

LAB 2 (Sim2) {January 12, 2012}

8 points

Wireless Local Area Network

Medium Access Control for Wirelessly Connected Stations

Due: Friday, March 23, 2012 at 5 p.m.

Objective

This lab reinforces details in the IEEE802.11 protocol and includes wireless performance metrics.

Details

Lab 2 directs that you create four duplicate scenarios: DCF, DCF_FRAG, DCF_PCF, and DCF_PCF_FRAG. For this CS513/ECE506 assignment you are to **replace** the DCF_PCF_FRAG scenario with a DCF_RTS scenario to study the impact of RTS/CTS on IEEE802.11 performance.

In addition to the five statistics chosen as results on page 14, select also the statistic **Dropped Data Packets (packets/sec)** for all four scenarios.

Complete exercises 1-3 and 5. Namely you should skip exercise 4. Instead include the analysis of the DCF_RTS scenario in exercises 2, 3 and 5. Replace exercise 4 with the following:

4. Analyze the graph that compares **Dropped Data Packets (packets/sec)** for the four scenarios.