

Old Dominion University

CS 462 Cybersecurity Fundamentals

---

Recent Controversies Around Pegasus Spyware

---

Brian Delos Santos

UIN: 01180618

March 20, 2022

## **Introduction**

Pegasus spyware is malware invented by an Israeli surveillance software provider, NSO group. This type of malware primarily infects IOS and Android cell phones and allows hackers full access to their targets cell phone capabilities. According to NSO group's homepage, they "create technology that helps government agencies prevent and investigate terrorism around the globe." (NSO). Even though NSO group claims the products they create are used for anti-terrorism and government agency use, one of their products, Pegasus spyware was found used by Israeli police to spy on their citizens and has even affected companies like Apple and Facebook (What).

## **What is Pegasus Spyware**

Pegasus spyware is malware targeted at cell phones. Once Pegasus spyware is installed on a target's cellphone, the hackers will have root access to the target's device. This means that the hackers can use the device as its owner with no restrictions. Pegasus spyware is especially hard to detect and can even listen in to their targets microphone or activate their camera. What makes this type of malware even worse is how difficult it is to get rid of and that it provides real time access to targets system (What).

According to Bhanukiran, initial forms of Pegasus spyware would be downloaded to targets cellphones through application vulnerabilities or phishing attacks. More modern versions of Pegasus spyware are considered zero-click exploits because it does not require any user action to install. This is what is especially scary when considering the hackers capabilities once it is installed. (Bhanukiran).

## **Recent Scandal**

According to the article, “Israel PM vows action as police Pegasus spying scandal widens” Pegasus spyware was allegedly found to be used by Israeli police to spy on criminals, public figures, and other people of high position (Israel). Even companies like Apple and Facebook have sued NSO group for infecting some of their systems (What). Although there is hard evidence of numerous individuals being targeted by Pegasus spyware, NSO group denies any wrongdoing. They stick to the claim that their products are not supported after sale and not intended for malicious use.

## **Shortcomings of Smartphones**

The discovery of Pegasus spyware has shined a light on a big issue with the security of mobile devices, the applications on them. Besides default applications that are predownloaded on a device before use, user downloaded applications can contain security vulnerabilities that can lead to malware infections like Pegasus spyware. Without considering insecure applications, smart phones are still not secure systems. Smart phone capabilities like Bluetooth and Wi-Fi allow phone companies, governments, or hackers track a phones location. (Bhanukiran).

## **Conclusion**

It is clear that there is a grey area when it comes to commercially sold malware. Companies like NSO group hide behind the branding of government use and antiterrorism to sell malware to non-government entities with no regulation or monitoring of use. NSO group should be held accountable for malicious use of their product and there should be strict regulation around commercially sold cyber weapons such as Pegasus spyware.

## References:

Israel PM vows action as Police Pegasus spying scandal widens. News | Al Jazeera. April 24, 2022, <https://www.aljazeera.com/news/2022/2/7/new-report-alleges-widespread-pegasus-spying-by-israel-police>

“What you need to know about Israeli spyware Pegasus”. Spy Cables News | Al Jazeera. April 23, 2022, <https://www.aljazeera.com/news/2022/2/8/what-you-need-to-know-about-israeli-spyware-pegasus>

Bhanukiran Gurijala, Assistant Professor of Computer Science & Information Systems.

“What is pegasus? A cybersecurity expert explains how the spyware invades phones and what it does when it gets in”. April 23, 2022, <https://theconversation.com/what-is-pegasus-a-cybersecurity-expert-explains-how-the-spyware-invades-phones-and-what-it-does-when-it-gets-in-165382>

Bennett, D. “Pegasus: A cyber security expert explains how the zero-click spyware can hack phones without user interaction”. Pegasus: A cyber security expert explains how spyware can hack phones | BBC Science Focus Magazine. April 23, 2022, <https://www.sciencefocus.com/future-technology/pegasus-a-cyber-security-expert-explains/>

NSO Group - about Us. (n.d.). April 23, 2022, <https://www.nsogroup.com/about-us/>