

## ***Abstract: Low Overhead File Synchronization Mechanism***

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### **Abstract**

Traditional file synchronization programs have difficulties in handling lots of metadata information when the file is transferred to the server. In this paper, we propose a practical approach for minimizing metadata exchanging overhead on the file synchronization system. The key idea of this paper is to adapt hash key compression technique that computes new hash key with several hash keys. The proposed system shows  $O(\log N)$  performance with fixed-length chunking algorithm. In the experiment, traditional file synchronization program sends 4 MB over 500 MB data files; however, the proposed algorithm only sends 900 Byte. Furthermore, the performance result of the proposed system outperforms variable-length chunking system.

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