Abstract

In this dissertation work, we used the Cisco Packet Tracer software simulator. This simulator is beneficial for students, teachers and network engineers to analyze and implement a VLSM network, providing all data they need, in a fast and easy way. Subnet masks (VLSM), often referred to as "internal network", were used in order to improve the convenience of internal networks and the effectiveness of VLSM was demonstrated by analytic diagrams. The performance score was based on an analysis of a simulated virtual network. Programmable network control technology was used for simulation.