

# HDFS based Private Cloud Storage Forensics

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## **Abstract**

*The demand for cloud computing is increasing because of the popularity of digital devices and the wide use of internet. That makes malicious users to make crimes. Therefore a study of digital forensics investigations of cloud storage is necessary. Hadoop Distributed File System (HDFS) has been widely adopted to build cloud storage as it provides reliable storage and high throughput access. In this paper, HDFS based private cloud storage is implemented, and digital forensic framework is proposed which expands on current methodologies. This framework is applied for conducting the forensics investigation of cloud storage. Experiments on private cloud storage are conducted and highlighted a lot of useful information that can be found by analyzing artifacts left by Cloud Storage clients (PC /Smartphone). The case study of the crime of a company's staff for the specification document of banking system and examination of crime reports concerning with cloud storage are presented.*