

# Testing of Utilities for Finding Vulnerabilities in the Machine Code of Telecommunication Devices

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**Abstract—** The article is devoted to the authors' machine code algorithmization utility to find vulnerabilities in telecommunication devices. The utility is compared with its closest analogue – the IDA Pro software and its plug-in – Hex-Rays. The paper presents the key tests that are used for such comparison and the results of software tools operation for them. The formalized outcome of the comparative analysis justifies the advantages of the authors' utility for solving this task.

**Keyword—** vulnerability, machine code, algorithmization, IDA Pro, utility testing



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1. M.V. Buinevich and others. Safety provision of high-security objects of the naval fleet in relation to damage effects in crisis and emergency situations in peacetime./ Under the editorship of the admiral V.S. Vysotskii.– Saint Petersburg: Publishing house ELMOR, 2008.– 300 p.
2. M.V. Buinevich and others. Provision of organizational and technical support of stability of function and safety of general communications network./ Under the general editorship of S.M. Dotsenko.– Saint Petersburg: Publishing house SPbSUT, 2013.– 142 p.



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