

Have I just been hacked!

Tamim Alabdali

Saudi Arabia

Abstract: Have you ever wondered whether your computer was hacked? Can you imagine there is a hacker attack every 39 seconds, according to a study from the University of Maryland. Nowadays, cybercrimes are becoming more and more real and it seems we are all worried about how safe and secure we really are with all the new technology that we have. It can be difficult to know for sure whether you have been owned. Authors of malicious software go to great lengths to disguise their work. However, there are certain signs that may indicate your computer was hacked or has been infected with a virus. It is imperative to be aware of these symptoms and signs to stay safe online.

Keywords: computer, hacker attack, cybercrimes, safe online.

I. INTRODUCTION

The days when we were safe from all kinds of cyber threats are gone. As hackers and cybercriminals become smarter, computers that connect to the internet can face various risks such as being infected with viruses and malware. Computer threats are created by people, not computers. Computer hackers are unauthorized users who hack into your system for different reasons such as stealing or leaking valuable information, destroying your system, blackmailing, or even for the fun of it. Detecting hackers' attacks is not a straightforward task, especially for inexperienced users. This is due to the fact that most computer vulnerabilities can be exploited in numerous ways. Attackers may use a single exploit or several exploits at the same time, a misconfiguration in the operating system or one of the services, or even a backdoor the attackers installed from an earlier attack. This paper sheds some light on the signs and symptoms that your computer was hacked or has been infected with a virus.

II. BODY

The first sign your computer was hacked is when you find that your antivirus software is disabled. Take a look at your antivirus software in computer settings. If things are normal, your antivirus software should be enabled and active. The main red flag that your computer may be compromised is if your antivirus program has been disabled and you never disabled it yourself. Disabling antivirus is usually the first thing that hackers do once they actually get into your system as it will allow them easier access to navigate around your computer and into your information. A typical sign of a virus infection is unexpected onscreen ads. Virus messages are the most common way people get deceived. They click on the message because they are worried, and unfortunately it ends up granting a hacker access to their computers. An example is when the ad asks you to pay for a program to remove a fake virus but in fact it allows more malware to be downloaded to your system. Another sign of compromise is when your system is taking longer than usual to boot up or programs are taking long time to open. If this is the case, check first that it is not due to lack of memory or storage space. If not, it could be a virus. If you ever tried to login with your password and was unable to login due to "password incorrect" error message, and you are sure you typed the correct password, then you might be hacked. Online password suddenly not working is a big sign of compromise. Easy and guessable passwords always play a major role in any hack. Sometimes, online services do not enforce password complexity and they don't challenge users to regularly change their passwords. And for convenience, we tend to pick simple passwords such as mobile numbers, birthdays, street name, etc. In fact, there are common password mistakes that we must avoid such as: using the same password everywhere, using personal information in passwords, sharing passwords with others, storing password in plaintext, and using passwords that are too short. What usually happens when an online account is hacked is that the hacker will change the password to one or more account. So try using the forgot password feature to reset the password. If your email has changed, you will need to

contact the company who is providing the service. Unwanted browser toolbars are another common sign of exploitation. If the toolbar is not coming from a well-known vendor, it's time to remove it. You can easily check active toolbars within your browser. Remove any toolbar you didn't want to install. If you are not sure, remove it. Another sign you have been deeply exploited is when your mouse pointer is moving and making human-like selections without your interaction. If this happens, then it is definitely a malicious third-party controlling your computer remotely and you have been hacked. When you encounter such attack; power off the computer, unhook it from the network, and seek help from an expert. Sometimes mouse pointers move randomly due to hardware problems, though. Another sign is pop-ups. Frequent pop-ups are annoying and everybody hates them. If you normally don't get many pop-ups and all of a sudden you are getting random browser pop-ups from websites that don't normally generate them, it is a good sign your system has been compromised. If you ever observed unexpected software install, this is a big sign your computer has been hacked. If a software is downloading without a warning or without your approval, you need to stop it immediately. Sometimes your computer downloads a regular update such as Flash update or a Microsoft update without telling you first. But if you start getting stuff downloading from random sources without your approval, then without a doubt there is something wrong there. Also, if you notice your browser configuration suddenly changed, it might be a symptom of virus or malware which infected your computer. This includes your homepage changing, a third-party toolbar being added, or your default search engine changing to something you don't want. Another sign is when your friends, family, or coworkers are receiving advertising e-mail from you, then your e-mail may be compromised. Because when an e-mail account is taken over, the attacker often uses that account to spread spam and viruses. So if this happens, log into your e-mail account immediately and change your account password. Finally, a big red flag is when you get redirected to random websites while searching online. If this happens frequently and you get redirected to websites when you didn't intend to go there, this is obviously not safe. In such case, start looking into your settings and see if anything has been changed or if your system has been compromised at all.

III. CONCLUSION

The web world is equally appealing for both adults and children. Be it social media, online games, or reading, we are always hooked onto the internet. And why not? After all, it's a vital tool of modern times that helps almost everyone in so many ways. The prevalence of the internet in our daily lives makes it important for everyone to realize the significance of staying safe online. Therefore, you need to be vigilant and cautions of the common signs and symptoms of your computer being hacked. In case of a breach, it is always best to perform a complete restore of your system, because it is difficult to predict what the bad guy will do and the ways he can hide. As a matter of fact, most malicious hacking originates from one of three attack vectors: running a trojan horse program, having unpatched software, or being a victim of social engineering attack by responding to fake phishing emails. Try your best to prevent these three things, and you will less likely have to rely on the accuracy of your antimalware software.

REFERENCES

- [1] Hackers Attack Every 39 Seconds. (2020, May 24). 2017-02-10 | Security Magazine. <https://www.securitymagazine.com/articles/87787-hackers-attack-every-39-seconds>
- [2] Grimes, R. A. (2019, July 25). 15 signs you've been hacked -- and how to fight back. CSO Online. <https://www.csoonline.com/article/2457873/signs-youve-been-hacked-and-how-to-fight-back.html>
- [3] How to detect a hacker attack. (2013, December 6). Kaspersky IT Encyclopedia. <https://encyclopedia.kaspersky.com/knowledge/how-to-detect-a-hacker-attack/>
- [4] Computer Hope. (2019b, September 3). How do I know if my computer was hacked? <https://www.computerhope.com/issues/ch001296.html>
- [5] Chaos. (2017, August 16). 10 EASY Ways to Know if Your Computer is Being HACKED | Chaos. YouTube. <https://www.youtube.com/watch?v=D4GQgDssRWY>
- [6] Lynn Wright . (2020, February 25). 10 Signs Of A Computer Virus - Technology & Computers. Saga. <https://www.saga.co.uk/magazine/technology/computing/security/10-signs-your-computer-has-a-virus>
- [7] Lal, R. (2019, June 3). The Importance of Staying Safe while Online. ThinkRight.Me. <https://www.thinkright.me/en/live-right/why-is-it-important-to-stay-safe-online/>