

## An Ontology-based Approach for the Recovery of Traceability Links

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Abstract	Traceability links provide support for software engineers in understanding the relations and dependencies among software artifacts created during the software development process. In this research, we focus on re-establishing traceability links between existing source code and documentation to support reverse engineering. We present a novel approach that addresses this issue by creating formal ontological representations for both the documentation and source code artifacts. These representations are then aligned to establish traceability links at the semantic level. Our approach recovers traceability links by utilizing the structural and semantic information in various software artifacts and the linked ontologies are also supported by ontology reasoners to infer implicit relations among these software artifacts.
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