

Simulation of TCP and UDP

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Abstract

The report shows great promise for users who suffer from wasting time in searching. Unfortunately, there isn't enough research that looks at the increase in academic performance due to searching. This project will attempt to design networks in Network Simulators 2 (NS2) mathematical calculations that can be used in NS2 Ubuntu Program and will attempt to answer the following question: Will using NS2 in conjunction with an academic networks (catered towards students in classroom) result in improvements in academic performance in the classroom? This paper will show many types of networks using nodes through links between them.

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protocols and networks in use today, such as WLAN, UDP, TCP, IP, WAN, etc. Technology is becoming an essential part of our lives. People all over the world use multimedia every day in order to communicate in their daily lives like in home, school, business offices, etc. In this project the focus is to let the user take an advantage from the multimedia without facing annoying congestion which is the more data in the multimedia cause it. It will allow studying different multimedia and data scenarios. The idea is to make the multimedia providing better quality of performance.

nearly tenfold increase in global wireless traffic between 2014 and 2019, requires INVESTMENT in expanding wired and wireless network capacities (such as additional spectrum, Wi-Fi hotspots for offloading data traffic, backhauling infrastructure, and newer technologies like 4G/LTE). The benefits of this capacity expansion are partly accrued by the content providers who attract more advertising and e-commerce revenue from greater user demand while further driving demand for bandwidth".

1) Models not created yet so the sound takes more time to reach from the mouth to the ear, recently by the early 2000s these models were driven electrically. In this project.

2) Voice traffic problem and data traffic problem which is solvent by many things, one of these things is the internet when it's come in the world, the

I. INTRODUCTION

Network simulators are tools used to simulate discrete events in a network and which helps to predict the behaviors of a computer network.

Generally the simulated networks have entities like links, switches, hubs, applications, etc. Once the simulation model is complete, it is executed to analyses the performance. Administrators can then customize the simulator to suit their needs. Network simulators typically come with support for the most popular

II. LITERATURE REVIEW:

An article written by JSoumyaSen, Carlee Joe-Wong, Sangtae Ha, was under the title (Smart Data Pricing: Using Economics to Manage Network Congestion). This article studied the effect on data that will face the user, also these authors said "data traffic driven by increasing demand for smart devices, bandwidth-hungry applications, cloud-based services, machine-to-machine traffic, and media rich Web content. This explosive growth, which Cisco's visual networking index projects will cause a

III. METHODOLOGY:

Normally at the past the audio calls were so low in delivering because there is main things in the audio should be exist so the audio can work professionally and these things was not available in the past but after the researchers found them the audio become better than before, these main things are:

a network software emulator first released in 2008.[1] It allows the combination of virtual and real devices, used to simulate complex networks. It uses Dynamips emulation software to simulate Cisco IOS.GNS3 is used by many large companies

including Exxon, Walmart, AT&T and NASA, and is also popular for preparation of network professional certification exams.

Mininet: Mininet is a network emulator which creates a network of virtual hosts, switches, controllers, and links. Mininet hosts run standard Linux network software, and its switches support OpenFlow for highly flexible custom routing and Software-Defined Networking.

Mininet supports research, development, learning, prototyping, testing, debugging, and any other tasks that could benefit from having a complete experimental network on a laptop or other PC.

Netkit is an environment for setting up and performing networking experiments at low cost and with little effort. It allows to "create" several virtual network devices (full-fledged routers, switches, computers, etc.) that can be easily interconnected in order to form a network on a single PC. Networking equipment are virtual but feature many of the characteristics of the real ones, including the configuration interface.Ns2: Ns is a discrete event simulator targeted at networking research.Ns provides substantial support for simulation of TCP, routing, andmulticast protocols over wired and wireless (local and satellite)networks. Installation of NS2 will have a result like the following

internet in the project contact with the gate ways to reach the nodes so two devices can contact with each other using the audio call.

Linux OS: The defining component of Linux is the Linux kernel, an operating system kernel first released on 5 October 1991 by Linus Torvalds. The Free Software Foundation uses the name GNU/Linux to describe the operating system, which has led to some controversy.

