## Mash network in an academic campus

## Pei Ping Белорусский национальный технический университет

The wireless network is a large network in an academic campus. The traditional cabling wiring can not be satisfied with new demand networking. So it is necessary to consider the issue to choose a new network scheme for the entire network system for effective security management.

There are some university campus have installed wireless networking already, however is does not stand for successful using in campus. The main problems from: 1. basically, the coverage from outside is not useful. 2. The signal is not stable, the user always disconnect from internet. 3. It is difficult to manage the users.

In traditional way to solve these problems is install AP point at high density. Using Mesh networking to build network could provide high quality coverage in outdoor with indoor.

Mesh network has special topology to suitable for rapid deployment. It has a few of wireless AP (access point) to constitute Mesh structure. AP connected with each other by repeater, fig.1.

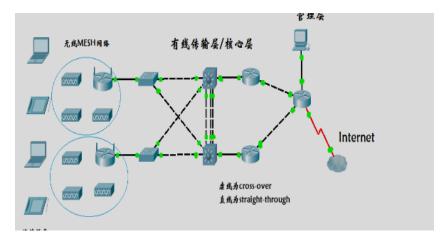


Fig. 1. - University campus Mesh network structure

The benefit in the mesh network structure: 1. self – organization. 2. Self – healing. 3. Multi – hop 4. Point to point topology. Thus, the hug university campus and public area propitious to structure a mesh network in real life.