

D-level dissertation by T. Persson and A. Lövgren

The thesis is to a large extent well written but some things can be improved (see the lists below). I have some major concerns though. That the thesis project was specified by TietoEnator is not clear until the last chapter. A discussion of the specification and why TietoEnator is interested in this project should be included in the introduction and would be of great value. Further it is not clear until the end of the thesis that the project concerns an investigation and no implementation. This should also be mentioned in the introduction. It would also be valuable to include a section of the working strategy of this thesis. A number of interviews was performed with staff members of TietoEnator. That was only briefly mentioned in Chapter 6 and 7 but should have been mentioned earlier and to a greater extent.

That the thesis concerns testing and testing environments is not clear in the beginning of the thesis. This must be stated more clearly and also a summary and references to this "subject" should be included in the thesis. The greater part of the thesis is about a comparison of two testing environments and suggestions of changes for making these two testing environments converge. In Chapter 5.3 various modifications (actions) are discussed and estimations of their degree of fulfilled criteria. However, no explanation is given of how the authors arrived at the grades of the specified criteria and what the grades symbolize. Neither is the estimation of costs for certain actions explained. Since these issues are the major results of this thesis it is important that they are properly described.

Specific remarks

- The title: The thesis is not only about comparing two techniques but also about the coordination of them. No abbreviations (CPP) in the title.
- The abstract: The first sentence "This report ... TietoEnator." should be removed or moved. From the abstract it should be clear what Signaling Base and CPP are. Are they testing environments or what?
- List of Figures: For consistency a colon (:) after each number.
- Introduction: Here the following questions should be answered: Are Base (Signaling Base) and CPP two examples of test environments?

Are there several more? Please give an introduction of what testing and test environments are in general (figures are welcome). What are the characteristics of Base and CPP and what are the differences between them and other test environments. Further a discussion of how and why the two test environments are used by TietoEnator should be included.

- Please insert some introductory text before chapter 1.1.
 - Explain what the X-Unit framework is.
 - The last sentence on page 2 is complicated. Please split it up.
 - Explain what SS7 is.
- Chapter 3: This chapter claims to have a discussion of the relation between Signaling base and CPP, but as far as I can see it is missing.
 - The title is "Overview". Overview of what? Modify the title!
 - Page 13: ".. if there where no errors the status bar remains green (.." should be ".. if there are no errors the status bar remains green. (..".
 - Page 14: "spec" should be "specification".
- Chapter 4:
 - Page 16: BB-lib is mentioned before it is defined.
 - Chapter 4.1.3: Modify the title! I believe you mean something like "Deficiencies prior to the introduction of the Black Box Library".
 - Page 21: Make the gray area with tcConfig() to a figure.
 - Page 22: Make the gray area with startLink to a figure.
 - Page 24: "see chapter 4.1.4" appears in chapter 4.1.4. Maybe it could be changed to "see above".
 - Figure 4.15: Is it clear what the submatrix represents?
 - Page 28: "In difference to base...." should be "Unlike Base...".
- Chapter 5:
 - Chapter 5.1 contains many short subchapters. Is it really necessary to make a subchapter for each criteria? If it is, more text should be added.

- Page 42: The sentence "When no time flow ... after a certain milliseconds." is complicated. Please split it up.
 - Page 43: What is SGML?
 - Page 43, 44: "...BTR-tool must be run thirty times ..." Why thirty?
 - Table 5.1: Have the different actions been implemented? What is the estimation of fulfilled criteria based on? What do the grades 1 to 5 refer to? Describe them.
 - Table 5.1: Check the table header.
 - Table 5.2: What is the estimation of the costs based on? Describe.
 - Page 47: The formula in the middle of the page is unclear. What is the summation over? Surely not over n if n is the action.
 - Table 5.3: Check the numbers in the table. As far as I can see many of them are wrong.
 - Table 5.4: Since this table is based on Table 5.3 some values also here are wrong.
 - Page 49: Prerequisite is one word.
- Chapter 6:
 - What does the title (Recommendations) refer to?
 - Here interviews with people at TietoEnator are mentioned. You have not discussed or summarized these interviews in the thesis. However, that would probably be a nice contribution to the thesis. It should be mentioned earlier maybe already in the introduction.
- Chapter 7:
 - A requirement specification from TietoEnator is mentioned. This has not been discussed elsewhere in the thesis. It should be mentioned in the introduction as well and the specification should be included in the thesis as an appendix.
 - Usually what is written in the summary should have been mentioned previously in the thesis.
 - Remove the last sentence.

General remarks

- “.. common way of working ..”: This expression appears in several places in the thesis. I believe “.. unified way of working ..” is what you really mean.
- “testing departments” (see abstract): what does department refer to?
- “the” is missing in several places, for example in “.. of IT services to the telecommunication ...” (page 1), “.. using the same system for ..” (page 3)
- Please use a spelling-check tool for correcting words that are spelled wrong.
- “aswell” is two words “as well”.
- “alot” is two words “a lot”.
- “very” could be omitted. For example on page 5: “testing is very important”.
- References: Example “.. choice.[1],[2]” should be “.. choice [1,2].”
- Avoid apostrophes: Example “isn’t” should be “is not”, “it’s” should be “it is”, etc.
- Refer to all figures and tables in the text. For example, Table 2.1 is not referred to anywhere. Find a proper place in the text for referring to it.
- Consistency with uppercase and lowercase letters. Should it be “signaling base”, “signaling Base”, “Signaling Base”, or what? Should it be “purecoverage” or “PureCoverage”?
- Consistency: Should it be “Signaling Base”, “Signaling Base Development”, “Signaling Base Department”, or what?
- Consistency: “J-unit” or “Junit”, “CppUnit” or “Cpp-unit”?
- Consistency: “SS7tracelog” or SS7trace.log?
- Avoid abbreviations in titles.