

hash value. Each partial hash value is concatenated to each other. Therefore, a hash string is generated. This hash string is used as file digest. To evaluate the performance, we compare our algorithm to typical measuring file similarity tools which are both Sdhash and Ssdeep. The result of performance evaluation substantiates that our algorithm is more accurate and fast than both software.

Keywords: File Similarity; File Digest; Media Data; Hash Function;

561195 Cost-Effective Multicast Routing with Multi-Gateway in Wireless Mesh Networks

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Abstract: In order that multicast routing characteristics is reflected in wireless mesh networks, multicast routing metric is required for quantifying the multicast tree cost under wireless environments. This paper proposes a new multicast routing metric considering receiver's different characteristics of link quality on a wireless multicast channel as well as wireless multicast advantage. The proposed multicast-tree transmission ratio quantifying the multicast tree cost represents the product of the multicast transmission ratios of all nodes in the constructed multicast tree. In this paper, we also propose a wireless multicast routing which constructs the multicast tree by maximizing the multicast-tree transmission ratio in wireless mesh networks with multiple gateways. Since the multicast tree by our wireless proposed routing algorithm contains the nodes having maximum multicast-node transmission ratio, our proposed multicast routing shows a higher delivery ratio and a lower average delay than original multicast AODV and the multicast routing with minimizing the forwarding nodes in its multicast tree. In comparison with other multicast routings, simulation results show that the proposed multicast heuristics maximizing the multicast-tree transmission ratio construct a cost-effective multicast tree in terms of its average delay, and required network resources.

744159 Transmission optimization of healthcare information for multi-channel cloud networks

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Abstract: Cloud networks enable enterprises to procure computing resources on demand basis and delegate management of all the resources to the cloud service provider. It becoming a promising platform and has developed rapidly. Healthcare information networks have emerged as one of the major research area in the cloud networks. Healthcare networks transfer highly personal data, it guarantees and keeps a certain level of transfer efficiency. Due to its attractive features such as multi-streaming and multi-homing, multi-channel transport protocol has received much attention. This paper presents a multi-channel control scheme that includes multi-streaming transport to solve performance problems. Proposed multi-channel control scheme overcomes existing problems in the traditional transport protocol when a multi-streaming feature is used.