

论文

基于SCA规范的DNC系统及其实现

龚毅光<sup>1</sup>, 龚异光<sup>2</sup>, 白俊杰<sup>1</sup>, 王宁生<sup>1</sup>

1. 南京航空航天大学机电学院, 江苏 南京 210016; 2. 武汉重工铸锻有限责任公司信息中心, 湖北 武汉 430084

摘要:

异构和集成是长期困扰DNC系统的两大难题, 服务组件架构 (Service Component Architecture, 简记SCA) 为解决这两大难题提供了良好的技术规范和解决方案.通过参考各种文献和商业DNC系统, 归纳出了DNC系统的主要业务功能, 并在此基础上, 提出了基于SCA规范的DNC系统模型, 模型分为四层: 向其它应用提供服务接口的应用层、提供业务功能服务的服务层、为服务提供构件的组件层、为构件提供业务逻辑和基础数据的实现层.此外, 还详细介绍了串口通信初始化组合件的Java实施过程.

关键词: 服务组件架构 组合件 面向服务架构

An DNC system based on SCA specification and its application

GONG Yi-guang<sup>1</sup>, GONG Yi-guang<sup>2</sup>, BAI Jun-jie<sup>3</sup>, WANG Ning-sheng<sup>1</sup>

1. College of Mechanical and Electrical Engineering, Nanjing University of Aeronautics and Astronautics; 2. Information Center, Wuhan Heavy Industry Casting & Forging Co., LTD, Wuhan 430084, China

Abstract:

Hetero-structure and integration are always problems of a DNC system. Service component architecture provides a good specification and solution to eliminate these two problems. The main business functions of the DNC system were ascertained after referring to all kinds of documents and lots of DNC business systems, and a model of the DNC system based SCA specification was subsequently worked out. This model consists of four layers: application layer which provides service interfaces for other applications, a service layer which offers services of business functions, a composite layer which supplies composites for services and an implementation layer which gives business logic and basal datum for composites. In addition, a detailed introduction concerning implementation by Java for the composite of initializing communication between serial ports and computers was provided.

Keywords: service component architecture composite service oriented architecture

收稿日期 2007-03-20 修回日期 1900-01-01 网络版发布日期 2008-02-16

DOI:

基金项目:

通讯作者: 龚毅光

作者简介:

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