Deliverable D5.2:
Ontology Modularisation Guidelines

What is the contribution of this deliverable to the overall goals of BEST?

→ *Please refer to the document "BEST Results: Overview" to get an overall picture of the relationship between BEST deliverables and project objectives.*

This deliverable presents a set of guidelines on how to develop and maintain ontology modules in a SWIM setting. The guidelines are formulated on the basis of the development of the ontology infrastructure performed in D1.1 combined with principles for ontology modularisation from earlier research. As part of the work in D5.2 we have developed a set of software tools to support the modularisation process. These tools are available from github at: https://github.com/sju-best-project/ontology-modules

Current Status of the Deliverable

Completed and approved by funding authority (SJU).

What items does the deliverable contain?

When we talk about a "Deliverable" in BEST, we mean not only the formal document describing the work done, but also any associated technical artefacts such as software, models, ontologies, diagrams etc. However, for this particular deliverable, there are no accompanying technical artefacts - all information is provided in the document itself.

See also: "Explanatory Notes" following the table.

Item#	Brief Description	What it can be used for
Provided in the formal deliverable document		
1	Theoretical background on ontology modularisation (chapter 2.1).	Establishes an understanding of various aspects related to ontology modularisation. Introduces the rationale for creating ontology modules, techniques that can be used for creating them, and how ontology modules can be formed into a network of modules to expand the knowledge domain they describe.
2	Details about the ontology modules in BEST (chapter 2.2).	Describes the ontology modules that were developed in D1.1.

3	Research question and principles to be used in formulating the modularisation guidelines (chapter 3).	Describes the research question to be addressed by this research as well as a theoretical framework that defines a set of tasks to be applied when developing ontology modules.
4	Ontology modularisation guidelines in a SWIM setting (chapter 4)	Describe how we apply and refine the theoretical framework for establishing a thorough modularisation strategy to produce a relevant, self-contained, but coherent set of ontology modules in a SWIM setting.
5	Example of using the ontology modularisation guidelines (chapter 5)	Uses the ontology module development performed in BEST as an example of how the ontology modularisation guidelines should be applied. This chapter also describes how the software tools can be used.

Explanatory notes:

1. The theoretical framework for ontology modularisation is developed by Mathieu d'Aquin [1].

What details can I find in the deliverable document?

Details about what?	Reference
An illustration of the theoretical framework from d'Aquin	Chapter 3.2, figure 1.
The final set of ontology modules from the modularisation process	Chapter 5.7.2, table 5.
A dependency diagram illustrating dependencies between the final set of ontology modules	Chapter 5.8, figure 10.

References

[1]   M. d'Aquin, "Modularizing Ontologies," in *Ontology Engineering in a Networked World*, Berlin, Heidelberg: Springer Berlin Heidelberg, 2012, pp. 213–233.