

Study on Security and Privacy Issues of Mobile Operating Systems Based on Malware Attacks

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Abstract : Nowadays, smartphones and mobile operating systems have been popularly widespread in our daily lives. As people use smartphones, they tend to store more private and essential data on their devices, because of this it is very important to develop more secure mobile operating systems and cloud storage to secure the data. However, several factors can cause security risks in mobile operating systems such as malware, malicious app, phishing attacks, ransomware, and more, all of which can cause a big problem for users as they can access the user's private data. Those problems can cause data loss, financial loss, identity theft, and other serious consequences. Other than that, during the pandemic, people will use their mobile devices more and do all sorts of transactions online, which may lead to more victims of online scams and inexperienced users being the target. With the increase in attacks, researchers have been actively working to develop several countermeasures to enhance the security of operating systems. This study aims to provide an overview of the security and privacy issues in mobile operating systems, identifying the potential risk of operating systems, and the possible solutions. By examining these issues, we want to provide an easy understanding to users and researchers to improve knowledge and develop more secure mobile operating systems.

Keywords : mobile operating system, security, privacy, Malware

Conference Title : ICESET 2023 : International Conference on Education, Science, Engineering and Technology

Conference Location : Kuala Lumpur, Malaysia

Conference Dates : December 04-05, 2023