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## BLUETOOTH

- ★ Bluetooth is a wireless technology standard used for exchanging data between fixed and mobile devices over short distances using short-wavelength UHF radio waves in the ISM radio bands, from 2.400 to 2.485 GHz, and building personal area networks (PANs).
- ★ It was originally conceived as a wireless alternative to RS-232 data cables.
- ★ Bluetooth is a wireless technology named after Harald Bluetooth, based on an analogy that Bluetooth technology would unite devices the way Harald Bluetooth united the tribes of Denmark into a single kingdom.

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## BLUETOOTH

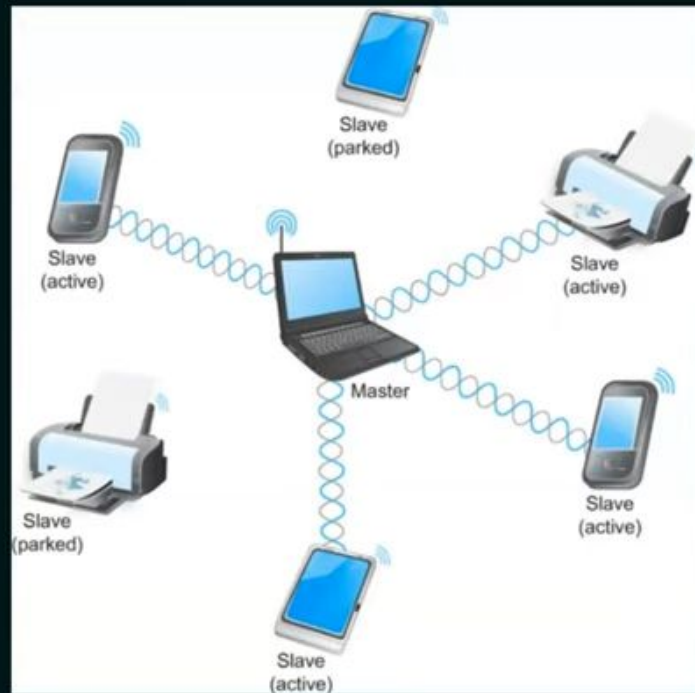
- ★ Bluetooth is specified by an industry consortium called the Bluetooth Special Interest Group.
- ★ It specifies an entire suite of protocols, going beyond the link layer to define application protocols, which it calls profiles, for a range of applications.
  - There is a profile for synchronizing a PDA with personal computer.
  - Another profile gives a mobile computer access to a wired LAN.
- ★ The basic Bluetooth network configuration is called a **piconet**.
  - Consists of a master device and up to seven slave devices.
  - Any communication is between the master and a slave.
  - The slaves do not communicate directly with each other.

- A slave can be parked: set to an inactive, low-power state.

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## AN EXAMPLE BLUETOOTH PICONET



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Collection of PICONETs is called SCATTERNET

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## PROS

- ★ Low cost.
- ★ Easy to use.
- ★ It can also penetrate through walls.
- ★ It creates an ad-hoc connection immediately without any

wires.

- ★ It is used for voice and data transfer.

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## CONS

- ★ It can be hacked and hence, less secure.
- ★ It has slow data transfer rate.
- ★ It has small range: 10 meters.

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## BLUESNARFING

- ★ Bluesnarfing is the unauthorized access of information from a wireless device through a Bluetooth connection, often between phones, desktops, laptops and PDAs.

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- ★ This allows access to calendars, contact lists, emails and text messages, and on some phones, users can copy pictures and private videos.
- ★ Bluesnarfing is the theft of information from the target device.