

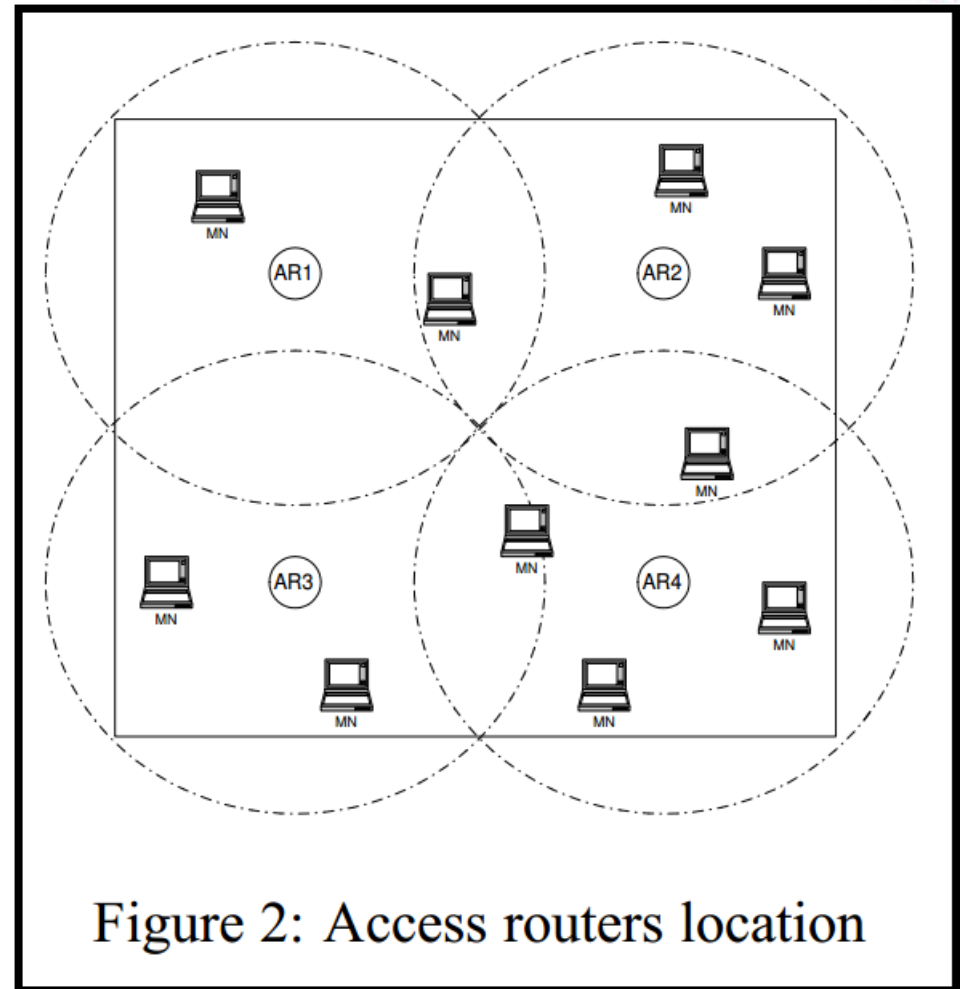
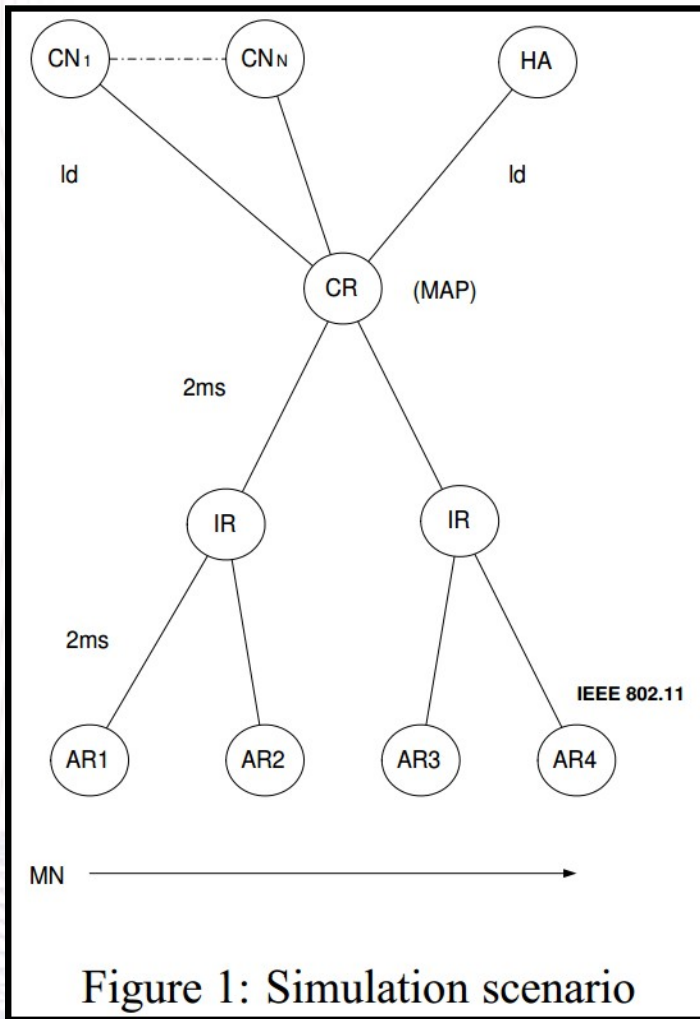
FMIP vs HMIP

