Problems analysis of Windows drivers verification

N.G. Ershov, N.Yu. Ryazanova

Bauman Moscow State Technical University, Moscow, 105005, Russia

The article is devoted to matters relating to the security of the operating system Windows. It is shown that the kernel-mode drivers, which are used by means of mutual exclusiveness, can be potentially dangerous for the system and cause a system crash. Analyzed are the results of the work included in the system of means of verification Driver Verifier. For the analysis developed by kernel-mode drivers, containing different types of hazards, and carried out the verification. Identify opportunities and formulate practical recommendations for the use of system resources to verify the purpose of detection and elimination of their code of potentially dangerous sites.

Keywords: verifier, system crash, driver, spin-lock, deadlock.

Ershov N.G. (b. 1991), a student of the Software and Information Technologies Department of Bauman Moscow State Technical University. e-mail: yershov.n@mail.ru

Ryazanova N.Yu. (b. 1951), Ph.D., Assoc. Professor of the Software and Information Technologies Department of Bauman Moscow State Technical University. Author of more than 36 publications and is currently interested in building system programming, algorithms of computer graphics. e-mail: ryaz_nu@mail.ru