



SEFOS is a plug-in to Outlook 365 that uses the latest technology to help you securely manage your daily business communication.

SEFOS ensures that senders and recipients are authenticated and protects all emails from all unauthorized access.

SEFOS is easy to use and ensures that you comply with the regulations that limit how you may send personal and other sensitive information.

With SEFOS, you can send secure information globally to any recipients, regardless of email client and device.



Challenges with digital communication

- Most other e-mail solutions don't protect text or attachments.
- Legal requirements force public authorities and private companies to use letters and faxes instead of e-mail.
- Today's typical communication of sensitive information uses complicated processes with a high risk of errors and heavy workload.
- Many other solutions that offer secure transfer of information are not user-friendly.



SEFOS solves your daily Communication needs

- SEFOS automatically protects text and attachments.
- SEFOS adheres to legislative demands of Level Of Assurance and GDPR during the transmission of sensitive information.
- SEFOS is very user-friendly and utilizes the latest technology
- SEFOS can be installed via the Microsoft Admin Center or locally via Outlook.





Simple, Secure and Efficient

As all digital communication should be



Simple

SEFOS is a plug-in to Outlook 365 and very user-friendly.



Secure

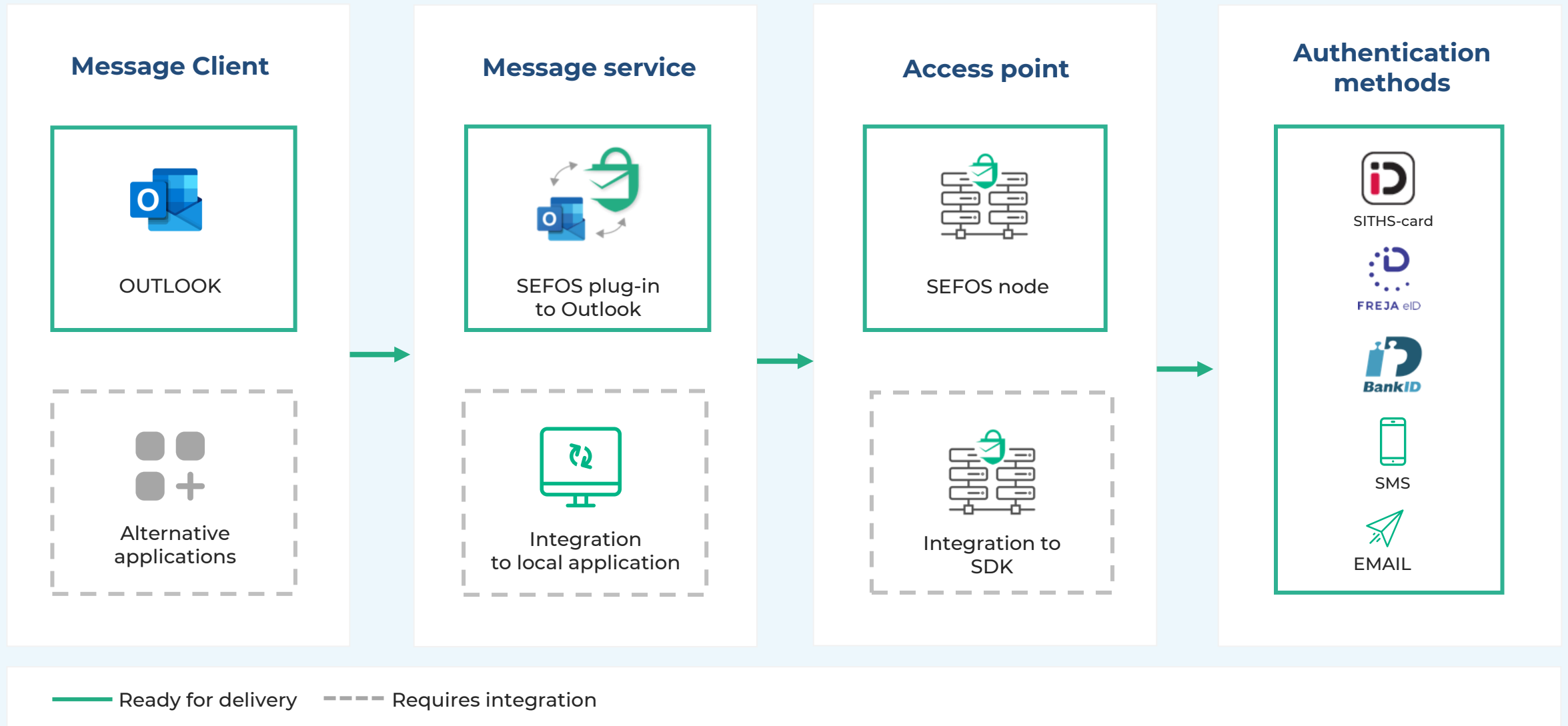
With SEFOS both information and attachments are protected with strong encryption.