An ultraquick look at:

«A Performance Comparison of Mobile IPv6, Hierarchical Mobile IPv6, Fast Handovers for Mobile IPv6 and their Combination» (Xavier Perez-Costa, Marc Torrent-Moreno, Hannes Hartenstein)

by Dag Ove Eggum

Simulation Setup



Simulation Setup (HMIP)

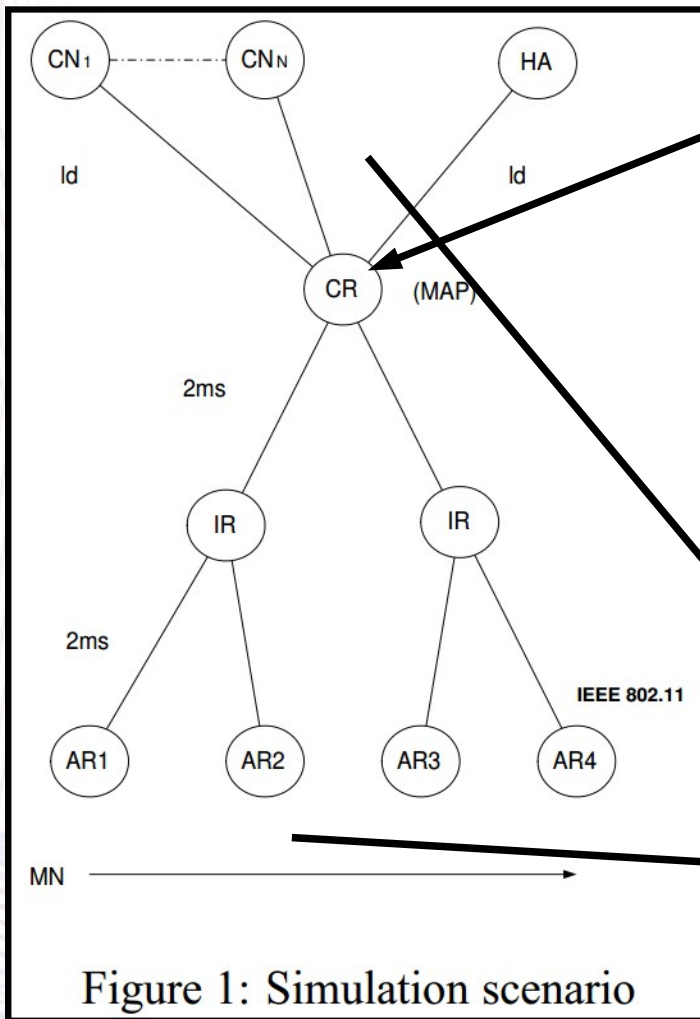


Figure 1: Simulation scenario

- Mobility Anchor Point
- Within the micro-mobility domain each wired connection is modeled as a 5Mbps duplex link with 2ms delay
- Micro-mobility domain

