

Analysis of Practical Guidelines for Mobile Device Security in Indonesia Based on NIST SP 1800-4

Authors : Mardiyansyah Mardiyansyah, Hendrik Maulana, Eka Kurnia Sari, Imam Baehaki, Mohammad Agus Prihandono

Abstract : Mobile device has become a key feature in Indonesian society and the economy, including government and private sector. Enterprises and government agencies already have a concern about mobile device security. However, small and medium enterprises (SME) do not have that sense yet, especially the new startups company. Indonesia has several laws, regulations, and standards for managing security in mobile devices. Currently, Indonesian information security policies have not been harmonized, each government organization and large enterprise has its own rules and policies. It leads to a conflict of interest among government agencies. This will certainly cause ineffectiveness in the implementation of policies. Therefore, an analysis of various government policies, regulations, and standards related to information security, especially on mobile devices, is carried out. This analysis is conducted to map the existing regulatory policies and standards into practical guidelines regarding NIST's information security to show the effectiveness of NIST SP 1800-4 towards existing policies. This work focused on the mapping of the NIST SP 1800-4 framework towards existing regulations, standards, and guidelines in Indonesia. The research approach is literature study to identify existing regulations, standards, and guidelines then the regulation mapped into the NIST SP 1800-4 framework and analyzed whether the framework could be applied to the organization in Indonesia. Finally, the finding and recommendations by documenting the security characteristics can be concluded. Based on the research finding, some of the regulations, standards, and guidelines in Indonesia are relevant to the elements in the NIST SP 1800-4 framework. From mapping analysis, the strength and weakness of mobile device security in Indonesia can be reported. It also can be concluded that the application of NIST SP 1800-4 can improve the effectiveness of mobile device security policies in Indonesia.

Keywords : mobile security, mobile security framework, NIST SP 1800-4, regulations

Conference Title : ICMSST 2020 : International Conference on Mobile Security and Security Threats

Conference Location : Paris, France

Conference Dates : December 28-29, 2020