

FMAC/CSR: a Fair MAC Protocol for Wireless Ad-hoc Networks

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Unfairness

Based on the length of time the system is observed

- Short-term fairness \Rightarrow long-term fairness
- Short-term unfairness \Rightarrow long-term unfairness

Goal is short-term fairness

Current Protocol

IEEE 802.11

Distributed Coordination Function (DCF)

- 2-way handshake (data/ACK)
- 4-way handshake (RTS/CTS/data/SCK)

Assume 4-way handshake to cope with
common hidden-terminal problems