

CS551

Wireless and Mobile Networking

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How Is Wireless & Mobile Different From Traditional Networking?



Wireless

- = cellular vs. ad hoc
- = transmission media is air
 - interference from other radios and obstacles
 - ⇒ much less reliable
 - higher error rates
 - mitigated by physical level work (coding)
- = not everyone can hear each other
- = slower speed than traditional (limited spectrum)
- = security
 - network may not trust users
 - users may not trust network



How Is Wireless & Mobile Different From Traditional Networking? (Cont...)



Mobile

- = location change \Rightarrow routing needs to change
 - what basestation are you talking to
- = limited energy (battery)
- = scaling may not be as important
 - scaling in ad hoc network is open research
- = security, again
 - network may not trust users
 - users may not trust network

