ENSC 427
Communication Networks

Evaluation of Zigbee Remote Sensor Networks

Group 1

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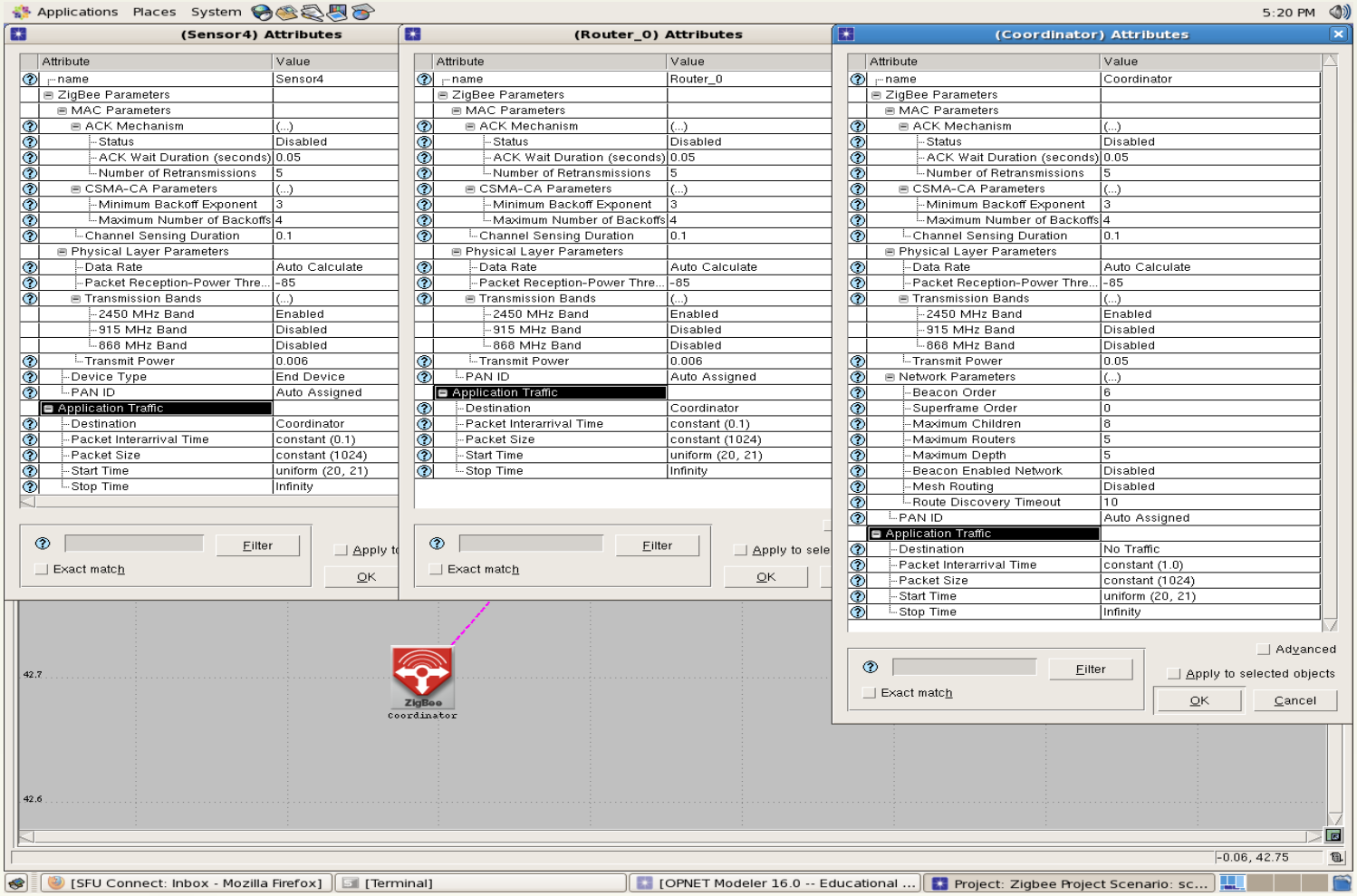
Introduction

