Terminologies, also known as Knowledge Organization Systems or vocabularies, help to agree on common concepts in data. Many types of terminologies exist [4] such as simple concept lists (e.g. Dublin Core Element Set), authority files (ORCID), classification systems (DDC), Thesauri (EuroVoc), and ontologies (Gene Ontology).

Terminology Registries and Services

Terminology registries [1] can broadly be classified into
- Registries list and describe terminologies
- Repositories contain full terminologies
- Services provide access to terminologies via an API

Examples: BARTOC [3, 6], GF Bio Terminology Service [2]

Terminology Services

Query capabilities and APIs differ largely among Terminology Services. We developed the JSKOS format for Knowledge Organization Systems [5] based on SKOS and JSON-LD to unify access to terminologies and registries especially for web applications [3, 6].

Most APIs are "RESTful" web service: applications can access terminology data via HTTP on any platform and language. Typical content types include SKOS/RDF and JSON based formats such as JSKOS. Queries are either responded from a local database or via wrapping an external web service.

Survey of registries, repositories and services listed in BARTOC

Topic repositories collect terminologies from one subject area. Around a third (25) are topic registries/repositories/services. The most frequent topics are:
- medicine & health (9): MET eOR, HeTOP, DIMDI...
- biology and life sciences (7): GF Bio, BioPortal, AberOWL...
- earth sciences and geography (3): NERC, Marine Metadata, DGIWG
- language (2): ISOcat, CLARIN
- arts (2): KulturNav, museumsvokabular.de

What to do next?

→ Put terminologies into a Terminology Service
→ Register terminologies registries in BARTOC
→ Express terminologies/services with JSKOS
→ Use existing terminology services
→ Think about registry persistence
→ Join RDA Vocabulary Services Interest Group

References