

# SWebB: Semantic Web Browsing

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In this talk I will present a browser, called *SWebB* (Semantic Web Browser), which explicitly uses, whenever available, the semantic information codified in Contextual Ontologies. Contextual Ontologies are ontologies enriched with Context Links. Ontologies define the conceptual model of a peer and describe its content. Context mappings are sets of *bridge rules*, namely pairs which allow to relate, via appropriate semantic relations (e.g., equivalence), concepts, roles and individuals in different ontologies. Using *SWebB*, context mappings, similarly to standard Web links, can be discovered, navigated, copied, and so on. Contexts mappings are discovered by Semantic Matching. Contextual Ontologies are formalized using the C-OWL Language. The talk will also provide an overview of the key aspects of C-OWL.

## References

1. F. Giunchiglia, P. Shvaiko. Semantic Matching. In *The Knowledge Engineering Review Journal*, 18(3) 2003.
2. L. Serafini, P. Bouquet, B. Magnini, S. Zanobini: Semantic Coordination: A new approach and an application. In proceedings of *ISWC'03* (2003)
3. P. Bouquet, F. Giunchiglia, F. Van Harmelen, L. Serafini, H. Stuckenschmidt . C-OWL: contextualizing ontologies. "*2nd international semantic web conference (ISWC 2003)*", edited by Dieter Fensel and Katia p. Sycara and John Mylopoulos, Sanibel Island (Fla.), 20-23 October 2003, pp. 164-179
4. F. Giunchiglia, P. Shvaiko, M. Yatskevich. S-Match: An algorithm and an implementation of semantic matching. In *Proceedings of ESWS'04*, pages 61–75, 2004.
5. F. Giunchiglia, M. Yatskevich, E. Giunchiglia. Efficient Semantic Matching. In *Proceedings of ESWC'05*, 2005.