<<分布式系统中的调度与缓存技术>>

图书基本信息

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内容概要

《分布式系统中的调度与缓存技术》主要内容简介：Distributed System、Contributions of the Book、Organization of the Book、Scheduling Strategy in Distributed Systems、Technology for Network-based Multimedia Services、Caching Strategy in Distributed System等。

作者简介

董黎刚，1973年生，博士，副教授，硕士生导师，中国电子学会高级会员，浙江工商大学网络与通信工程研究所副所长，浙江省高校学科带头人培养对象。
于1995年、1998年获浙江大学（混合班）学士、硕士学位，2003年获新加坡国立大学计算机工程专业博士学位。
研究方向为计算机网络和分布式系统。
2008年获得浙江省高校优秀共产党员称号。
2006年至今共主持包括国家863计划项目、国家自然科学基金在内的5项省部级科研项目，提交4篇互联网协议草案，其中1篇获准成为互联网国际标准，在国内外产生重要影响。
发明专利授权2项，并发表多篇论文，其中30多篇被EI及SCI检索。

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书籍目录

章节摘录

版权页：插图：In this chapter, we study the scheduling strategy of divisible loads in a special network-DIN networks. Previous scheduling strategy can still be used for DIN networks. However, we proposea novel scheduling strategy that has much better performances thanbefore. Our scheduling strategy has two features.In past scheduling strategy, the allocated fraction of the load isnot processed until entire allocated load fraction is received. In oth-er words, while the data are being received, the host does notprocess data. In our strategy, we let the host process data and re-ceive data simultaneously. In this way, the processing time isgreatly reduced. Our numerical experiments show significant im-provement in minimizing the processing time. This is the first fea-ture.The second feature is that, unlike traditional scheduling strat-egy, the originating host of the load does not directly transmit theload fractions to hosts. Instead, the load is transmitted to andstored in DIN loops. If one host would like to process the load,this host can retrieve one load fraction from the DIN loop. Thisfeature has two advantages. First, the originating host of the loaddoes not need to partition the load. Therefore, the originator of theload des not need to know all the parameters （such as networkstructure, computing ability of hosts） that impact the result of par-tition. Second, the hosts can dynamically adjust the processing a-mount according to their real-time computing abilities without ac-cessing the originating host. For example, when a host becomesbusy, it can return a part of amount of load to the DIN loop, sothat other idle hosts can process them.

编辑推荐

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