



UCL Department of Computer Science
CS M038/GZ06: Mobile and Cloud Computing
Spring 2014
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One-pager: Maranello (Han *et al.*, 2010)

Due: Start of lecture, 28th February 2014

*Instructions: **in your own words**, answer the following questions as **succinctly** as possible (in 200–500 words total, but shorter answers within this range are encouraged). Quoting figures or text from the assigned reading or from any other source is specifically prohibited.*

In the experimental evaluation of Maranello on a Linksys wireless router with two clients (named “A” and “B”) uploading to the router, the authors observe an unexpected performance result. Relative to baseline performance where both A and B run unmodified 802.11, enabling Maranello on client B results in a significant throughput increase *for client A*, while enabling Maranello on client A results in a small throughput increase *for client B*.

The authors offer no explanation for this phenomenon. What is one possible explanation?

Hint: Recall from your reading of the paper that Maranello stations adapt their transmission contention windows in exactly the same way as 802.11 stations.