

Cloud database is a cloud service mode formed under the concept of cloud computing software-as-a-service, which expands the overall storage capacity by changing the organization mode of the database server. The second part is the proxy layer. The main design of an encrypted middle layer, while ensuring the security of the cloud database, can reduce the pressure of network transmission and client decryption, the greatest extent to take advantage of the advantages of cloud computing [2]. Server software and hardware maintenance are managed by professional operation and maintenance personnel of cloud service providers to ensure service reliability. The main features are generating keys, updating ciphertext, and sending SQL requests. Our framework composed of three parts.