# An Overview of Security Incidents Targeting Citizen How the Attackers Are Deceiving Us?



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#### **CIRCL**



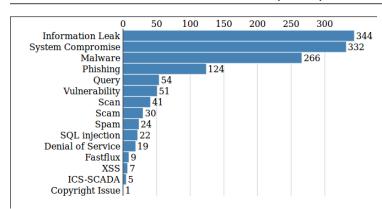
- The Computer Incident Response Center Luxembourg (CIRCL) is a government-driven initiative designed to receive, review, report and respond to computer security threats and incidents.
- CIRCL is like "a fire brigade" which can react when computer security incidents occur.

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#### CIRCL Statistics

- CIRCL started as a fully operational national CSIRT team in October 2010
  - In **2011**, we processed more than **4500** events for the past 12 months
  - More than 220 technical investigations and analysis were conducted in 2011
  - In 2013, we processed 35958 events and conducted more than 1006 technical investigations
- The increase of attacks can be explained by the improved reporting process but also the growing attack surface:
  - More connected equipments and mobile devices
  - o A significant increase of users and web applications

## Type of Incidents in Luxembourg (2013)



- Cybercriminals/attackers often search for direct financial gains using different techniques.
- The support from the victim is often required for the the criminal  ${}_4$  objectives...

## The Attackers Principles

- Principle of shortest or fastest path of attack
- Principle of the cheapest path of attacks
- Principle of the weakest link
- Principle of psychological acceptability

Principles are based on the recurring patterns discovered in the various attacks.

## Phishing or the art of making a website acceptable



image from bitofprevention.com

- Attackers rely on user interfaces complexity
- A common security recommendation: "look for the small lock"
- What's the correct lock? the one of the left? or the one on the right?
- The attacker is able to collect passwords...

### Phishing or the art of making a website acceptable



 Internet browsers try to improve the situation for SSL website
 Is it really an improvement? or

Is it really an improvement? or even more confusion?

If confusion is still there, the attacker is still able to collect passwords...

image from bitofprevention.com

#### Ransomware - Using Fear



#### Ransomware - Using Fear

- The potential victim searches for dubious content.
- The attackers manage compromised server with such content or keywords.
- The attackers compromised the victim accessing the server.
- As the victim is in doubt and fear prosecution, the victim pays the attacker.
- This is a kind of vicious circle for the benefit of the attacker.

#### Do you download the right software?



- A subtile trick, the real Skype URL shown (when you move your mouse over) is different than the fake Skype URL when you click on it.
- Then the victim clicks and download the malicious Skype software.

#### What should I do to limit the risks of such attack?

- Keep your software up to date including browsers and add-ons (e.g. Java, flash, quicktime...)
- Dedicate a browser for your sensitive activities (e.g. web banking or alike)
- Disable unused plugins and use NoScript or similar trusted add-ons in your browser
- Use a bootable CD/USB like tails<sup>1</sup> to access suspicious sources
- Keep an eye on your laptop (e.g. use unique stickers to cover screws) and don't leave it unattended
- Think twice before doing an action on Internet (e.g. open suspicious URLs, inserting USB keys, open document from unknown sources)

https://tails.boum.org/

#### Contact

- Don't hesitate to contact us or report incidents via
- https://www.circl.lu/
- info@circl.lu