

Mash network in an academic campus

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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 that have installed wireless networking already, however it does not stand for successful using in campus. The main problems are: 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 an access point (AP) 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 to constitute Mesh structure. AP connected with each other by repeater, Fig.1.

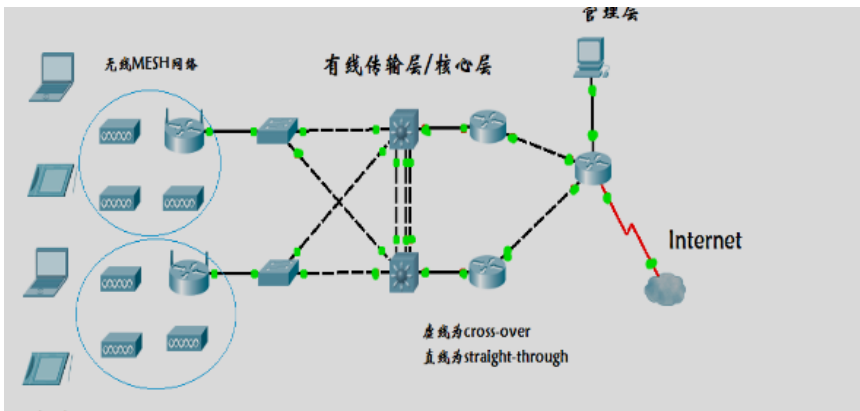


Fig. 1. University campus Mesh network structure.

The benefits in the Mesh network structure are: 1) self-organization; 2) self-healing; 3) multi-hop; 4) point to point topology. Thus, the huge university campus and public area propitious to structure a mesh network in real life.