

工程与应用

面向综合集成研讨厅的方案生成和评估系统

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摘要 针对综合集成研讨厅体系, 设计并实现了方案生成及评估系统。该系统采用电子问卷的形式供专家撰写和提交方案, 自动分析汇总专家群体的方案; 并提供了一种评估研讨方案的有效方法, 通过专家一致性算法将群体专家的定性评估进行量化, 然后实现评估结果的可视化; 经过反复研讨评估, 得到最终的研讨方案。面向综合集成研讨厅的方案生成和评估系统, 采用定性、定量相结合的方法, 将与专家的经验知识和计算机高速的信息处理能力结合起来, 为与会专家在综合集成研讨环境中解决复杂问题提供了强有力的工具, 实验结果证明了该系统的可行性和可操作性。

关键词 [综合集成研讨厅](#) [方案生成](#) [方案评估](#)

分类号

Scheme creation and evaluation system for Hall for Workshop of Meta-synthetic Engineering

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Abstract

A system of scheme creation and evaluation for Hall for Workshop of Meta-synthetic Engineering is proposed. The experts' schemes are automatically analyzed and gathered through electronic questionnaire distribution and collection tools of this system. An efficient method to evaluate the schemes is also proposed, in which the qualitative evaluation results can be quantized by the consensus algorithm. Then, the evaluation results are conveniently visualized by the Isomap algorithm. A final scheme is obtained during the repeated discussion. The experience and knowledge of experts can be combined with the high performance of computer to accomplish the scheme evaluation tasks in the system. Experimental results show that this system is a powerful tool helping experts handle the complex problems in the environment of Hall for Workshop of Meta-synthetic Engineering.

Key words [Hall for Workshop of Meta-synthetic Engineering \(HWME\)](#) [scheme creation](#) [scheme evaluation](#)

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