

The Revangie Tool: Generator Code Opaque Recovery of Form-Oriented Web Site Models

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1. What is Revangie?

Revangie is a set of tools that collect data from HTTP sessions, analyse them and use them to reconstruct a form-oriented analysis model of a web site. It contains tools for automatic web site exploration, HTTP traffic survey, model construction and model visualization.

2. What can it be used for?

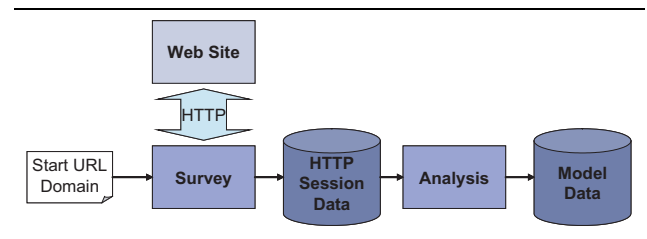
Revangie can, e.g., be used for reengineering of legacy systems. It can recover an analysis model of any system, which can in turn serve as input for other tools. The tool Angie, for example, can use the model to generate a stub for a Model 2 architecture using JSP and servlets or, alternatively, a fully functional click dummy for the web site.

Product benchmarking of web sites is another possible application. The recovered model can help to understand the navigational structure of a web site. With the help of the formchart builder tool, which is part of the Revangie package, models can be visualized in a graph-like manner thus making it easy to gain an intuitive understanding of a web site in a small period of time.

The data collected and inferred by Revangie can effectively be applied for the creation of testing scenarios. The formchart model helps a lot when constructing a set of test cases that cover the different parts of the web site as exhaustively as possible, and it is also conceivable to generate test cases on the basis of that data automatically. Collected data about actual usage of a site serves as realistic input for load testing.

3. How does it work?

Revangie works in two stages: a survey stage in which data is collected and an analysis stage in which the collected data is evaluated.



The survey stage gets a start URL and a domain as input. It can work in different modes, which differ in the location where the data are collected and the source the data is collected from. In the crawl mode it works like an automated web browser: it uses an HTTP client to request web pages and submit values. The trace of submitted values and visited pages is stored in a database. In order to make crawling efficient it uses different heuristics for navigation and generation of values. In the snoop mode it collects HTTP data of other users at some point in the communication line between clients and server, either by acting as a proxy server or a facade to the web server itself. The snoop mode is passive and has the advantage of being able to collect data reflecting the real usage behaviour of many users.

The analysis stage uses different criteria to classify and evaluate the collected data. It applies various heuristics in order to reconstruct a model of appropriate shape and size.

4. Where can I get it?

You can download the crawler and the formchart builder tools from our website at www.revangie.formcharts.org. Future releases will all be available on that site.

5. Contact

If you have any questions, comments or suggestions, please feel free to contact any of us.