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Peer-to-Peer文件共享系统的测量研究

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Abstract

With the progress of peer-to-peer (P2P) technology, the Internet applications model is in a great reformation. In order to get an all-win solution among the Internet users, Internet service providers and content providers, it is necessary to measure and analyze the P2P applications from their perspectives. In this paper, the content of P2P measurement is introduced firstly, and then the existing research on P2P measurement is classified into 3 areas: topology measurement, traffic measurement and availability measurement. After comparing between measurement methods, the comprehensive survey on P2P measurement is given, and then the existing measurements and their results are analyzed in depth, furthermore, the shortcomings and problems are outlined. In the end, the future trend of the P2P measurement is discussed.

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摘要

Peer-to-Peer(P2P)技术的发展引发了Internet应用模式的变革.为了寻求网络运营商、内容提供商和Internet用户三方共赢的解决方案,必须从他们各自的角度出发对P2P应用进行系统的测量与分析.首先概述了P2P测量的研究内容,并将现有的P2P测量研究划分为P2P拓扑特征的测量、P2P流量特征的测量、P2P可用性的测量3类.在对P2P测量方法进行对比分析之后,详细综述了P2P测量的研究现状,对现有的各种测量方案以及研究成果进行了深入的分析,指出了其中存在的问题和缺陷.最后讨论了P2P测量未来的研究方向.

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