- Analyze the performance of Cluster and Star topology with OPNET 16.0
- Compare and contrast the two topologies under different scenarios
  - -Network coverage
  - -Transmission rate
  - -Additional sensors
- Parameters of interest
  - End to end delay (ETED)
  - Throughput
  - Range

Implementation Details



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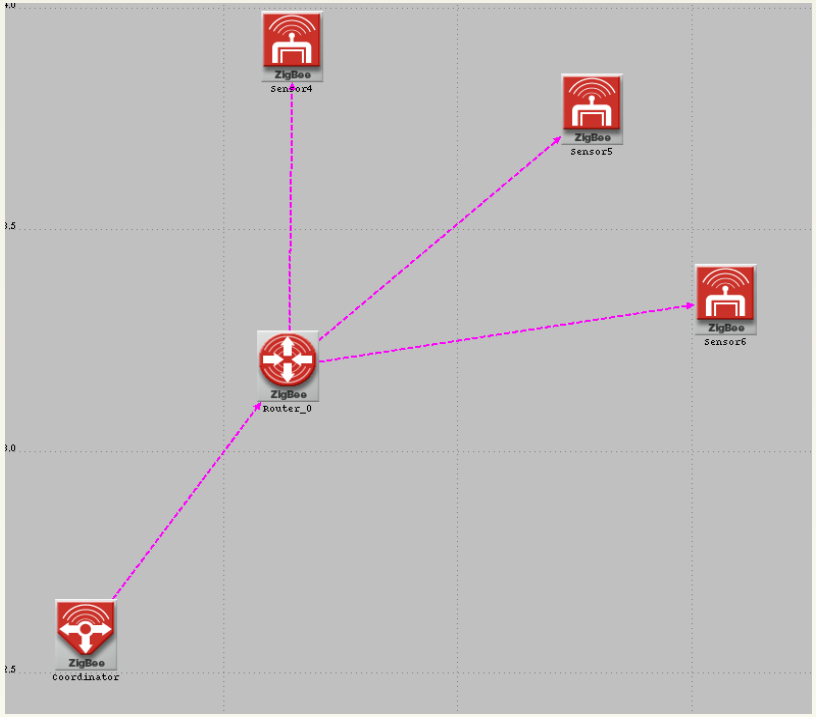

