Distributed Meta-information Generation and Semantic Search for Environmental Resources in TaToo



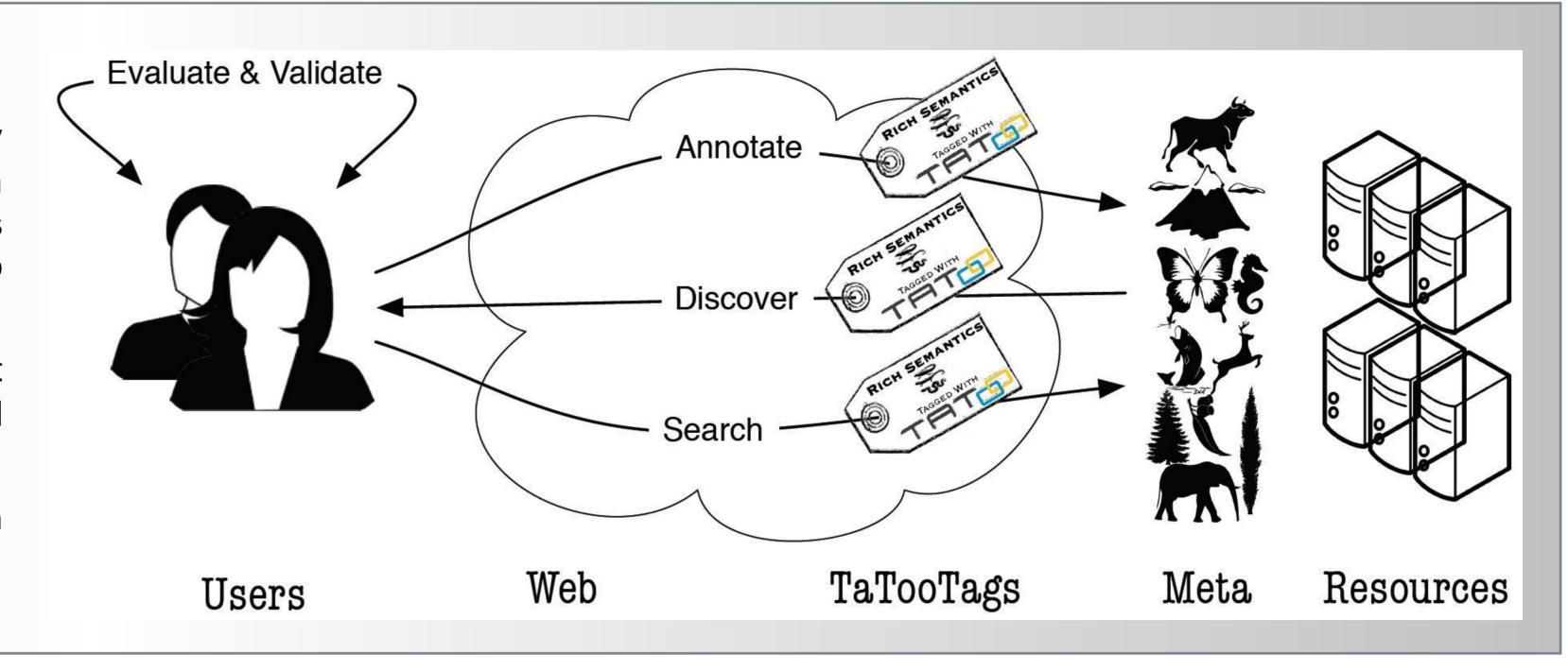


TaToo Vision

TaToo, which stands for "Tagging Tool based on a Semantic Discovery Framework", is an FP7 Project sharing the vision of a Single European Information Space for Environment (SISE). It aims to enable experts as well as general users to share trusted and reliable information, but also to allow easy discovery of information which is already available.