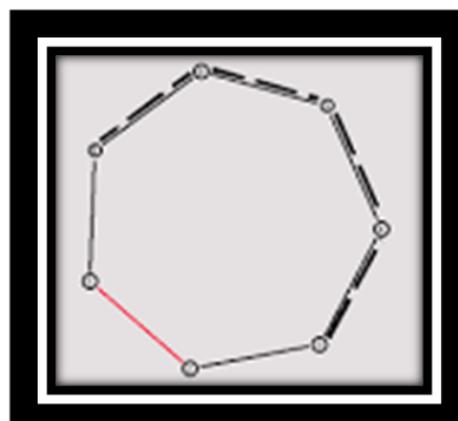
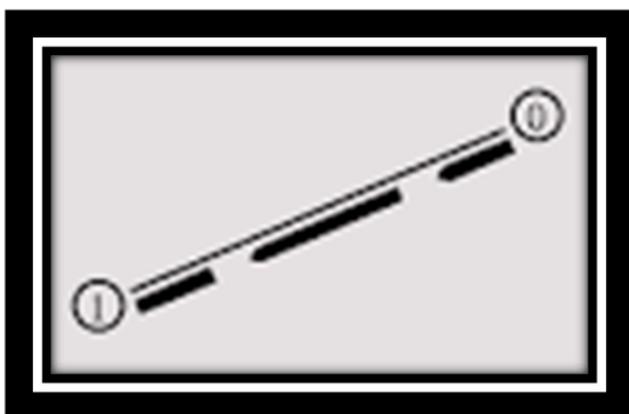
Ubuntu: Ubuntu (pronounced oo-BOON-too) is an open sourceDebian-based Linux distribution. +Sponsored by Canonical Ltd., Ubuntu is considered a good distribution for beginners.

The operating system was intended primarily for personal computers (PCs) but it can also be used on servers. The word "ubuntu" is from the African Zulu language and translates as "humanity to others." FIRST, Using a DVD? Put the Ubuntu DVD into the DVD-drive and restart the computer. FIRST, Choose your preferred language and click on 'Try Ubuntu'. Click to enlarge. SECONED, Your live desktop should appear. THIRD, When you're ready to install Ubuntu, double-click on the icon on your desktop: 'Install Ubuntu 14.04 LTS'.

