SNS COLLEGE OF TECHNOLOGY

(Autonomous)
COIMBATORE – 35

DEPARTMENT OF COMPUTER SIENCE AND ENGINEERING (UG & PG)

Third Year Computer Science and Engineering, 5th Semester

UNIT III - CYBERCRIME: MOBILE AND WIRELESS DEVICES

Topic Name : **Authentication service Security**

There are two components of security in mobile computing: security of devices and security in networks. A secure network access involves authentication between the device and the base stations or Web servers. This is to ensure that only authenticated devices can be connected to the network for obtaining the requested services. No Malicious Code can impersonate the service provider to trick the device into doing something it does not mean to. Thus, the networks also play a crucial role in security of mobile devices.

Some eminent kinds of attacks to which mobile devices are subjected to are: push attacks, pull attacks and crash attacks.Authentication services security is important given the typical attacks on mobile devices through wireless networks: Dos attacks, traffic analysis, eavesdropping, man-in-the-middle attacks and session hijacking. Security measures in this scenario come from Wireless Application Protocols (WAPs), use of VPNs, media access control (MAC) address filtering and development in 802.xx standards.

Modern computer systems provide service to multiple users and require the ability to accurately identify the user making a request.Password based authentication is not suitable for use on computer network – as it can be easily intercepted by the eavesdropper to impersonate the user.

There are 2 components of security in mobile computing:

Security of Devices

A secure network access involves mutual authentication between the device and the base station or web servers. So that authenticated devices can be connected to the network to get requested services. In this regard Authentication Service Security is important due to typical attacks on mobile devices through WAN:

- DoS attacks
- Traffic analysis
- Eavesdropping
- Man-in-the-middle attacks

Security in network

Security measures in this regard come from,

- o Wireless Application Protocol (WAP)
- o Use of Virtual Private Networks (VPN)
- o MAC address filtering