



Computer Science

Opponent(s):

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Respondent(s):

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**Analyzing Online Game Traffic in Hybrid
Mobile Ad Hoc Wireless Networks with/without
Packet Aggregation**

1 A General Evaluation of the Project

The topic of the dissertation is to evaluate the performance of MANETs, used for interactive computer games with and without package aggregation.

The comparison of MANETs using “with and without package aggregation”, is from great value, because it proofs through a simulation in NS2, that packet aggregation improves the performance of MANETs, when those networks are used for interactive computer games.

2 Comments on the Project in Relation to the Dissertation

2.1 Title

The title states very well what a reader has to expect from the dissertation. From the opponent’s point of view, the written part of the dissertation fulfils all expectations.

2.2 Dissertation Layout

The layout of the dissertation is based on a, from the university given, word master layout file. Extensions for the code documentation fit very well in the overall layout. All defined layout functions (e.g. tables, captions for figures...) are used correct.

2.3 Scientific Method

All argumentation is still supported by references.

2.4 Argumentation and Conclusions

The argumentation is still conclusive. At any time of the project, a red thread can easily be identified. Conclusions are over all well formulated. See Section 3.2. for an exception.

2.5 The Abstract

The abstract describes the implemented comparison well in only a few sentences. An improvement may be done by describing the today used approach in MANETs and how this approach may be improved through the proposed packet aggregation approach.

2.6 Language Aspects

The dissertation is written in English. Neither the mother tongue of the opponent, nor of the author is English. A judgement about the language is therefore not done.

2.7 References and Sources

Scientific papers are mostly used. Only a small number of web references can be found. All paper descriptions of the used references let suggest well chosen literature.

2.8 General Comments on the Project

The paper is especially very well written, because of a good structured layout and a easy to follow red thread. The implemented test is documented very well. Also readers with less knowledge in the specific topic should be able to understand the introduced comparison.

3 Chapter by Chapter Evaluation of the Dissertation

3.1 Chapter 1

Motivation for the topic. A practical use for the introduced test is given through the computer game Quake3. Quake3 is used through the whole work as an example of use for the discussed characteristics of the traffic model

3.2 Chapter 2

All necessary background, which is necessary for the understanding of the work is explained very well, sufficient long enough. An improvement could be achieved by adding

figures to the different introduced approaches. It is also not mentioned why the applied packet aggregation approach is preferred compared to the other, before outlined approaches.

The conclusion of Chapter 2 may stand as a conclusion for the whole dissertation but is not suitable as a conclusion for Chapter 2. The opponent suggests to rewrite this short section.

3.3 Chapter 3

Contains a comprehensive and easily understandable documentation of the performed tests. No suggestions for improvement.

3.4 Chapter 4

Chapter 4 gives an evaluation of the test results. The author of the dissertation documents well, how he evaluated and judged about the test results. As a conclusion, he suggests using an adaptive approach, which takes use of “with or without packet aggregation” depending on the present network situation. From the opponent’s point of view, using packet aggregation is overall better than approaches without packet aggregation. Therefore “using packet aggregation” may be suggested, if an adaptive approach is not configurable.

References for the origin of used equations are missing (e.g. on page 67).

3.5 Chapter 5

Concludes and summarises the results of the dissertation. As already mentioned in Section 3.4., the results of the comparison may be illustrated more positive.

4 Final Comments

Spelling mistakes were found on

page 48:

3.3.10, first line: Traffic

page 50:

missing quotation mark first line.