## **MeSign CEO Blog**

## MEaaS, an Innovative Cloud Cryptography Service

(Mar. 18, 2021)

The author believes that many readers are familiar with the term "SaaS", but considering that some non-IT readers may not understand it, let me briefly introduce SaaS.

SaaS is Software as-a-Service. SaaS is an innovative software application model that has emerged in the 21st century with the development of Internet technology and cloud computing technology and the maturity of application software. In the traditional model, vendors deploy software products to multiple clients within the enterprise for delivery by selling software licenses. SaaS defines a new delivery method, and makes the software further return to the essence of service. The essence of enterprise deployment of software is for its own operation and management services. The appearance of software is the informatization of business processes, and the essence is still a service model. SaaS has changed the way of providing traditional software services, it greatly reduces a large amount of early-stage investment to further highlight the service attributes of software and has gradually become the main delivery model of the software market.

For email encryption, in the traditional model, software vendors develop email client software that supports S/MIME technology to achieve email encryption. The user deploys the email client software to multiple clients within the enterprise for delivery for free or for a fee. At the same time, the user also needs to purchase and apply for an email certificate from the CA, and laboriously configure the email certificate for each client. It is necessary for the sender and the recipient to exchange the public key to realize the email encryption, thereby ensuring the entire security of the email content.

Traditional email encryption solutions are very cumbersome and difficult to implement. This leads everyone to know that emails are transmitted in cleartext, which is insecure and need to

1

be encrypted. However, because the S/MIME email encryption technology is too troublesome, they have to give up email encryption and letting unsecure cleartext emails continue to exist, the author believes that this is "ostrich thinking".

Of course, there are also someone trying to solve this email encryption problem, such as PGP encryption. They do not use cumbersome S/MIME encryption technology and do not rely on the email certificate issued by a third-party CA to achieve email encryption. Users can create an encrypting certificate by themselves to realize email encryption, but it still can't solve the problem of exchanging public keys, and it does not solve the problem of how to prove the authenticity of the email sender.

MeSign Technology has found an innovative solution through years of hard work and exploration, allowing the email client software to return to the essence of service. What the users need is an email encryption service, not an email certificate, and not an email client that does not support encryption. MeSign Technology has developed an encrypted email client and built a cloud cryptography infrastructure. The combination of "cloud" and "client" allows users to automatically send encrypted email without applying for an email certificate from the CA and without exchanging public keys with the recipient in advance. This idea of solving the problem of email encryption is the same as that of SaaS, so we call it "MEaaS".

MEaaS is Mail Encryption as-a-Service, which is the email encryption service provided by MeSign Technology for users around the world now. This is an innovative cloud cryptography service that makes the very complex and difficult-to-use S/MIME email encryption technology very easy, allowing users to send encrypted emails as easy as sending cleartext emails, only in this way, the email encryption can be popularized, and to truly guarantee the security of the entire life cycle of emails. MeSign Technology make the email encryption service as a cloud service (MEaaS) available as tap water at any time.

Finally, let me talk about the entire implementation process of MEaaS in detail. Users only need to setup their own email account in MeSign App, and MeSign App will connect to the cloud validation system to finish the email control validation automatically, it will

automatically apply for email certificate to the cloud CA system and the cloud key management system to get the email certificate automatically, and then automatically configure it to be used locally for email encryption and digital signature. After the user enters the recipient's email address in MeSign App, MeSign App will automatically connect to the cloud public key database to obtain the recipient's public key, so that the user can directly send encrypted emails without exchanging the public key with the recipient in advance. The sender's digital signature will be automatically attached to prove the sender's trusted identity when the email is sent, and the cloud timestamping service will be automatically connected to obtain the timestamp signature to prove that the email sent time is trusted and cannot be tampered with.

The whole process may seem a little complicated for you, but just like tap water, you don't need to care about how the water comes, you just need to turn on the tap and the water will come. You only need to use MeSign App to write an email and click "Send" to send an encrypted email!



**MEaaS**, an innovative cloud cryptography service, is exclusively provided by MeSign Technology in the world! Welcome to download MeSign App for free to enjoy the MEaaS!

------ END ------

