

# Context Specification for System Analysis and Design

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## Abstract

The lack of design information forms a significant barrier for engineers to maintain and reuse a design model. This paper tackles this problem by presenting the conceptual framework of design context. It systematically discusses the linking of contextual knowledge to components deployment in systems analysis and design, including the conceptual dependencies of component definition, reuse, and implementation, as well as the reasoning and rationale behind design and reuse processes. The contextual information provides shared understanding for component creation, reuse, maintenance, and evolution, which eventually improves the efficiency and effectiveness of component reuse.