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Conference Abstract

AnnoSys - future developments

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Abstract

AnnoSys (Tschöpe et al. 2013, Suhrbier et al. 2017) is a web-based open-source system for correcting and enriching biodiversity data in publicly available data portals. Users are enabled to annotate specimen data, and these annotations become visible to researchers who subsequently observe the annotated specimen. The AnnoSys search and subscription capabilities make it possible to access or receive notification of annotations of records and even records of duplicate specimens accessed in different portals.

In its current second project phase, the project's technical infrastructure opens from a mixture of structured specimen data based on XML*1 and semantic information (annotations based on W3C Open Annotation*2) into a pure semantic and linked data (Heath and Bizer 2011) oriented service backend. To this end, we are implementing an AnnoSys ontology prototype providing semantic information about supported data elements, their mappings and semantic relationships with data elements from an extensible catalog of relevant biodiversity standards (e.g. ABCD*3, Darwin Core*4) as well as their annotation workflow oriented collection and organisation within so called annotation types. Furthermore, the linked data oriented service backend enables importing, exporting and transforming annotation related information into a variety of data formats and sources. Ultimately, AnnoSys will be upgraded to the new W3C Web Annotation*5 standard for representing annotations in RDF*6.

These new facilities permit AnnoSys to hook into a number of annotation workflows in a way that could not have been realised before. Examples include the automatic generation

of annotations from the output of data quality control services, the reporting of update or edit processes at provider databases to the AnnoSys service backend, or recording the changes made in large(r) datasets by analysing differences between download and (corrected) upload. The extension of the data domain from specimen data to taxonomic data (i.e. annotation of checklists) is another envisioned development, same as supporting the annotation of multimedia elements (e.g. the images that are inreasingly linked to specimen data records). Within our presentation, we will sketch out some of these use cases to foster the discussion of further workflow scenarios for biodiversity-related annotations.

Keywords

AnnoSys

Presenting author

Lutz Suhrbier

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Endnotes

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