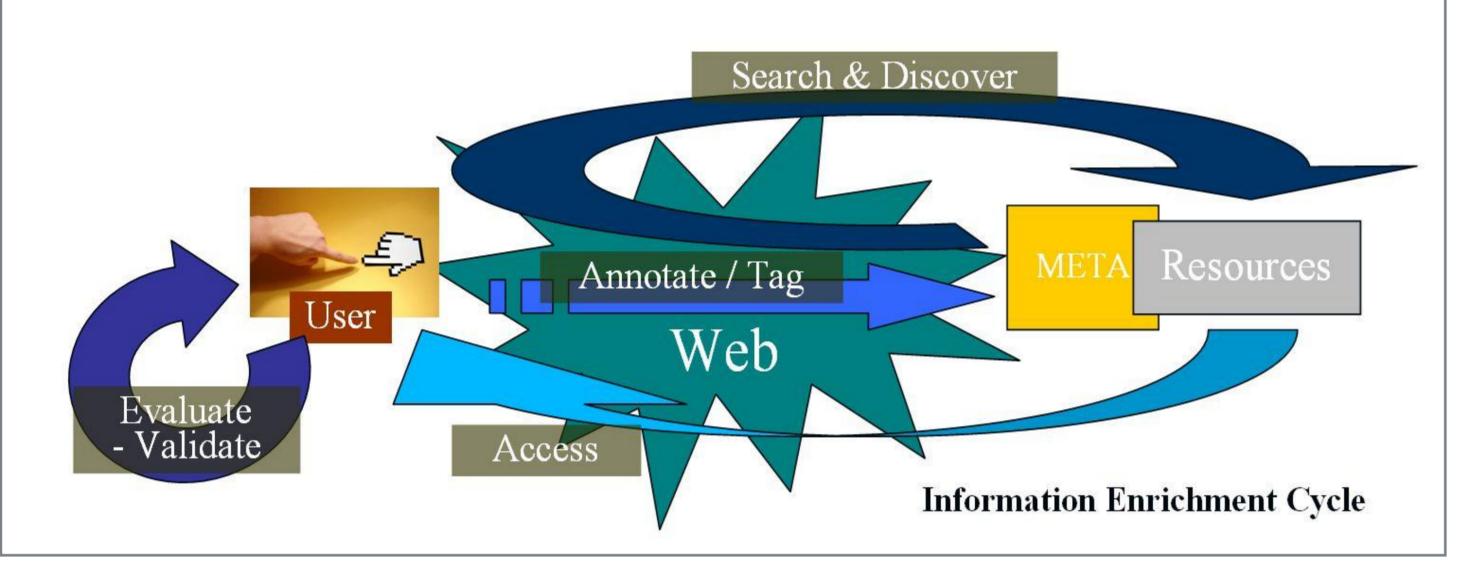
Central concept of the TaToo project is a set of self-contained "TaToos" that are used as a base for semantically enhanced resources discovery and retrieval by the TaToo's discovery service.

Three Climate-Change Scenarios are validating TaToo developments in health, agriculture and urban planning domains.