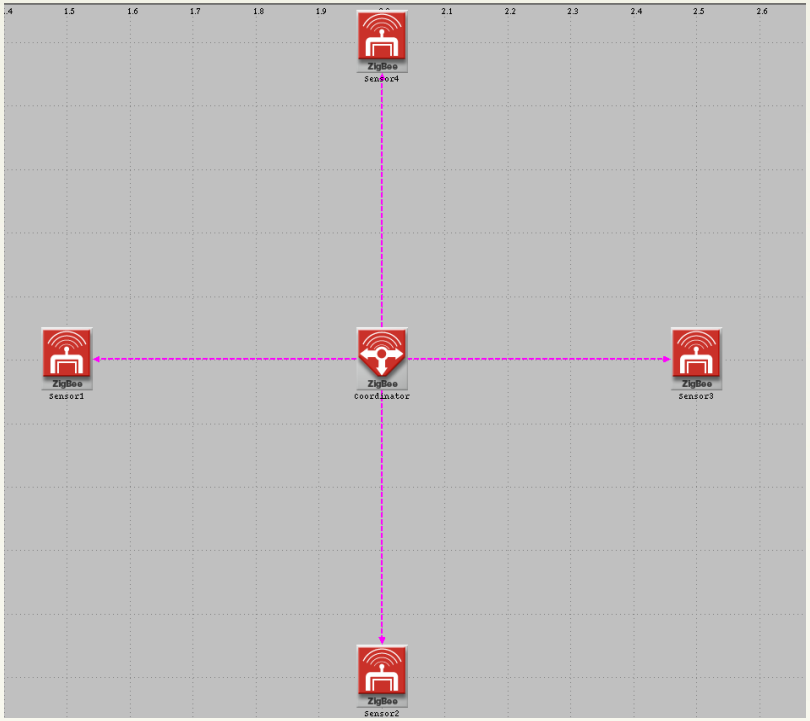

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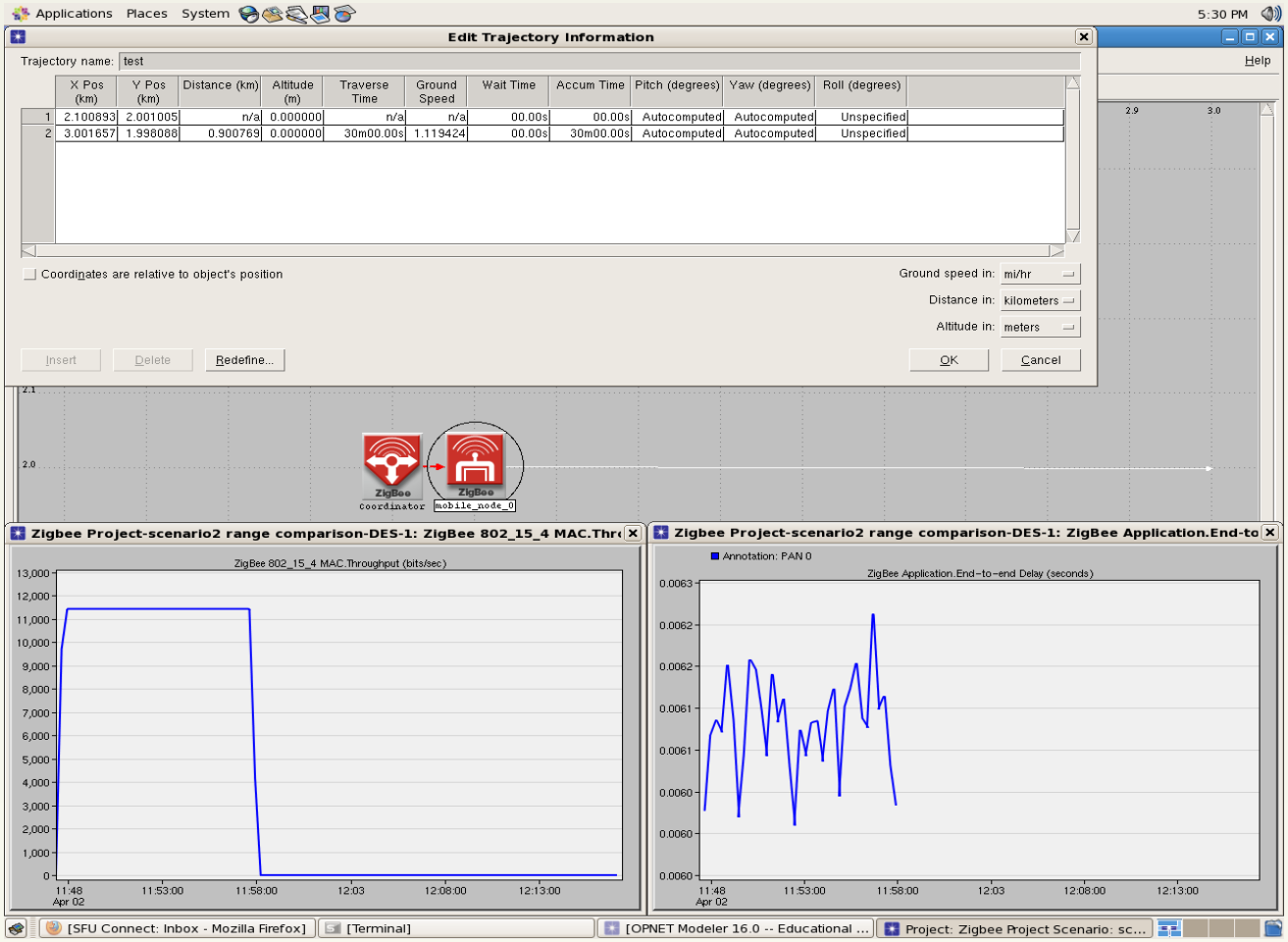

