

Formalizing Dependencies in Business Process Models Using Constraint Satisfaction

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Abstract: Compliance management tackles issues related to both modelling and enforcement of business constraints in enterprises. In the context of business process management [Sch00], we propose and describe the use of constraint satisfaction problems [Dec03] as a formal mean for representing these dependencies [Run09, REK09]. We describe different scenarios using constraint satisfaction for the modelling of business processes and propose different constraint categories to distinguish between them. In order to illustrate this we give an example for each of these constraint categories. In the following we discuss which category of constraints is useful modelling different problem classes. Furthermore we discuss in this paper in which cases it is adequate to model a dependency as a constraint in general.

References

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