Efficient

SEFOS makes processes more efficient within organizations through simple and secure digital communication.

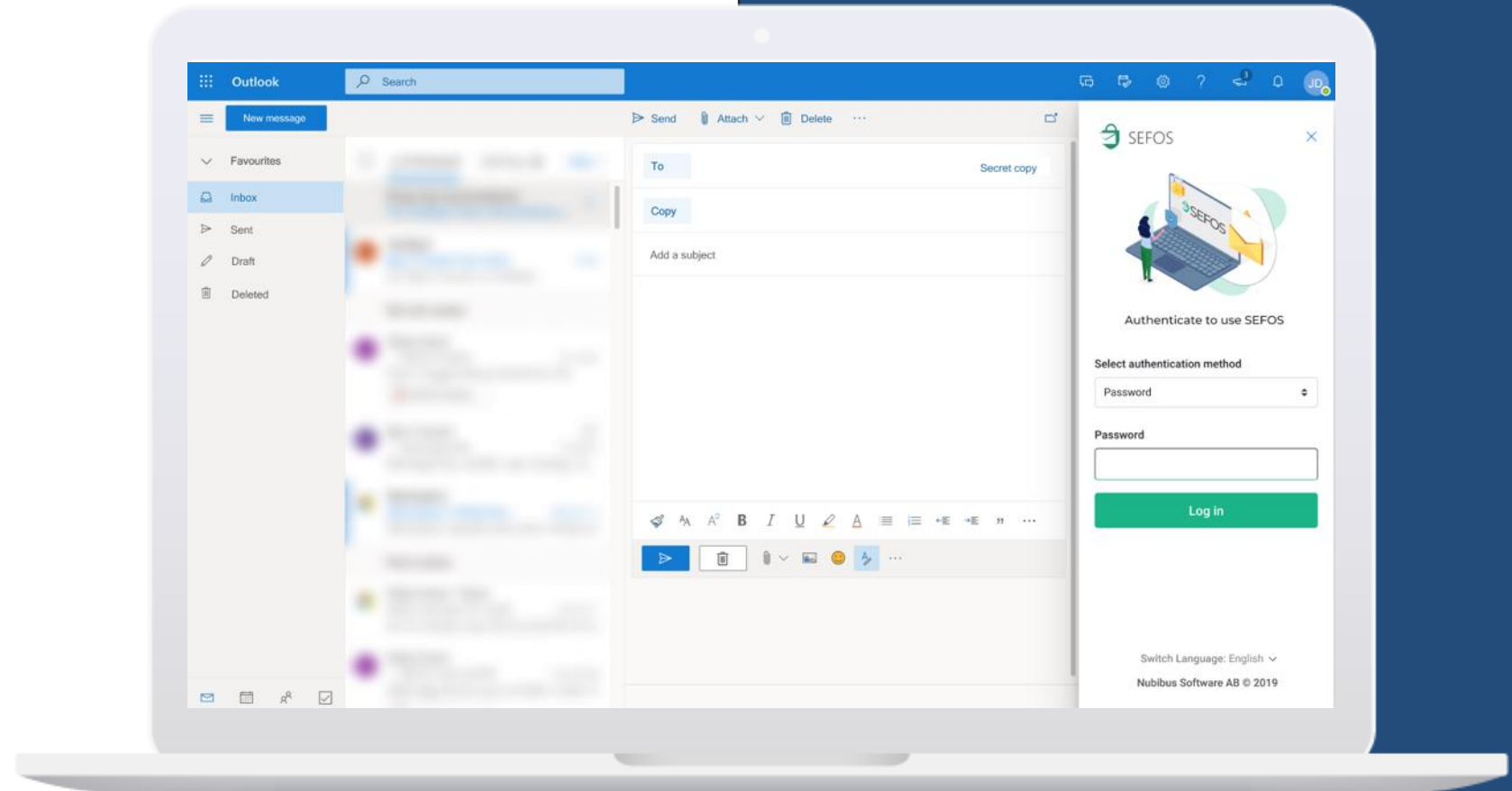
SEFOS Building Block



