

PROTOTYPE „BUDDY FUSION“

David Rueckel¹, Bernhard Pflug², Tobias Noiges², Katharina Steininger¹

¹Department of Business Informatics – IE, Johannes Kepler University Linz, Austria

²Department of Telecooperation, Johannes Kepler University Linz, Austria

david.rueckel@jku.at, bernhard.pflug@gmail.com, tobias.noiges@gmail.com,
katharina.steininger@jku.at

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1. Purpose and Motivation

Purpose of the prototype is the merger of contacts and its possible visualization within online social networks. Especially driven by the trend of using web 2.0 techniques, individuals are supported managing their private and business driven social networks. The aim is to develop a prototype that enables a user to administrate his contacts within diverse online social networks supported by a graph-driven GUI.

2. Prototype Description (Functional)

Especially in science the use of visualization is a common technique to describe complex relations and to offer a deeper understanding of these relations. The fundamental work on the visualization of social networks was done by Moreno (1932) by pointing out five principles when constructing an image of social networks: (1) draw graphs, (2) draw directed graphs; (3) use colors to draw multigraphs; (4) vary the shapes of points to communicate characteristics of social actors; (5) show that variations in the locations of points can be used to stress important structural features of the data (Freeman 2000). These principles are obtained setting up this prototype. At the current state of development the prototype is able to import data from online social networks, display the networks featuring all diverse social network services with nodes and lines and offer the user the opportunity to merge identical persons existing in separated online social networks into one single node. Furthermore a search query can be conducted and the visualization is multi layered according to the different social network services using different colors.

3. Prototype Description (Technical)

Java SE 1.5 was used as programming language. Several java-based frameworks provide additional functionality, such as the prefuse visualization framework for interactive and dynamic visualization of the social networks and their actors, the facebook-java-api as a means to query Facebook for user data, and the open-social-java-api to access social networks which are members of Google's Open Social Initiative.

4. Future Plans

First, basic statistical information may enable analysis of multidimensional relationships between friends. Another enhancement of the prototype will be the implementation of a three dimensional visualization that might improve clarity of inter-network relations. Furthermore a data crawler is planned which continuously reads-out user data from networks and stores them persistently. This data could then be visualized in a cumbersome timeline-like fashion, enabling users to explore what their contacts were doing at a certain moment (for which data was recorded by the crawler) back in time.

Literature

Freeman, L. 2000. "Visualizing Social Networks" *Journal of Social Structure* (1), <http://www.cmu.edu/joss/content/articles/volume1/Freeman.html>.

Moreno, J. L. 1932. *Application of the Group Method to Classification*. New York: National Comitee on Prisons and Prison Labor.