Handover Latency Results

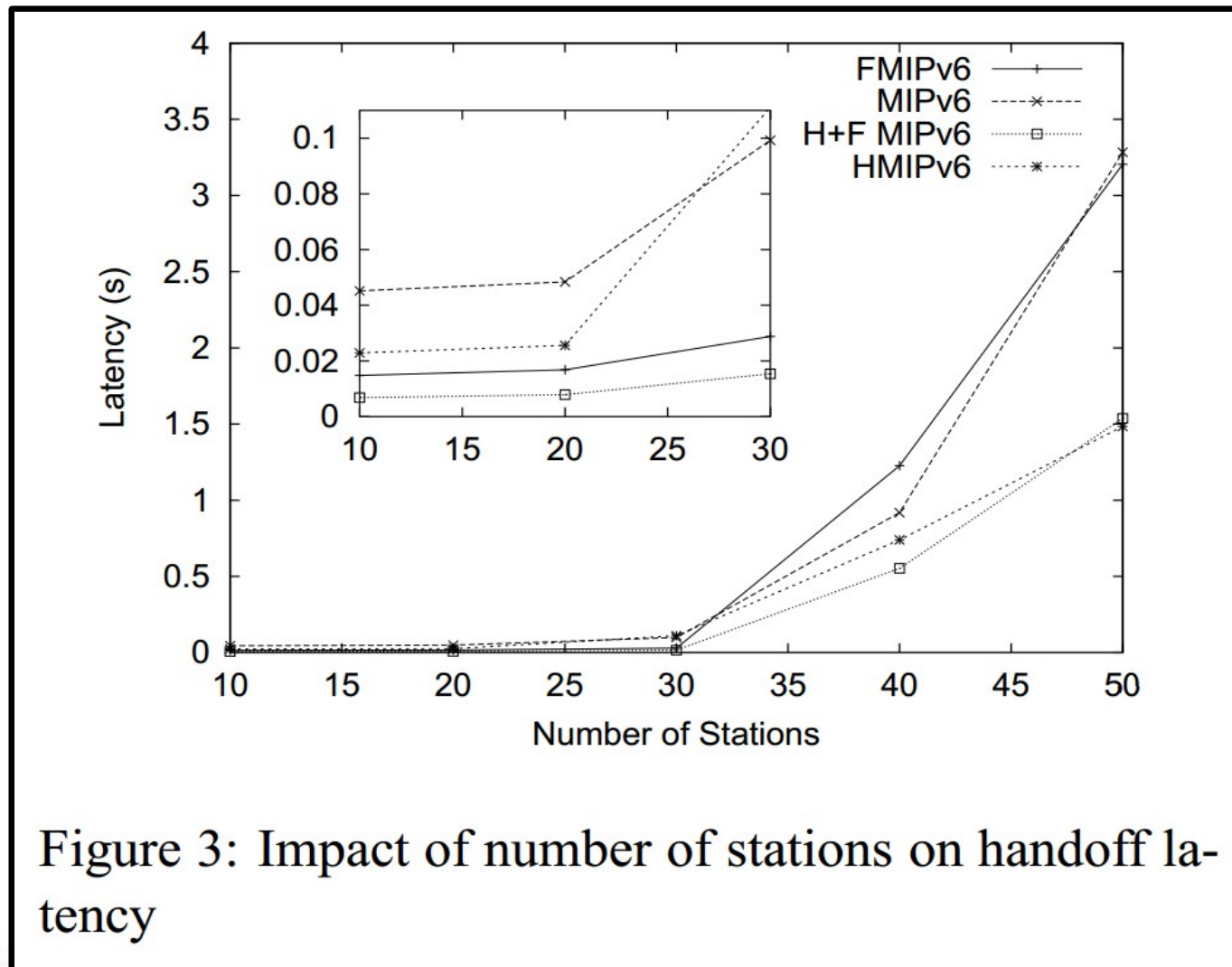


Figure 3: Impact of number of stations on handoff latency

Handover Latency Results

- HMIPv6 latency outperforms standard MIPv6 one since the wired 'distance' in order to update the entity that forwards packets to the mobile node is always shorter.
- FMIPv6 outperforms standard HMIPv6, since the MN prepares the handoff in advance and thus, after a handoff, does not have to wait for the oAR to be updated to start receiving packets again.
