

Trace Link Recovery using Static Program Analysis

B.Sc. Thesis Colloquium/Defense

Maximilian Meffert

30th December, 2017

University of Koblenz-Landau

Maximilian Meffert

Mat.-Nr.: 210 101 205

E-Mail: maxmeffert@uni-koblenz.de

GitHub: <https://github.com/maxmeffert>

Thesis-Repo.: <https://github.com/maxmeffert/BScThesis>

Supervisors

Prof. Dr. Ralf Lämmel University of Koblenz-Landau, *Institute for Computer Science*

M.Sc. Johannes Härtel University of Koblenz-Landau, *Institute for Computer Science*

Motivation: Software as Cognitive Challenge



Modern Software Systems are:

- large
(allover artifact count)
- heterogeneous
(languages involved)

⇒ challenging for program
comprehension tasks

View on the "Black Eye" galaxy
provided by [2].

asdf

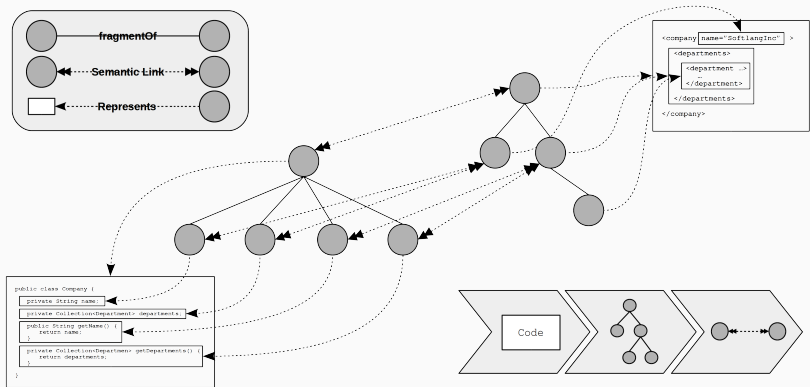
Definition (Trace)

(Noun) A specified triplet of elements comprising: *source artifact*, *target artifact* and a *trace link* associating the two *trace artifacts*. [1]

(Verb) The act of following a trace link. [1]

[1]

Trace Link Recovery Approach i



asdf

References

- [1] Gotel, O., Cleland-Huang, J., Hayes, J.H., Zisman, A., Egyed, A., Grünbacher, P., Dekhtyar, A., Antoniol, G., Maletic, J.I., Mäder, P.: Traceability Fundamentals. In: Software and Systems Traceability, pp. 3–22. Springer (2012)
- [2] NASA, STScI: Dust Band Around the Nucleus of "Black Eye Galaxy" M64 (2004), http://hubblesite.org/image/1447/news_release/2004-04, retrieved 29th December, 2017