Abstract

The mechanism of resource allocation plays a vital role in maximizing the network utilization and serving the requesting nodes. This idea can be effectively demonstrated using the concept of network virtualization. Through Network virtualization an environment conducive to perform tests using similar network conditions, applications and dependencies can be created to ease and enhance implementation of network elements in a topology. One important challenge on network virtualization is the efficient use of the physical resources. To accomplish such efficient use the management of the physical resources should be transparent to the applications running within the virtual networks. In this paper we use directed graph to simulate the network and to reallocate virtual network resources along different physical nodes in order to understand the dynamics of resource allocation. The system generates analytical results through graph plotting and statistical analysis of network parameters.
Realization of Resource Allocation using Centralized Approach by Means of Directed Graph

- http://www.omnetpp.com
- http://canu.informatik.uni-stuttgart.de/mobisim.

Index Terms

Computer Science

Algorithms

Keywords

Resource allocation  Network Virtualization  directed graph