- H+F MIPv6 performs better than all the other solutions since when the MN receives the F-BACK from the MAP indicating that the handoff should be performed, the re-directed packets are already waiting in the new AR.

Packet Losses Results

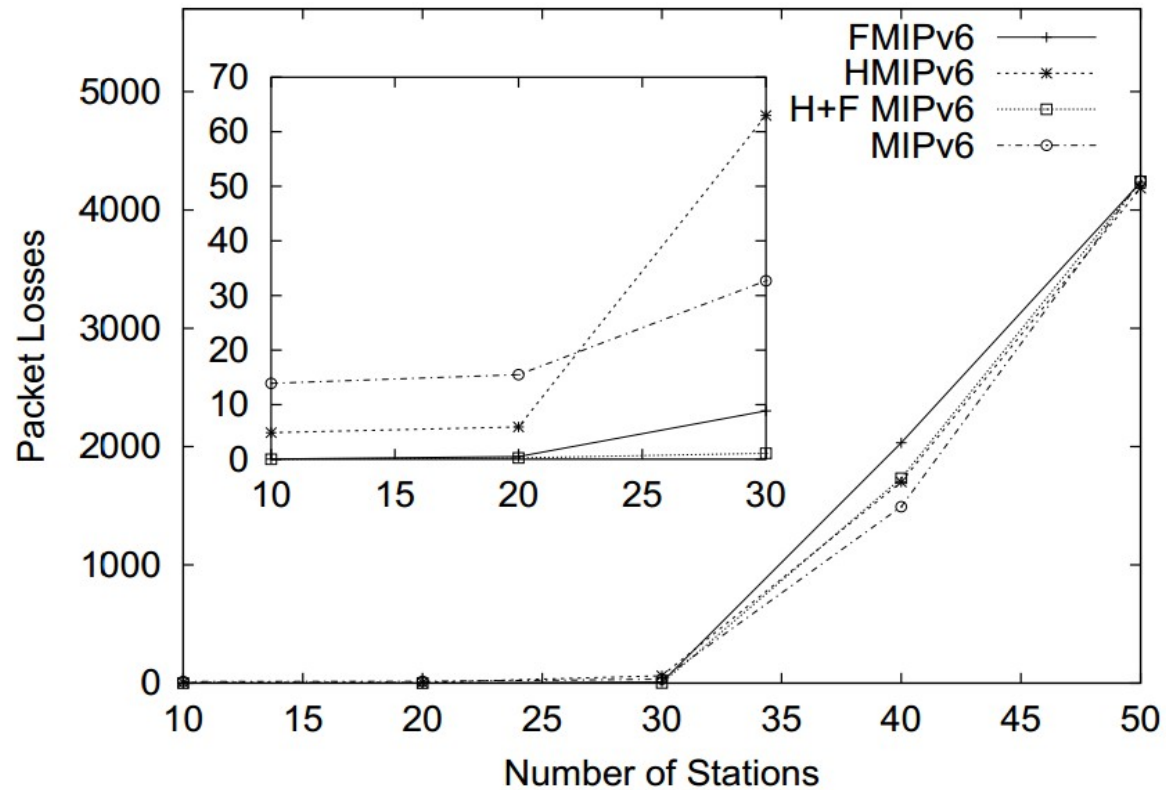


Figure 4: Impact of number of stations on packet losses

Conclusion

- This document is very good, suggest that the next class study it when they are addressing handover ;)