

Wireless Security



- WiFi coverage can leak outside the desired area
- End stations do not need physical access to join the network
- This can make it more vulnerable to attack
- Strong authentication and encryption techniques should be used

Wireless Security Standards

- **WEP** Wired Equivalent Privacy (1999) – RC4 encryption
- **WPA** WiFi Protected Access (2003) – RC4 encryption, TKIP
Temporal Key Integrity Protocol
- **WPA2** (2004) – AES encryption, CCMP Counter Cipher Mode with
Block Chaining Message Authentication Code protocol
- **WPA3** (2018) – AES encryption, CCMP, protection against KRACK
attack

WPA Personal and WPA Enterprise



- **WPA Personal** uses pre-shared keys (PSKs)
- **WPA Enterprise** uses a AAA server

