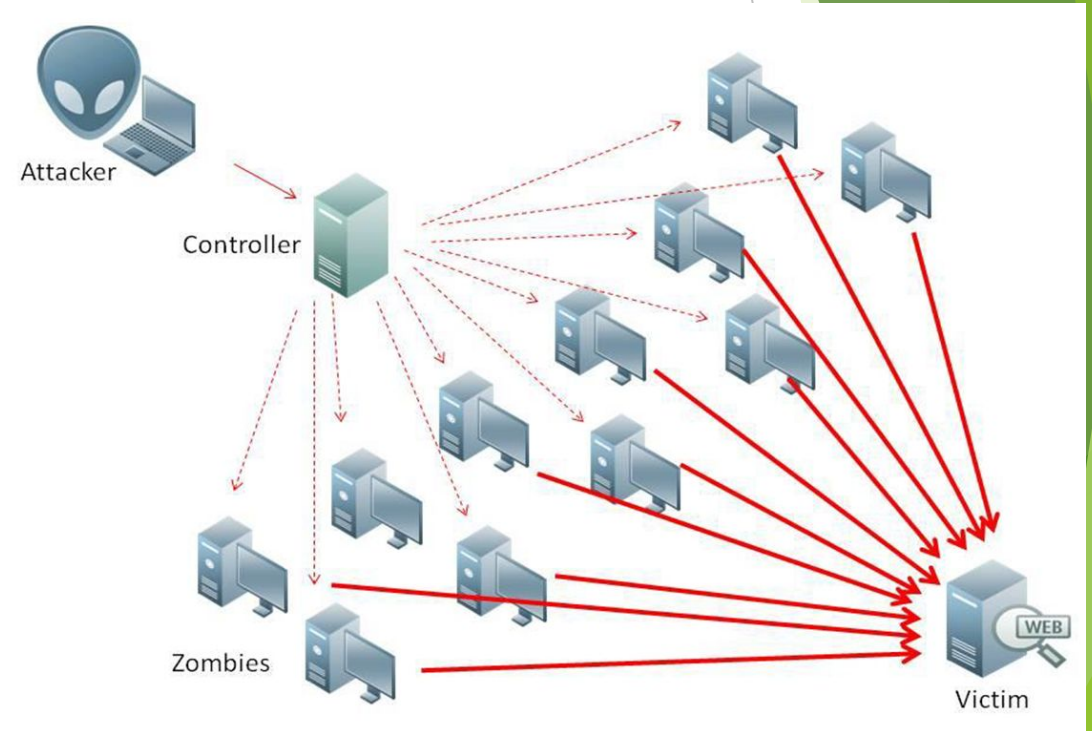
Hacking



- ▶ There are four forms of attacks commonly used against computers and networks, according to Aaron Turpen, in his article ‘Hacker Prevention Techniques.’

1. Distributed Denial of Service (DDoS) attacks

- ▶ Usually aimed at networks by third party systems (typically, compromised systems lacking security that unwittingly become hacker accomplices)
- ▶ Focuses on open ports and connections in the network or system
- ▶ They undermine the network by flooding it with requests and “pings,” thereby causing one or more systems and their resources to shut down or crash
- ▶ Major systems usually recover from such attacks easily and completely



2. Trojan Horse

- ▶ Software disguised as something else (typically useful shareware or freeware) and so are installed in your system consciously
- ▶ It either contains
 - a “back door,” (which allows others to enter your system, and do what they want with it, while you’re using the software), or
 - a “trigger,” (sets itself off when triggered, either by a date or a time or a series of events, etc., and cause your system to shut down or attack other computers; can be part of a DDoS attack
- ▶ Difficult to detect



3. Virus

- ▶ Most common
- ▶ Primary concern is to replicate and spread itself, and then destroy or attempt an attack on the host system



4. Worm

- ▶ A combination of a DDoS and a virus attack
- ▶ Usually reproduces as often as possible to spread as widely as they can
- ▶ Commonly aimed at larger systems (mainframes, corporate networks, etc.); some are built to “consume” data and filter it back out to unauthorized users (i.e. corporate spies)
- ▶ It consumes resources (quietly) until the system finally becomes overloaded and ceases to function



What can hackers do?

- ▶ Steal services and/or valuable files
- ▶ Spy on friends, family members or even business rivals
- ▶ Steal your money by using hacking techniques such as:
 - Setting up fake e-commerce sites to collect credit card details
 - Gaining entry to servers that contain credit card details



BE CAREFUL!



References

- ▶ <http://www.crucialp.com/resources/tutorials/website-web-page-site-optimization/hacking-attacks-how-and-why/>
- ▶ English book :)