— Choose your method for login

*We are constantly adding new PKI based e-ID

Login to SEFOS using a
password or strong
authentication*

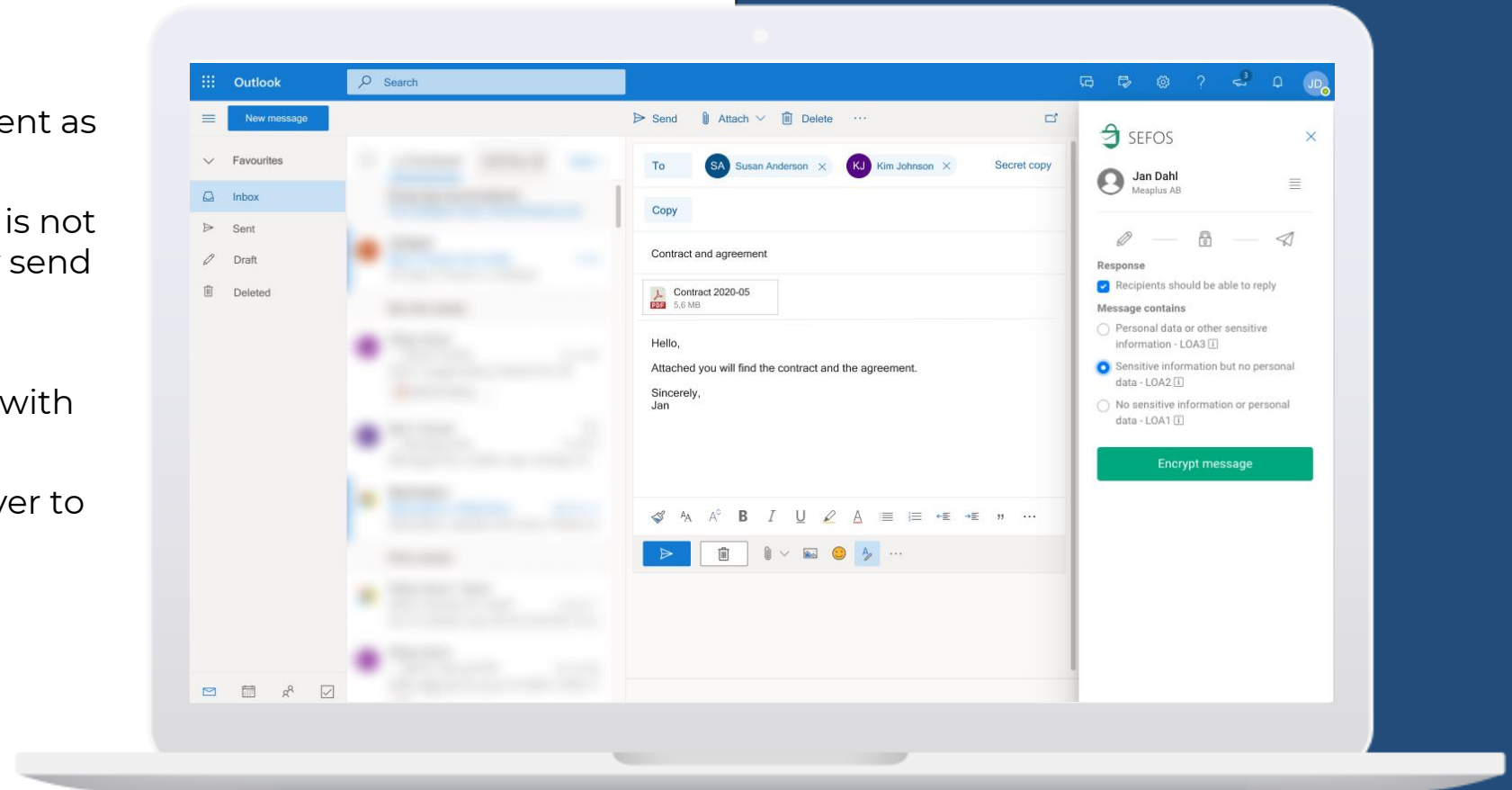


How to send an e-mail?

