

Computer Security

What is Computer Security?

- is a <u>branch</u> of computer technology
- known as "Information Security"
- applied to <u>computers</u> and <u>networks</u>
- the objective is to <u>protect</u> information and property from <u>theft</u>, <u>corruption</u>, or <u>natural</u> <u>disaster</u>

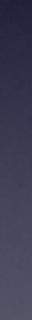






Risks & Threatening

Malware



Social Engineering



Malware

Consists of programming designed to:

- disrupt or deny operation
- •gather information that leads to loss of privacy or exploitation
- or gain unauthorized access to system resources



Examples of Malware

- Virus
- Trojans
- Bots and botnets
- Spyware

Virus

- programs that alter the functioning of our computer without our knowledge obtaining or destroying information
- spread by <u>direct contact</u> or <u>sharing the same</u>
 <u>medium</u>



Trojans

- viruses disguise as programs that supposedly do something but actually open a door on our computer so it can be accessed from outside
- his name comes from *The Trojan Horse*



Bots or Robots

- is a type of trojan that use our computer to connect to other infected computers (zombies)
- the goal is create **botnets** or zombie networks
- enables to send mass mailings without be detected



Spyware

- collects small pieces of information about users without their knowledge
- search for email adress, IP address, pages visited,...
- the presence of spyware is typically hidden from the user and can be difficult to detect

What is the propose?

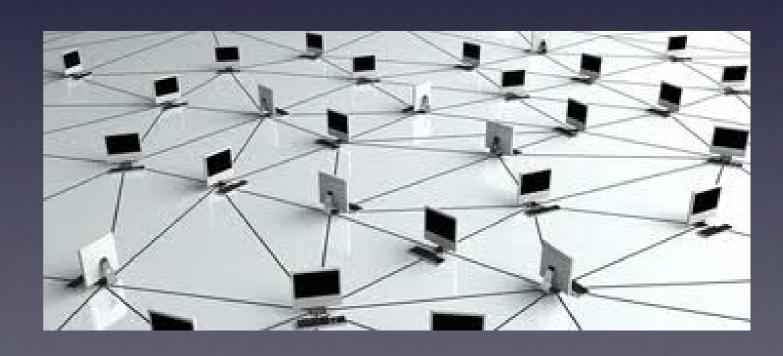


How to get money?

directly: getting our bank access: phising



indirectly:
 renting zombie networks
 for illegal purposes



Social Engineering

 The art of manipulating people into performing actions or divulging confidential information.



Examples of Social Engineering

- Spam
- Hoax
- Phising

Spam

• is the use of electronic messaging systems to send unsolicited bulk messages indiscriminately

• the most widely recognized form of spam is

e-mail spam



Shoulder Pork hAM

Hoax

- is a message warning the recipient of a nonexistent computer virus threat
- the message is usually a chain e-mail
- are usually harmless

Bank of Queensland Internet Banking Security Update

It has some to our attention that your assount need to be updated due to the recent changes we have made to our internet flurating system. This update will allow us to activate new features for your account on our new system. We have made these changes to provide a better and more secure services.

To evilute the update confirmation process place fills the link below and fill in necessary required a

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Phishing

 a way of attempting to acquire information such as <u>usernames</u>, <u>passwords</u>, and <u>credit card details</u> by masquerading as a trustworthy entity in an electronic communication



HowTo defend against Social Engineering?

"If something seems too good to be true, it probably isn't"

- don't share relevant information
- ensure that access the site you want
- change the password regularly

There are two rules to enforce good passwords:

- easy to remember
- not a word in the dictionary



How to create passwords easy to remember

- find a personal "algorithm" for generating obscure passwords
- use sayings, poems or famous quotes

Example:

Kill Two Birds With One Stone

take the first letter of each word and change the numbers in

figures:

K___ 2 B___ W__ 1 S____

"k2bw1s"

Other examples:

"2habt1"

"1ysm7yw"

"2icb3iac"

"abithiw2itb"

"str&stc"

"w&pup4ure"

Two Heads Are Better Than One

One year's seeding makes seven years weeding

Two is company but three is a crowd

A bird in the hand is worth two in the bush

Spare the rod and spoil the child

Walnuts and Pears You Plant For Your Ears