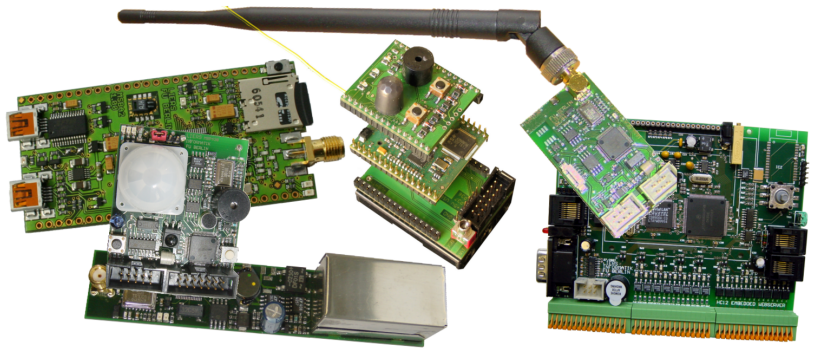

19589 - PS Telematik-Projekt: Wireless Embedded Systems

Task

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15. April, 2009

Outline

1. Required Reading
2. Task Summary
3. Experiments
4. Topologies
5. Technical Report

Required Reading

- Ant Routing Algorithm
- Highly Dynamic Destination-Sequenced Distance-Vector Routing (DSDV) for Mobile Computers
- RFC 3626 (OLSR)
- RFC 4728 (DSR)
- ZRP Draft
- William Strunk, Jr. - The Elements of Style [in technical writing]
- FMM - Frequently Made Mistakes [in technical writing]

Task Summary

- Implementation of the specified protocol
- Documentation of all functions and data with Doxygen
- Evaluation of the protocol by experiments
- Measurement and evaluation of data
- Technical report

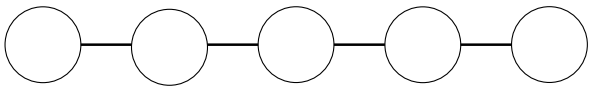
Experiments

Measure the throughput of your protocol implementation. Consider the following parameters:

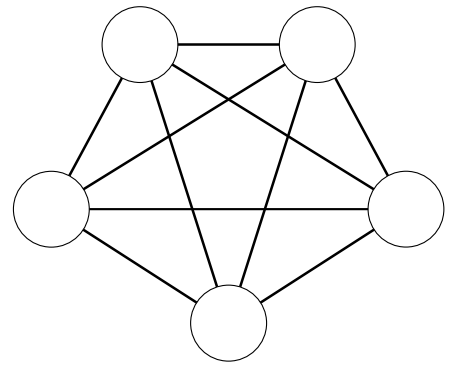
- Hop count, create different topologies
- Payload size, create packets with varying payload
- Inter-packet spacing, vary the time between sent packets
- Contending flows

Topologies

Consider the following topologies:



Chain, one flow



Fully Meshed, contending flows

- Minimum of 7 pages, no titlepage
- LaTeX, 11pt, double column, IEEE format
- Follow general guidelines, e.g., alignment of figures and tables
- Structure: abstract, introduction/motivation, your contribution, evaluation, discussion, conclusion, and bibliography
- Content:
  - General topic/task you have to solve and application domain
  - Routing approaches (OSLR, DSR, etc.)
  - Specified routing protocol in detail
  - Software architecture of implementation
  - Important encountered problems
  - No (or very few) source code
  - Elaborate testbed/experiment setup
  - Evaluation of measured data, figures and discussion
- No spelling, grammar, or punctuation mistakes!!!