Just press “Encrypt message”

Encryption

- With a simple press of a button, the message and attachments will be sent as an encrypted file.
- SEFOS will notify you if any receiver is not a subscriber of the service. You may send the message anyway.
- The sender may select the level of identification of the receiver, in line with EU legislation.
- Select the box if you want the receiver to be able to reply securely

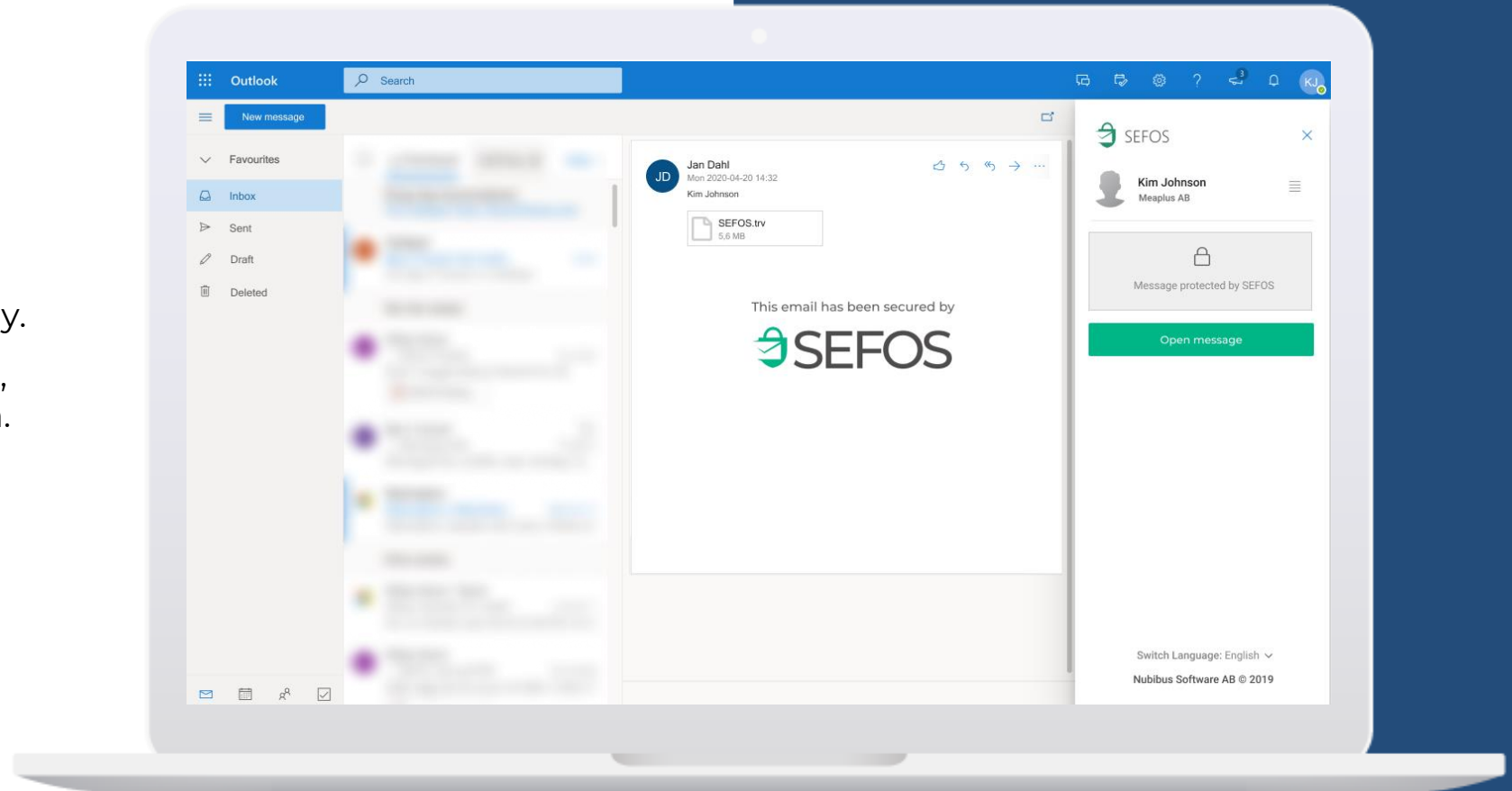


How to open an e-mail?

