Infrastructure based WLAN

Mobile and Satellite Communication PPT

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Infrastructure WLAN

- An infrastructure WLAN offers a means to extend a wired network.
- In this configuration, one or more **access points** interface **wireless mobile devices** to the distribution system. Each access point forms a **radio cell**, also called a **basic service set (BSS)**, which enables wireless users located within the cell to connect to the access point.
- This allows users to communicate with other wireless users, as well as with servers and network applications connecting to the distribution system.
- Most companies, public hotspots, and homeowners implement infrastructure WLANs.

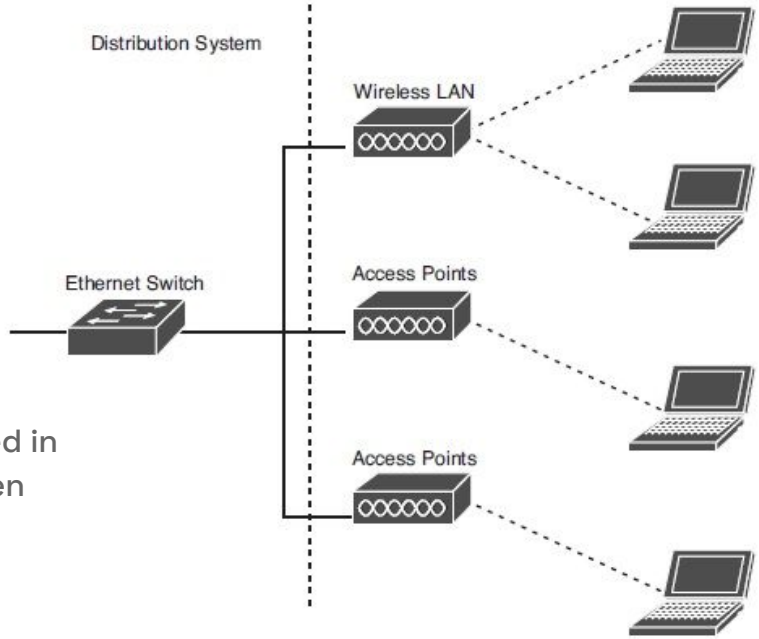
WLAN Architecture

Infrastructure WLAN Architecture consists of :

- Ethernet Switch
- Access Points
- Wireless Mobile Devices

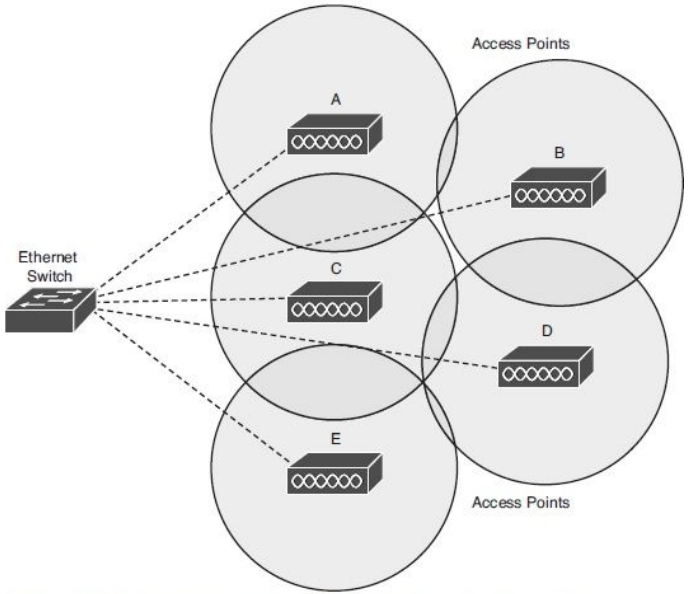
The device Access Point is like base station used in cellular system. All the communications between stations will go through Access Point.

Access point is basically like a router.



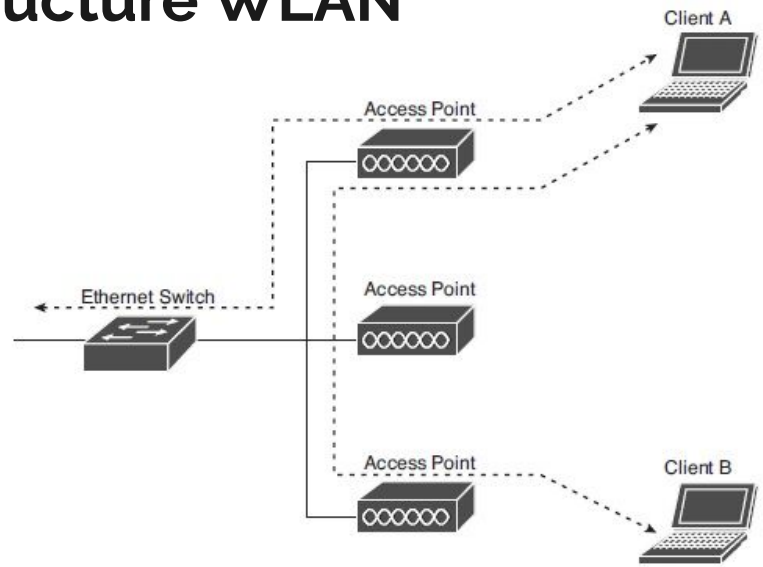
Overlapping of Access Points

- Access points are installed with overlapping radio cells so users can roam throughout the facility without any noticeable loss of connectivity.
- The radio card within the user's mobile device will automatically re-associate with access points having stronger signals.



Flow of Data through Infrastructure WLAN

- In infrastructure WLANs, data transmissions do not occur directly between the wireless clients.
- Data traffic going from one wireless user to another user must travel through an access point
- The access point receives the data traffic going from client A to client B, for example, and retransmits the data to client B.



References

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Thank you !