ABSTRACT ON

"CAMPUS NETWORK"

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TITLE: " CAMPUS NEWORK"

ABSTRACT:

This project is to design a suitable network system for universities, school, and colleges in developing countries. The aim was to design a network with high security. The advantages of networking can be seen clearly in terms of efficiency, security, manageability and cost as it allows collaboration between users in a wide area. To improve college campus network design, the technology used was creating LAN, WLAN and cheap device to reduce cost of the network. But the network can also become better using routing protocols and other protocol. So, we are going to use such protocols using less number of devices and will also maintain the cost of the network less. To design such network, we are going to use software "Cisco-Packet Tracer".

Networking is referred as connecting computers electronically for the purpose of sharing information. The aim was to design a network with high security. Resources such as a file, application, printers & software are some common information shared in a networking. The Switches and Router this device that play an important role in data transfer from one place to another using different technology such as a radio waves & wire. LAN is a Local Area network which is made up of two or more computers connected together in a short distance usually at home, offices buildings or school. WAN is a Wide Area network that covers wider area than LAN and usually covers cities, countries and the whole world.

Technologies Implemented:

- Creating a network topology using Cisco Packet Tracer.
- Hierarchical Network Design.
- Connecting Networking devices with Correct cabling.
- Creating VLANs and assigning ports VLAN numbers.
- Subnetting and IP Addressing.
- Configuring Inter-VLAN Routing
- Configuring DHCP Server.
- Configuring SSH for secure Remote access.
- Configuring IPv2 as the routing protocol.
- Configuring Port-Security on the switches.
- Host Device Configurations.
- Test and Verifying Network Communication.