

协议无感知转发环境下的内容传输策略研究

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摘要: CCN (内容中心网络) 为最受关注的下一代网络架构. CCN 的网内缓存能够确保内容的高效获取, 并提高重传效率. 基于 POF (协议无感知转发) 实现了网络层的内容路由与缓存, 对 pull 传输机制提出可靠性改进, 同时基于网络节点信息和丢包率来决定缓存时间, 构建 CCN 网络的差异化缓存机制, 实现内容的有序缓存. 仿真结果表明提出的策略可以提高内容分发性能.

关键词: 协议无感知转发; 内容中心网络; 可靠传输; 协作缓存

Content Delivery of Protocol-Oblivious Forwarding

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Abstract: CCN (Content-Centric Network) have been gradually considered as the next network architecture. In face of the lack of end to end session, the design of a reliable delivery mechanism becomes very important. In POF (Protocol-Oblivious Forwarding), this paper proposes an improved strategy for reliability, including different time that the requested content will be cached in different nodes, which is based on the network node information and packet loss rate. The proposed strategy is evaluated by simulation experiments. The experiments results show that the strategy can improve the performance of content delivery.

Key words: POF; CCN; Reliable delivery; Cooperative Caching

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