Just press “Open the message”

Decryption

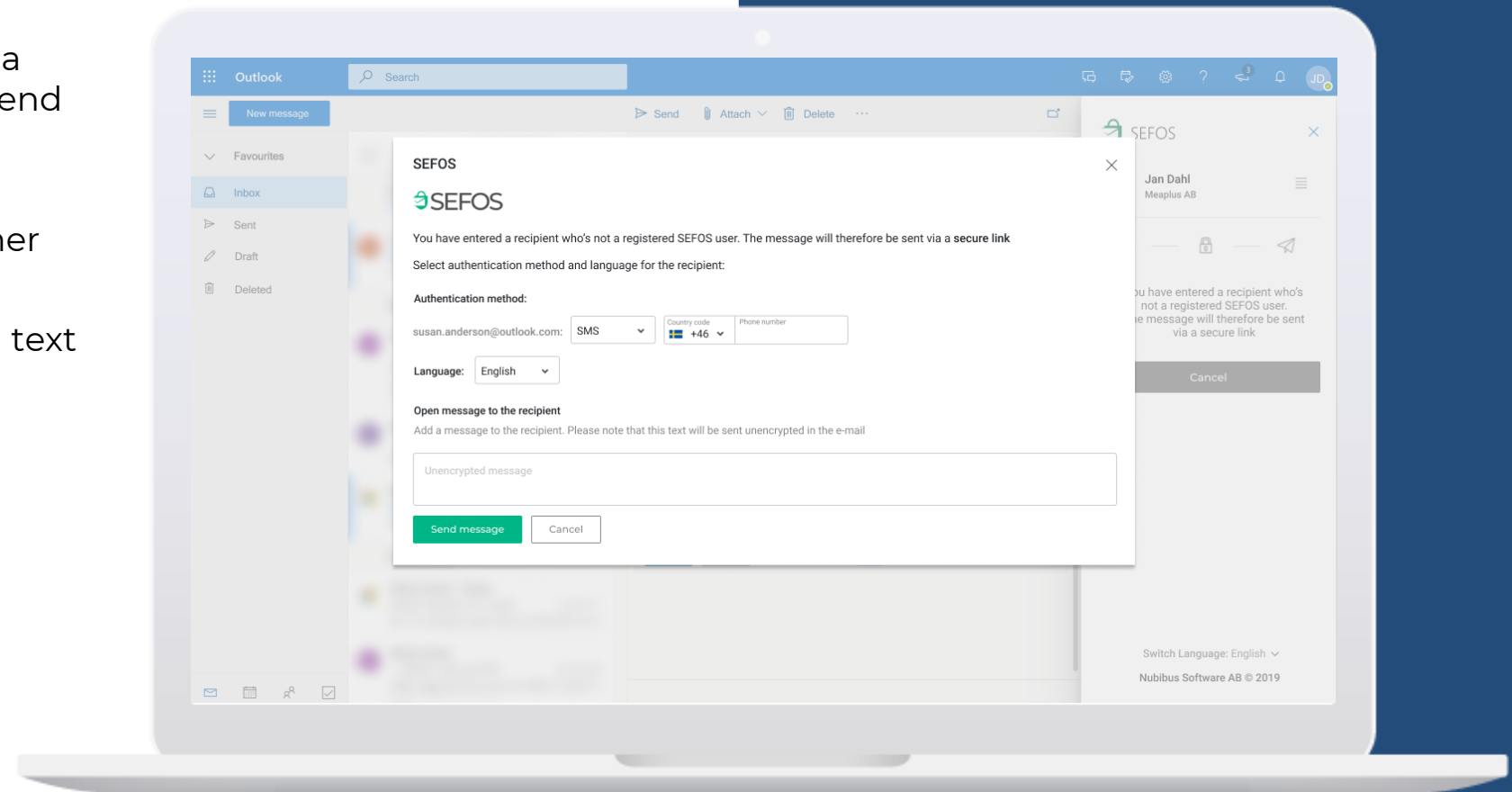
- With a simple press of a button, the message and attachments will be opened.
- You may use SEFOS to reply securely.
- When you have opened your e-mail, the sender will receive a notification.



How to send a message to someone outside SEFOS?

