



The XML Metadata Editor of GFZ Data Services

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Following the FAIR data principles, research data should be Findable, Accessible, Interoperable and Reuseable. Publishing data under these principles requires to assign persistent identifiers to the data and to generate rich machine-actionable metadata. To increase the interoperability, metadata should include shared vocabularies and crosslink the newly published (meta)data and related material. However, structured metadata formats tend to be complex and are not intended to be generated by individual scientists. Software solutions are needed that support scientists in providing metadata describing their data.

To facilitate data publication activities of 'GFZ Data Services', we programmed an XML metadata editor that assists scientists to create metadata in different schemata popular in the earth sciences (ISO19115, DIF, DataCite), while being at the same time usable by and understandable for scientists. Emphasis is placed on removing barriers, in particular the editor is publicly available on the internet without registration [1] and the scientists are not requested to provide information that may be generated automatically (e.g. the URL of a specific licence or the contact information of the metadata distributor). Metadata are stored in browser cookies and a copy can be saved to the local hard disk. To improve usability, form fields are translated into the scientific language, e.g. 'creators' of the DataCite schema are called 'authors'. To assist filling in the form, we make use of drop down menus for small vocabulary lists and offer a search facility for large thesauri. Explanations to form fields and definitions of vocabulary terms are provided in pop-up windows and a full documentation is available for download via the help menu. In addition, multiple geospatial references can be entered via an interactive mapping tool, which helps to minimize problems with different conventions to provide latitudes and longitudes.

Currently, we are extending the metadata editor to be reused to generate metadata for data discovery and contextual metadata developed by the 'Multi-scale Laboratories' Thematic Core Service of the European Plate Observing System (EPOS-IP). The Editor will be used to build a common repository of a large variety of geological and geophysical datasets produced by multidisciplinary laboratories throughout Europe, thus contributing to a significant step toward the integration and accessibility of earth science data.

This presentation will introduce the metadata editor and show the adjustments made for EPOS-IP.

[1] <http://dataservices.gfz-potsdam.de/panmetaworks/metaedit>