Problem Statement

Good system modeling techniques allow for the comprehensive representation, organization, design, and evaluation of a system, from requirements, to structure, behavior, and beyond. If the underlying tools are implemented as islands of automation and are not connected together in a way that allows for flows of data and information among tools, then there is no automated way to create a trace from a requirement, to a component, to a behavior, to a test case.

Definition of Higraphs

A higraph is a mathematical graph extended to include notions of depth and orthogonality.

Visualization of Relationships

System Requirements

Interface Requirements

Associate with Functional Requirements

Functional Requirements

Physical Requirements

System Structure

Satisfy

Specify

System Behavior

Allocated To

Physical Rules

Logical Rules

Domain Rules