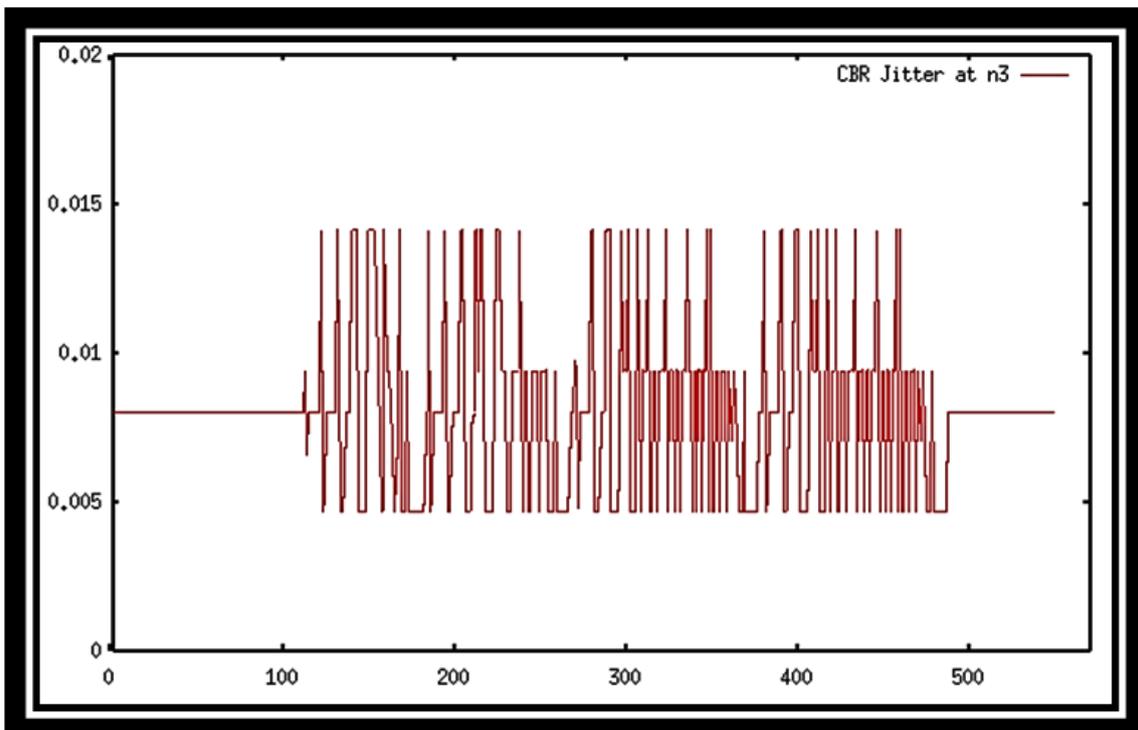
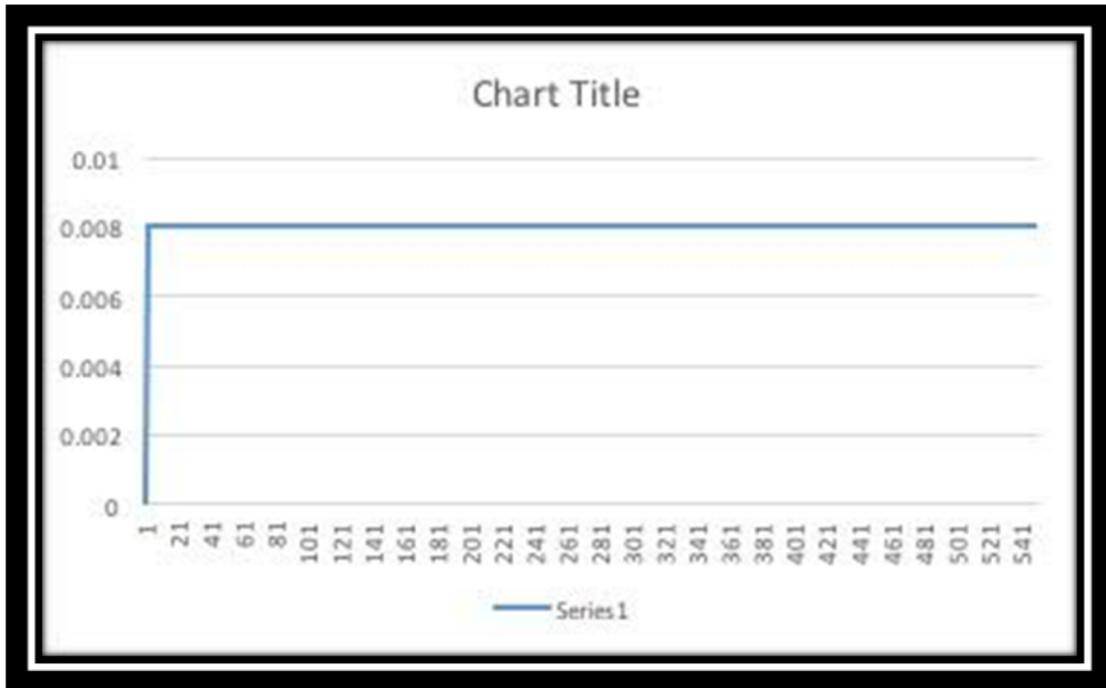
Open source network simulator

1- Cloonix: The Cloonix package provides modified versions of networking tools and virtual machine management tools, so one does not need to install a lot of supporting software. The developers also provide file systems for Linux distributions such as Debian and Vyatta (a Linux router) that can be used in the simulations.

GNS3: Graphical Network Simulator-3 is



IV. RESULTS



about networks with its types TCP and UDP. Overall, the result in-depth study for the scripts was presented in this report. The types of the networks which showed is so complex as these

V. CONCLUSION

After reaching more knowledge about Linux and scripts in the companies of these days, I presented the best information which is in details

explanation for finding the data analysis that is proven to have a better advantage for the user like from the moth to the ear directly without annoy. It would also be useful to compare the data analysis between yesterday and today.

Difficulties faced” The programs need enough empty space in the lab top. Every task takes minimum one week in order to finish it.

days we see data analysis However, the programs needed a small modification to drastically change its complex time. The dataanalysis was proved to work correctly and was proved by computer science induction. The strength of this report in its steps where theuser has only to follow the steps to open the program so it's direct.

Future Work: A good recommendation for a future study would be to present a thorough

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