Abstract

Simulation software plays a vital role in real-world implementation. Practically hardware setup of network topologies is very costly and strenuous to modify often. Hence various simulators act as the prototype of the real system. These days a wide range of network simulators are accessible, some of them are committed to the wired network, some of them to the wireless network or some dedicated to both type of networks. There are many simulators available such as Ns-2, Ns-3, OMNeT++, NetSim, J-SIM, REAL, OPNET, OMNEST, QualNet, GloMoSim, TOSSIM, DRMSim, TraNS, NTCUns etc. Out of these varieties of simulators, it is difficult for one to select network simulator based on the requirement for a specific job. The following paper provides comparison based analysis of various network simulators. Simulators taken into consideration are Ns-2, Ns-3, OMNeT++, NetSim, REAL, OPNET and QualNet. Information about simulators such as features, advantages, disadvantages, backend environment, the supporting operating system, and minimum hardware requirement is discussed in the following paper. So based on above-mentioned information and analysis, one can make choice of an appropriate network simulator based on the requirements.
References

6. Xiaodong Xian, Weiren Shi and He Huang, Comparison of OMNET++ and Other Simulator for WSN Simulation, 3rd IEEE Conference on Industrial Electronics and Applications 2008 on 3-5 june.

Index Terms

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Keywords
Simulation, Network Simulator, Simulators comparison, OMNeT++, Ns-2, Ns-3, REAL, NetSim, OPNET, QualNet, Event driven, GUI support.