

工程与应用

MBMS中模型的关系表达和自动复合研究

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收稿日期 2009-8-24 修回日期 2009-11-13 网络版发布日期 2010-1-20 接受日期

摘要 由于决策环境的变化及决策范围的扩展, DSS中模型不断被分批开发和增加, 同时决策问题的复杂性往往导致模型的多样性, 由此模型关系的表达和管理往往比较复杂, 模型间的冗余及整体关系难于掌握。使用扩展的Petri网表达MBMS中各模型的相互关系, 论述了PN自动成图算法, 增强决策者对整个MBMS的整体掌握程度, 有利于发现模型间的求解冲突与冗余; 同时, 通过从决策目标出发, 通过基于PN的逆向推导, 发现决策问题求解路径, 降低了DSS应用门槛。

关键词 [模型库管理系统](#) [Petri网](#) [模型库](#) [决策支持系统](#)

分类号 [TP311](#)

Research on graphical expression of relationship between models and automatic models compound method in MBMS

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Abstract

Due to the changes of the decision-making environment, the models in MBMS are constantly being developed and increased at different times, at the same time the complexity of decision-making leads to the diversity of models, the diversity of models brings many complex problems in model representation and model management. So the overall relationship and redundancy between models is difficult to master. The paper extends the definition of PN to express the relationship between the various models in MBMS and states the automatic mapping algorithm, PN is useful for decision-makers to find the conflict and redundancy between models. The paper also implements a backward reasoning algorithm to find the decision-making path based on PN from the decision-making objectives. The algorithm reduces the difficulty of using DSS effectively.

Key words [Model Base Manager System \(MBMS\)](#) [Petri net](#) [Model Base \(MB\)](#) [Decision Support System \(DSS\)](#)

DOI: 10.3778/j.issn.1002-8331.2010.02.061

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