A Unified Ontology-Based Process Model for Software Maintenance and Comprehension

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- ontological reasoning [2]
- Process Modeling [3]
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Abstract	In this paper, we present a formal process model to support the comprehension and maintenance of software systems. The model provides a formal ontological representation that supports the use of reasoning services across different knowledge resources. In the presented approach, we employ our Description Logic knowledge base to support the maintenance process management, as well as detailed analyses among resources, e.g., the traceability between various software artifacts. The resulting unified process model provides users with active guidance in selecting and utilizing these resources that are context-sensitive to a particular comprehension task. We illustrate both, the technical foundation based on our existing SOUND environment, as well as the general objectives and goals of our process model.
Notes	This paper was invited for the MoDELS LNCS book based on the best paper awards received by our two ATEM 2006 workshop contributions on process modeling and traceability link recovery.

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Attachment	Size
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