Send to external recipient

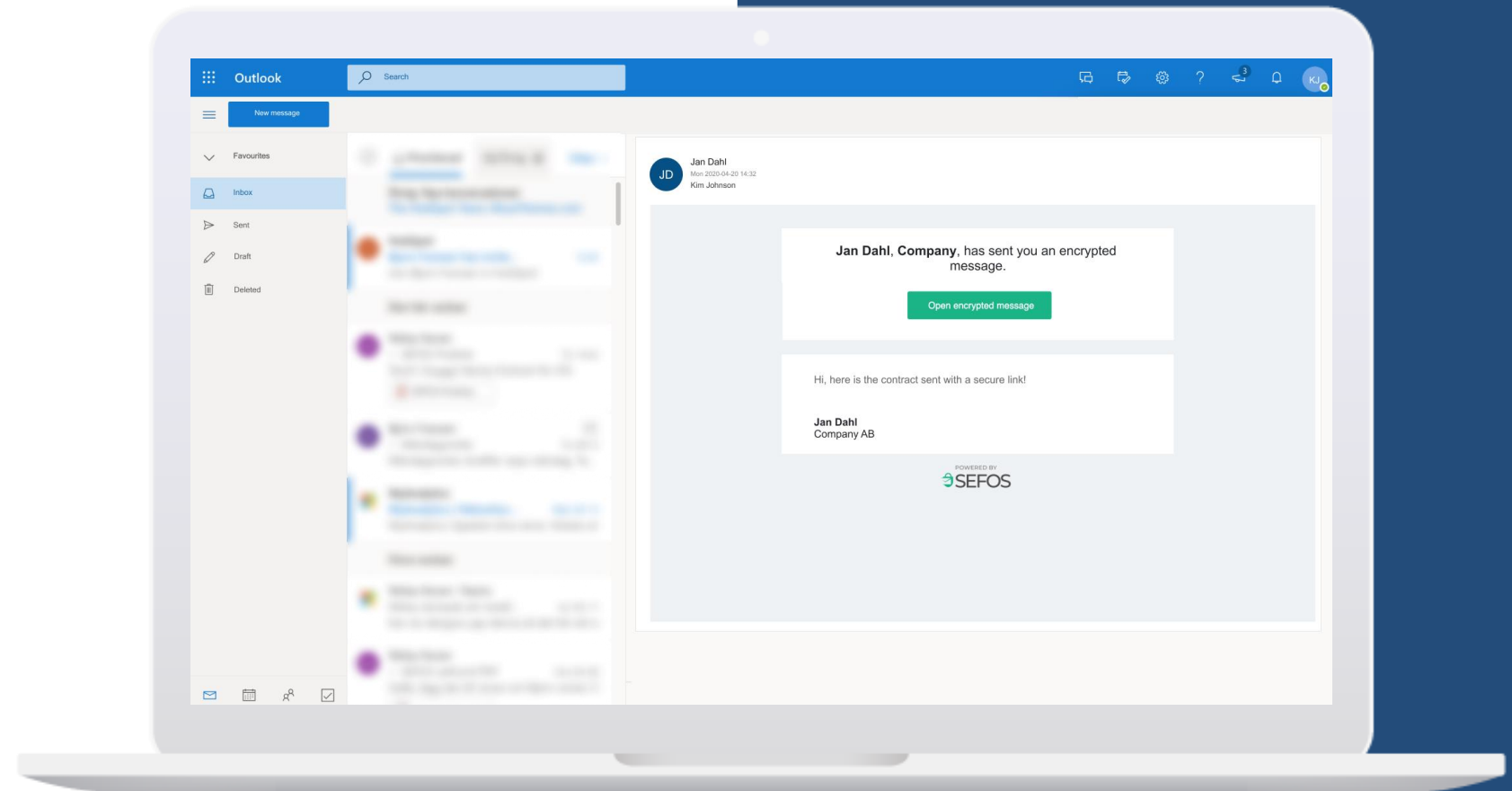
- If the recipient is NOT registered as a user in SEFOS, the sender can still send a message via a secure link.
- In order to access the message, the receiver needs to identify in a manner the sender chooses.
- A field for entering a non encrypted text is available to facilitate the process.
- Today, the following methods for identification are available;
- **SMS or E-mail**
- **SITHS card**
- **Mobile BankID or Freja e-ID**



If you receive an e-mail with a link, just verify yourself and access the information

Open message via link

- The recipient receives a link via e-mail.
- Press the link and verify yourself. The method of identification is chosen by the sender.
- The sender might have added “plain text” in order to facilitate the process.





Get going with SEFOS

1

Registration in SEFOS node

Register your company to a SEFOS node. SEFOS node is available both as a service and for local installation.

2

Invite users

Invite the users who will have access to the service. Installation of SEFOS plug-in can be handled centrally via the Office 365 admin center.

3

Done!

Once users have accepted the invitation, they can log in and start using SEFOS.

SEFOS basic requirements

Message client

- ✓ Outlook Office 365
- ✓ Exchange 2016
- ✓ Exchange 2019

Browsers

Works with most browsers but Google Chrome, Mozilla Firefox or Microsoft Edge are preferred.

