Overview on Network Simulation Tool

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Abstract. Conducting a study of a network in the real world is very difficult. This is because in the network there are various network devices, routers, compilers, and data links to authenticate and confirm certain network protocols. It also involves certain network algorithms that require a large amount of time and cost. Simulators can help network developers to check whether the networks work properly in the real world. Therefore, time and cost to test network functions can be reduced and the implementation becomes easy. The network simulator is also very useful especially in testing a new network protocol or to change it. The existing protocol is in a controlled and manageable way. This paper discusses different types of network simulators and discusses the main features of each simulator including its advantages and disadvantages. The results of this study are expected to help network developers in choosing the right network simulator for them.

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