Two Fish: An Efficient Encrypted Data Search In Mobile Cloud Computing

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Abstract: Cloud storage become a popular method throughout the world, but the security of the data stored in the cloud is the major issue. Therefore data encryption plays an important role in cloud storage. The encrypted date should be easily accessible by the user whenever needed without any privacy and security issues. Recent research has solved many security issues but while considering the mobile cloud environment it is very difficult to apply directly due to the major challenges like poor connectivity, latency problem as well as low transmission rates of wireless connection. So it will leads to high network traffic and long searching time when we are using traditional searching schemes. This study will address those issues by proposing an efficient encrypted data search scheme (Two Fish) for mobile cloud computing. This innovation scheme uses a Two Fish compression method which optimizes the data communication by reducing the trapdoor's size for network traffic efficiency, Trapdoor Mapping table module which optimize the document search and Ranked Serial Binary Search (RSBS) algorithm which speedup the search time. Results show that Two Fish compression method reduces search time by 34% to 49% as well as network traffic by 17% to 45%.

*Key-words:-*Mobile Cloud Environment, Two Fish Compression, Encryption Search, Ranking Search, Trapdoor, Mapping Table