ABSTRACT

This research focuses on the implementation of *profiling* and analysis of *anonymity* and *privacy* in the Kodachi Linux operating system. This research examines the functionality of technologies such as TOR and VPN implemented in Kodachi Linux to maintain identity confidentiality. The methods used in this research include field testing and analysis of data obtained through various scenarios of system use and depicted on Data Flow Diagrams based on the conditions of *anonymity* and *privacy* enabled or not. Compilation of Data Flow Diagrams based on the *profiling* results on service aspects, such as network, application, and *storage*. The results showed that Kodachi Linux can provide a significant layer of protection against *anonymity* and *privacy*, on network services shown in the network structure with the highest score of 5 meeting all five metrics, but being a limitation when activating *anonymity* and *privacy* features in situations of RAM usage of 40%. In application services, the highest positions are Speeekchat, Pidgin Internet, Onion Share, Kodachi Ghacks Browser: TOR, Kodachi Loaded Browser: TOR, Kodachi Browser with Proxychains: TOR, and TOR Browser with a score of 5 fulfilling all five metrics. Then the encryption application fulfills the highest *anonymity* and *privacy* functions in Veracrypt and Zulucrypt with a score of 5 meeting all five metrics. The highest measurement results on *storage* services use the Nuke System and are non-persistent in implementing *anonymity* and *privacy* functions with a score of 5 meeting all five metrics. The conclusion is that Kodachi Linux realizes the functions of *anonymity* and *privacy* in-network services, applications, and *storage*. However, it becomes a limitation where network services will use RAM so that higher specifications are needed and the *anonymity* and *privacy* functions run optimally. Application services are limited to using applications for *anonymity* and *privacy* functions. Then encryption data security and the Nuke System feature that deletes data quickly and thoroughly when activated show a lack of flexibility in data management.

Keywords: Kodachi Linux, Anonymity, Privacy, TOR, VPN