 146175 Concept note

**Network monitoring using SNMP to ensure network availability and security.**

The network is a critical backbone of IT and with networks becoming large and complex, it is becoming quite challenging to manage them. This in turn gives network administrators a very difficult time in their workstations. A single failure can take so much time, which could be used to make improvements and increase the overall performance of the network.  A failure in the network can also cause the unavailability of services which can result in losses and inconveniences given the wide adoption of IT in business.

Therefore, a proposed solution to this problem is a network monitoring system that enables the administrator to be able to have all the information about the network including IP addresses of all the devices, their performance as well as the traffic information. The administrator can then receive notifications in case there is an abnormality. the project is seeking to implement a network monitoring tool which looks into the IP traffic to be able to discover unauthorized or malicious IP addresses.

The project will be using tools such as Nagios and SNMP to perform network monitoring. posfix and davcot will be used to set up an email server.