Modeling computer networks by the help of OPNet tools^{*}

Attila Kuki

Faculty of Informatics, University of Debrecen, Hungary kuki.attila@inf.unideb.hu

Abstract

The presentation deals with a family of modeling tools concerning physical infocommunication network problems. OPNet offers two free licence tools for academic use. The IT Guru can be used with an individual licence while the Modeler with an organizational licence. In this paper the use of IT Guru will be presented in education and in research, as well. This tool can be used for protocols and problems in each OSI ISO layers. Equipments from different manufacturers can be investigated. The range and the topology of the network under consideration have also a lots of options to choose.

In the modeling process numerous individual and global parameters and statistics can be chosen, the results provided by a discrete event simulation can be displayed as a scalar or a vector panel, there is a lot of output options, and the graphs of different scenarios can be compared easily.

At the end of the presentation the limitations of IT Guru and the additional features of Modeler are shown.

Keywords: computer networks, modeling, tools

MSC: 81T80

References

- [1] ADIL NAZIR MALIK, Modeling and Simulation of Computer Network Using OPNET, LAP LAMBERT Academic Publishing, 2012.
- [2] SETHI, A.S., HNATYSHIN, V.Y, The Practical OPNET User Guide for Computer Network Simulation, Chapman and Hall/CRC, 2012.

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