

Wireless Networks and Security

6.1 Wireless networks

Wireless networks are computer networks that are not connected by cables 电缆 of any kind. Wireless networks use radio waves to connect devices such as laptops to the Internet.

- wireless hosts
- wireless links
- base station 基站

A base station is responsible for sending and receiving data (e.g., packets) to and from a wireless host.

wireless networks 分类:

- **LAN** Local Area Network (本地) 局域网
- **MAN** Metropolitan Area Networks 城域网
- **WAN** Wide Area Network 广域网
- **PAN** Personal Area Network 个人局域网

6.2 Security

- Firewall

A firewall is a combination of hardware and software that isolates an organization's internal network from the Internet at large, allowing some packets to pass and blocking others.

All traffic from outside to inside, and vice versa, passes through the firewall.

Firewall placement between the administered network and the outside world.

安全

- Access Control 访问控制
- Antivirus Software: 杀毒软件
- Cloud Security 云安全

病毒

- Virus 病毒
- Worms 蠕虫
- Trojan 木马

密码 Cryptographic

- Symmetric Key Cryptographic 对称密钥加密 **SKC**
- Public Key Cryptographic 公钥加密 **PKC**

6.4 Mobility management 移动管理

None

6.5 Mobile IP 移动IP

Mobile IP: (internet protocol)

Mobile IP is a communication protocol that allows the users to move from one network to another with the same IP address.

移动IP是一种允许用户使用相同IP地址从一个网络移动到另一个网络的通信协议。

- Agent discovery 代理发现
- Registration with the home agent 向本地代理注册
- Indirect routing of datagrams 数据报的间接路由