

Abstract

Cloud Storage is an online or digital file storage media that relies on an internet connection for data access. Cloud storage is a new breakthrough in the world of data storage that features many advantages when compared to offline storage media such as hard drives and flash drives, so data stored in cloud storage will be stored on a number of servers managed by service providers or commonly known as hosting. Elliptic Curve Digital Signature Algorithm is an implementation of the elliptic curve of the DSA. Functionally where RSA and DSA require a key length of 3072 bits to provide 128 bit security, ECDSA can achieve the same thing with only 256-bit keys. However ECDSA relies on the same degree of randomness as DSA.

Owncloud is a suite of software for creating and using file hosting services. Owncloud is functionally similar to the widely used Dropbox. The main functional difference between OwnCloud and Dropbox is that OwnCloud does not offer data center capacity to store stored files. OwnCloud server edition is free and open-source, allowing anyone to install and operate it free of charge on their own private server. Owncloud is a public cloud alternative and therefore prefers more levels of security and data protection. It is expected that with the ECDSA algorithm method in the transport layer security and AES in cloud storage, maximum security of encrypt for files and data is expected.

Keywords: *Cloud storage, server, cloud, Elliptic Curve Digital Signature Algorithm, Owncloud*