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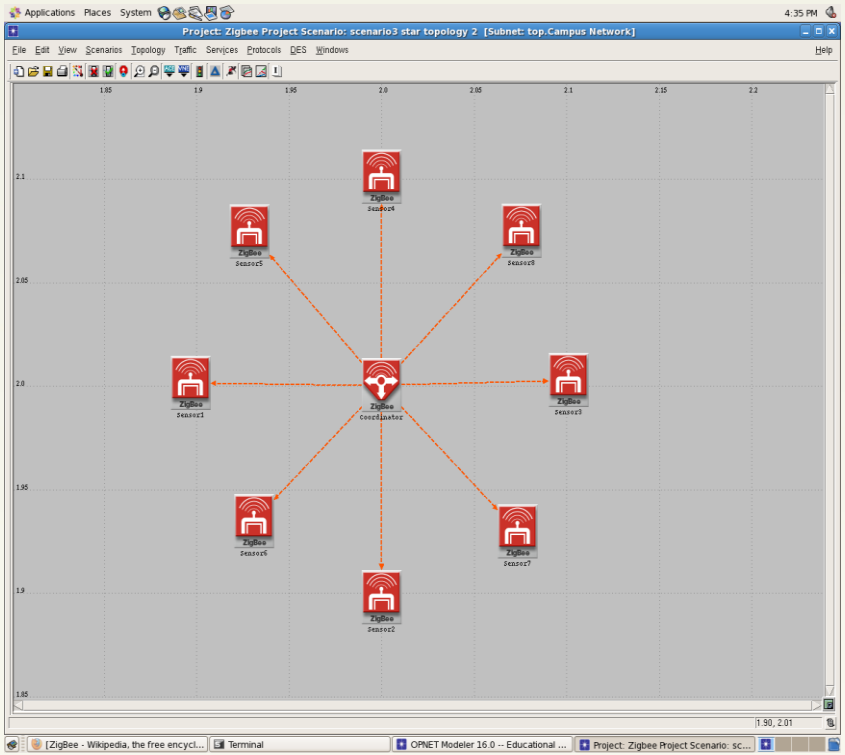

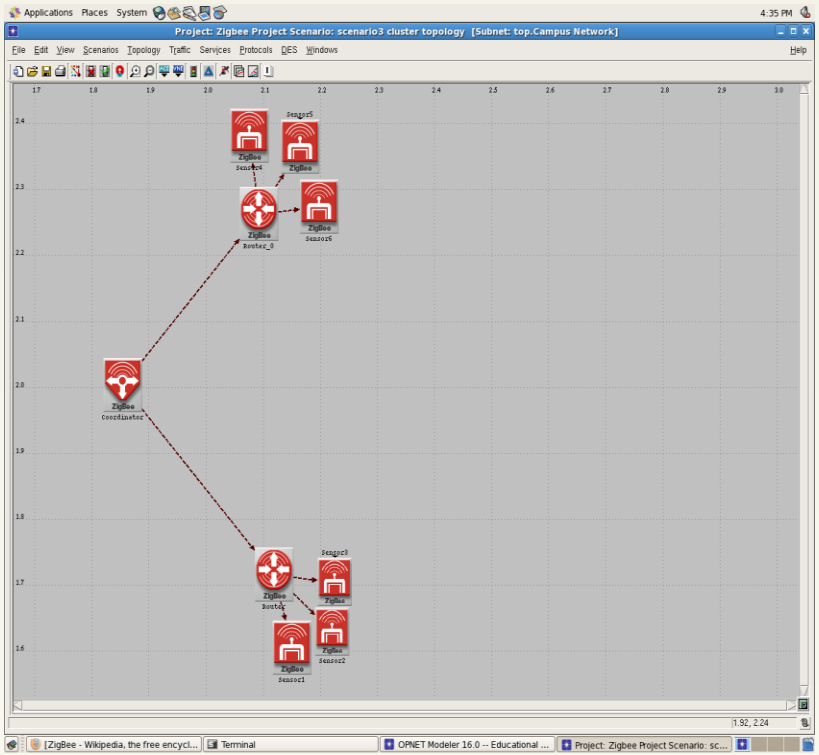

Conclusion

- ETED is smooth proportional to increase packet size/transmission rate (as expected)
- Star topology more prone to Packet Loss (PL)
- Throughput is higher in cluster topology
- PL proportional to transmission rate

THANK YOU