The company / organisation

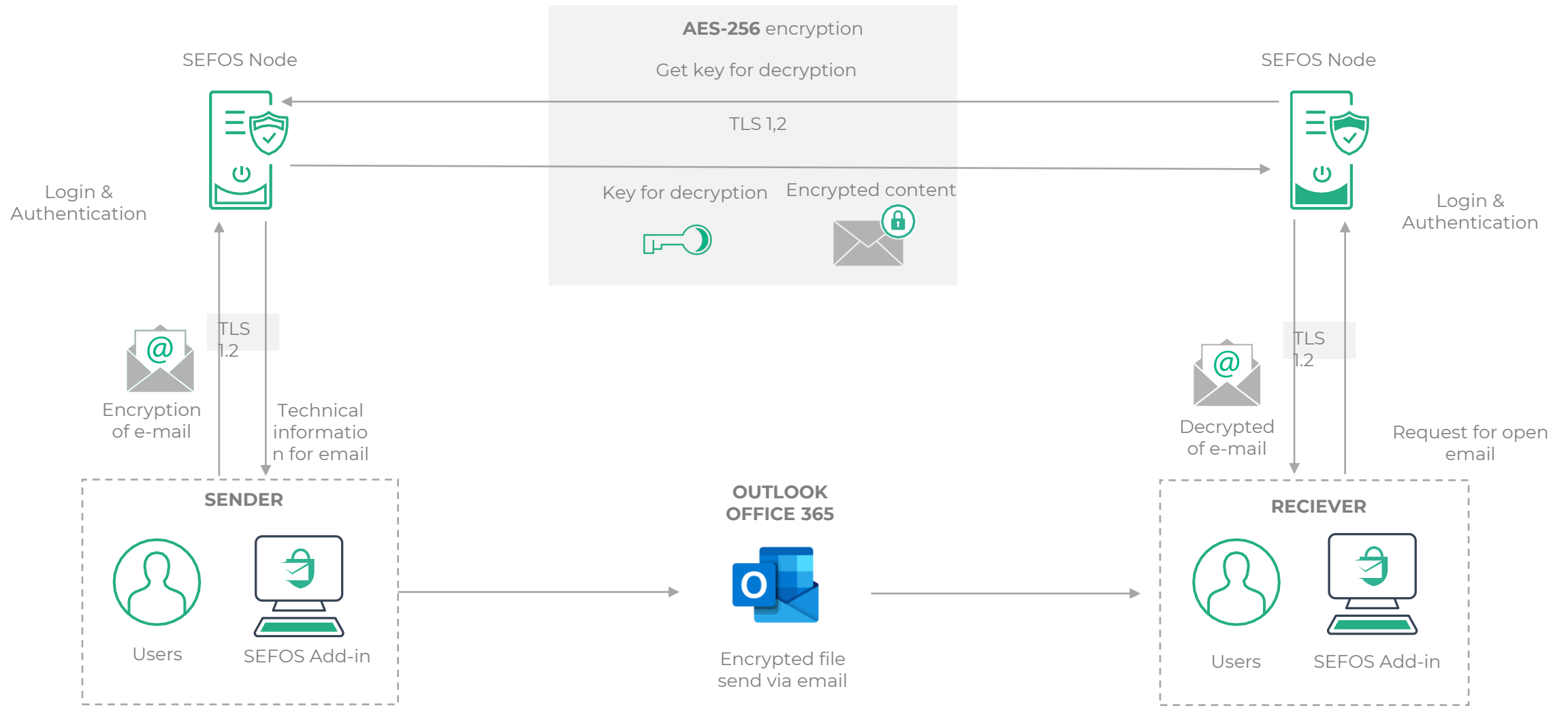
Must be registered in a SEFOS node to be able to use the service.

The User

Must be invited by an administrator in the company or organisation. The administrator selects the login method.



SEFOS Technical overview



SEFOS-link Technical Overview



Technical overview SEFOS-node

	SEFOS node				
API connections	REST	SAML	GraphQL	E Delivery	Other
Security	x509	RSA	AES	HSM	Rules and Policies
Services	Encryption Decryption	Digital signature	Secure file transfer	Response function	Blockchain
	Catalog services	Admin interface	Personal mailbox or for group	Machine to Machine	Mobility
Authentication methods	National e-ID SITHS, Freja e-ID BankID	Security hardware Yubikey	One-time passwords E-mail/SMS	Password	Other

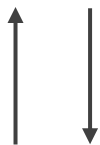
— Authentication with SEFOS Plug-in

SEFOS-node



Login & Authentication

- ✓ Net ID / SITHS Card
- ✓ Freja e-ID
- ✓ Bank ID
- ✓ Password
- ✓ PKI based ID-solutions



