**Project Title**: VLAN (Virtual Local Area Network design and implementation)

**Description**:

The Local Area Network (LAN) is widely used because a large number of applications imply some user in the same broadcast domain. There is kind of LAN named virtual LAN (VLAN), in this sort of network a group of hosts with a set of common requirements provides communication. It is important to emphasize that the group of hosts should be in the same broadcast domain, despite the same place.

The limited access to a network protects information and reduces the navigation in undesirable sites. The users normally want to waste time in web pages like news, sports, and games. This project has the following structure: the section two is dedicated to analyze the features of the designed and implemented VLAN, the section three describes the solution, the main results obtained are shown in the section four, and finally, the conclusions are in the section five.

A VLAN is a set of LAN stations that are connected by software. As consequence, a VLAN does not require a physical link, besides these stations can be in different locations. It is clear that a VLAN has the same attributes than a physical LAN. The users are not involved in VLAN, but many companies are interested in these technologies. For example, there are many ways to configure the network. In initial, physical architecture of the network to be designed and implemented. The security level was the most important feature in the design and implementation of the VLAN presented in our project. The most important features of the VLAN are: internet access only for company operation, real time user monitoring, limited navigation and privacy. In this paper, the design and implementation of policy based VLAN was carried out. The main goals were: to optimize the network resources, to give security and to provide a real-time users monitoring, in order to avoid time wasting. The most important results were a lot of plots that indicate the user navigation and the information transferred by them. As a result of this work, the solution implemented can be changed according to current organization requirements. This is especially useful, because the workstations can be easily relocated if necessary.

**Technologies:** VLAN, LAN, IP addressing scheme**.**

**Team Size**:

R.V.S.Soundarya

2. M.Yagna

3. P.Mounica lakshmi

4. M.N.V.Vara lakshmi