

Wireless IP Simulation using OPNET Modeler

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ABSTRACT

Modern communication protocols cannot be efficiently evaluated without a sophisticated simulation tool. Particularly the network effects on IP based applications should be simulated with the whole protocol stack especially because of the TCP protocol, which is very dynamic and susceptible to the network resources changes. OPNET Modeler is a tool that supports specification, modeling and simulation of communication protocols and networks. One of the most important reasons to use OPNET Modeler is its comprehensive support of existing protocols, which can also be modified. The paper presents how the OPNET Modeler can be used for the simulation of the broadband wireless access system based on IP technology. In this scenario the existing as well as self-developed models have been used.

KEY WORDS: OPNET simulation, wireless IP, broadband wireless access