Objectives and Challenges

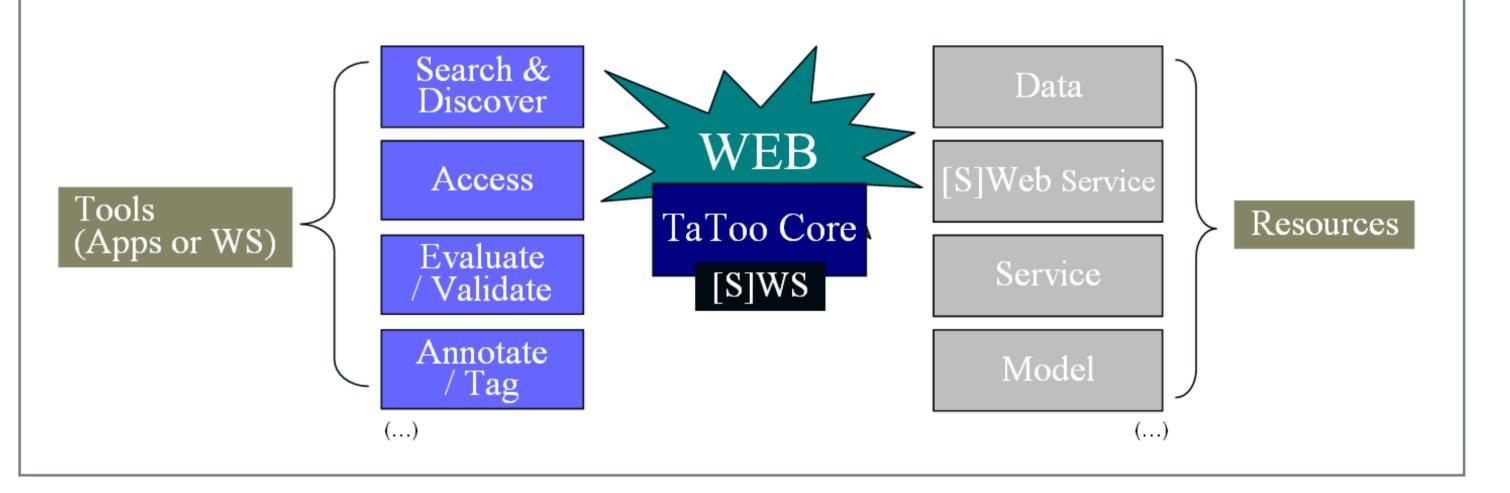
Development of tools allowing third parties to easily discover environmental resources on the web and to add valuable information in the form of semantic annotations to these resources, thus facilitating future usage and discovery, and kicking off a beneficial cycle of information enrichment.



Expected Results

TaToo will provide a semantic framework for discovery and access to environmental resources in a multilingual and multi-domain context. Therefore, it will provide tools for:

- Semantic Discovery and Annotation of Environmental Information
- Evaluation and Validation of discovered information



TaToos

"TaToos" have several interesting properties:

- A TaToo is a piece of self-contained semantic information corresponding to one of the pre-defined ontologies
- It exists independently from the resource it describes
- A resource can be described by several TaToos
- TaToo is considered a resource and therefore can be annotated by another TaToo ("tag the tag")

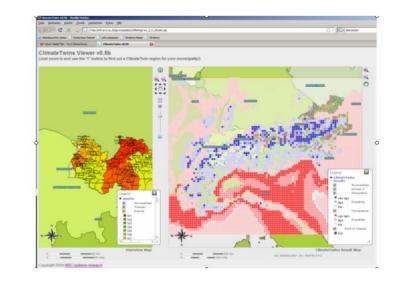
TaToos are generated, updated and if needed deleted using a tagging web service. This service can be invoked by humans, but the 'TaToos' can also be generated automatically.

By decoupling the meta-information from the resource it describes, TaToo will allow decentralized annotations and quality assurance of the arbitrary web-enabled resources.

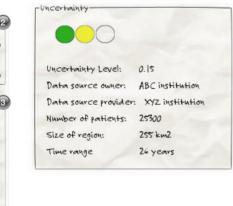
Tagging and Discovery in TaToo Validation Scenarios

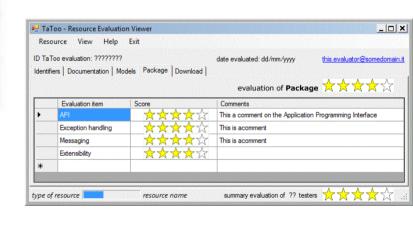
TaToo Validation scenarios rely on user-contributed as well as on generated TaToos to:

- Enhance the Climate Twins model results, as well as to improve the result discovery, by linking the results with information related to the same area.
- Improve the discovery and quality assurance of Agro-environmental models through generated meta-information and user-contributed QA feedback.
- Enlarge the expertise on Persistent Organic Pollutants, and their health impact, by linking and comparing observations, model results and third party health-relevant information.









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ACKNOWLEDGEMENT

The research leading to these results has received funding from the European Community's Seventh Framework Programme (FP7/2007-2013) under grant agreement nr. 247893.

PROJECT COORDINATES

Total Budget: ~3.8 MEuro

Project Start: 01.01.2010 Project End: 31.12.2012 Duration: 36 months

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More Information: www.tatoo-fp7.eu

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