## **4.5 Mobile Device Security**

- Mobile devices have become an essential element for organizations as part of the overall network infrastructure
- Prior to the widespread use of smartphones, network security was based upon clearly defined perimeters that separated trusted internal networks from the untrusted Internet
- Due to massive changes, an organization's networks must now accommodate:
  - Growing use of new devices
  - Cloud-based applications
  - De-perimeterization
  - External business requirements

## **Security Threats**

- Lack of physical security controls
- Use of untrusted mobile devices
- Use of untrusted Networks
- Use of untrusted Content
- Use of applications created by unknown parties
- Interaction with other systems
- Use of location services

## MOBILE DEVICE SECURITY ELEMENTS

- Mobile device Configuration Server
  - Mobile device is configured with security mechanisms and parameters to confirm to organization security policy
- Application/ DB server
- Authentication/ Access Control Server
  - Used to verify device and user and establish limits on access
- Firewall

Mobile traffic is encrypted using SSL or IPSEC

## **Mobile Device Security Elements**

