

研发、设计、测试

FlowVR的Scilab ToolBox的设计与实现

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摘要 FlowVR是为VR提供的支持数据流的分布式框架^[1], 对于构建功能强大的分布式科学数据分析系统也有很大的优势, 但是FlowVR本身没有数学建模功能。Scilab具有强大的数学建模和仿真功能。结合FlowVR和Scilab的优点, 可以构建高性能的科学数据分析系统, 以应用于各种领域。文章介绍了FlowVR的Scilab Toolbox的设计与实现。该系统通过开发Scilab的函数编程接口, 实现了FlowVR框架下各个模块与Scilab的数据交互, 利用后者的科学计算功能, 能够为FlowVR开发数据分析系统提供强大的建模工具。

关键词 [接口](#) [工具箱](#) [Scilab](#) [FlowVR](#)

分类号

Design and implementation of Scilab ToolBox for FlowVR

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Abstract

FlowVR is a data-flow oriented distributed framework for VR systems^[1], which has many advantages for implementing large scale distributed scientific analysis systems except for that it has no mathematical modeling functionality.Scilab has numerous features for modeling and simulation, which enlightens us to build high performance data analysis system with the collaboration of both FlowVR and Scilab.This article presents the design and implementation of a Scilab toolbox that functions as an interface between FlowVR and Scilab because there is no interface between them.We realize data exchange between modules that run under FlowVR framework and Scilab by means of a well developed Scilab programming interface.With the help of scientific computing functionalities of Scilab, it becomes easier to develop data analysis system with FlowVR.

Key words [interface](#) [ToolBox](#) [Scilab](#) [FlowVR](#)

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