Demo: Publishing Desktop Data with semiBlog^{*}

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ABSTRACT

This demo proposal briefly presents the *semiBlog* editing platform for Semantic Blogging. semiBlog allows a blog author to reference objects from other desktop applications — addressbook entries, events, publications, etc. — and annotate blog posts with these objects. The annotations are realized as RDF resources generated from the referenced desktop objects.

1. INTRODUCTION

Blogging, as a subset of the web as a whole, can benefit greatly from the addition of semantic metadata. The result — which we will call *Semantic Blogging* — provides improved capabilities with respect to search, connectivity and browsing compared to current blogging technology. Moreover, Semantic Blogging will allow new ways of convenient data exchange between the actors within the blogosphere blog authors and blog users alike.

2. SEMIBLOG

Semantic Blogging has been identified as a topic and discussed in a number of recent publications (especially [2], [1], [3] and [7]). The semiBlog application¹ (previously presented in [5] and [6], as well as in the research track of ESWC2006 [4]) takes up these ideas on semantic blogging, adds to them integration with a user's personal desktop (i.e. the data on their computer), and addresses usability questions, in order to maximize a user's incentive to use the technology.

The basic assumption behind semiBlog is that a user often wishes to blog about topics or things for which they already have formal data available in some form. Such topics or things might e.g. be people, events like conferences or meetings, publications or music. For all these things, metadata will often already exist in a user's electronic addressbook, calendaring application, bibliographic database or mp3 collection — in short, somewhere on the desktop. semiBlog uses a plugin architecture (cf. Fig. 1) to wrap the various desktop based data sources. Each plugin is responsible for data of a specific type, and contains functionality to resolve references to relevant (structured or semi-structured) data



Figure 1: Creating RDF metadata from desktop applications

objects, as well as translate them into a common, Semantic Web conform data model: RDF. Through techniques such as drag and drop from different desktop applications, a user can annotate a blog post with metadata about the post's topic. Fig. 2 exemplifies this: here, the user has authored a blog post about an ESWC paper, and subsequently annotated the post with metadata taken from their electronic addressbook (the authors of the paper) and a webbrowser (the ESWC2006 web site).

Connecting a blog post to existing desktop data provides a number of benefits: (i) reuse of data — once a user has entered metadata into any of the applications they use on a day-to-day basis, there is no need to enter it again when annotating a blog post. This makes a desktop based application like semiBlog different from web based approaches, which offer HTML forms to add metadata. (ii) reuse of functionality — specialized external applications like an electronic addressbook or calendar are usually very good at dealing with the kind of data they are designed for. It is therefore beneficial to reuse this expertise, instead of reimplementing inferior methods of metadata creation. (iii) always up-todate — semiBlog links to desktop objects instead of duplicating them in RDF. This means that, should a user update data in an external application, this update will automatically be reflected in their blog.

Just as importing data from other applications is implemented using a plugin architecture, functionality for pub-

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Figure 2: The semiBlog editing environment

lishing the blog in various ways is implemented as plugins to the core application. We currently offer a publishing plugin which generates individual RDF files for each annotation object and uploads them to a WordPress² server, using the Metaweblog API³ through XML-RPC. The actual blog posts will then contain links to these RDF files. However, an implementation which uses an external RDF repository such as YARS⁴ or Sesame⁵ is equally possible. Also, publication based on the Structured Initiative⁶ could be implemented as a plugin.

semiBlog is implemented as a desktop-based application. Since tight integration with other desktop applications was a goal when developing the software, we decided to realize semiBlog in a platform-specific way. Currently, semiBlog is therefore only available as a Mac OS X application.

3. DEMONSTRATION

For the demonstration, we will show how a user authors a simple blog post within semiBlog, consisting of text and pictures. We will then show how to annotate the post with data from various external applications using drag and drop (currently an addressbook and web browsers are supported; we will have additional plugins available for the conference), publish the post to a blogging platform such as Wordpress and show the resulting post on the web. Additionally, we will show how changes to data in the external applications are reflected in the blog. Apart from a guided demonstration by the authors, conference attendees will also have the opportunity to try out the software and play with it themselves.

4. **REFERENCES**

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²http://wordpress.org/

- ³http://www.xmlrpc.com/metaWeblogApi
- ⁴http://sw.deri.org/2004/06/yars/

⁶http://structuredblogging.org/

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⁵http://www.openrdf.org/