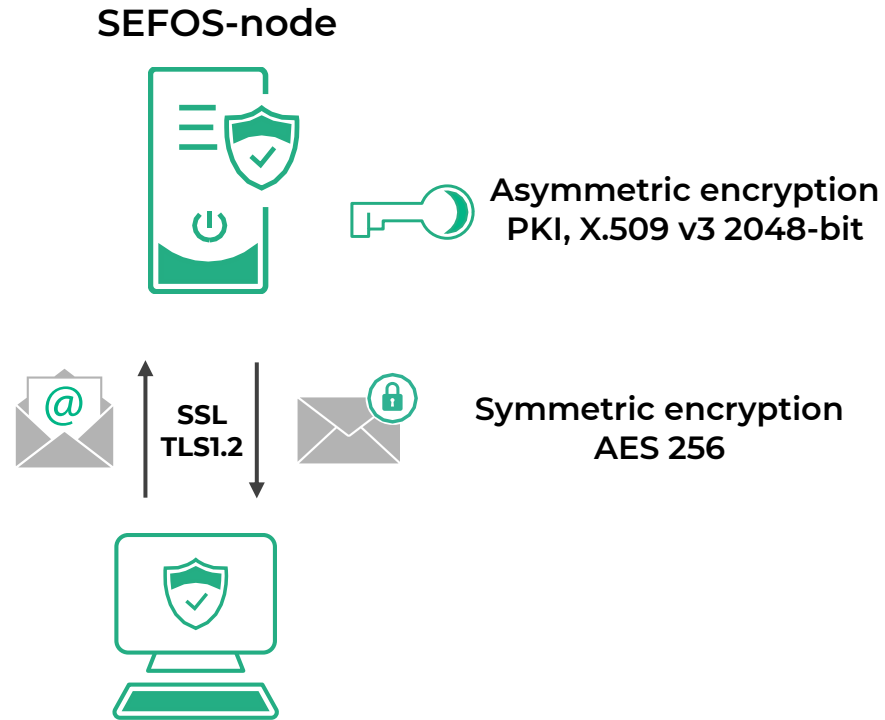
SEFOS Add-in



Important information

- ✓ All users need to authenticate themselves in order to use the SEFOS plug-in. The method required is determined by the person who is the administrator of the company / organization.
- ✓ SEFOS offers login via several different ID methods, such as NetID / SITHS, Freja e-ID, Bank ID and others.
- ✓ SEFOS can also be integrated with other client certificate solutions that use PKI by default.
- ✓ All communication that takes place is protected by at least one layer of encryption.
- ✓ The plug-in can be installed via the central Microsoft Admin Center or locally via Outlook.

Encryption



Important information

- ✓ SEFOS uses standards for encryption and key management.
- ✓ When an organization is created in a SEFOS node, an encryption key is generated based on the x509 v3 certificate protocol. The key is thus linked to the organization.
- ✓ The content itself (email + attachment) is protected with symmetric encryption based on AES256.
- ✓ The encryption keys used for encryption and decryption use PKI, x509 v3 asymmetric encryption.
- ✓ Each message uses unique encryption keys.
- ✓ The SEFOS system does not send the content itself, only metadata about the content, authentication and encryption / decryption of information.
- ✓ The SEFOS node does NOT store any sensitive information.

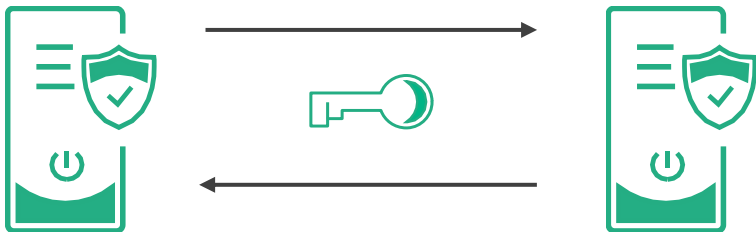
— Communication and decryption

Outlook Office 365



Email with an encrypted attachment

SEFOS node



Important information

- ✓ The symmetric key used to decrypt the content is encrypted using the sender's SEFOS node and the public key associated with the receiving organization and their SEFOS node.
- ✓ Text and attachments are sent as an encrypted file to the recipient via Outlook.
- ✓ When opening the content, the receiving SEFOS node first authenticates itself to the sending SEFOS node and retrieves the symmetric key. This allows the receiving SEFOS node to first decrypt the symmetric key and then decrypt the content sent by the user.



 SEFOS
