V@nguard

User   Manual

List of Content

1. Introduction to V@nguard

V@nguard, a Suspicious Email Detection System, is required to be installed on the mail recipient's email server. V@nguard operates by comparing the sender's email address against the emails that were previously received by the recipient, which is known as the Known Sender List, thus assisting the mail recipient in detecting suspicious emails.

Installation

V@nguard is written in Python, a widely used programming language. It is required to be installed on an email server running on Linux operating system. Once V@ngaurd is downloaded and decompressed, it consists of four major components:

Folder **config**   —   configuration of V@nguard
Folder **src**   —   major source code of V@nguard
Folder **data**   —   Known Sender List in SQLite format to store the email address
Folder **logs**   —   system logs of V@nguard

Download and Applications

V@nguard can be downloaded from www.cyberdefender.hk. Once V@ngaurd is installed and starts running on the email server, the senders' email addresses in the inbox of an individual mail recipient would be imported to the Known Sender List, and the email addresses in the junk folder would be imported to the Junk Sender List. For more details, please refer to the file of README.md.

Support

For technical support, please dial 2860 2913 or email vanguard@police.gov.hk.

# 2. Known Sender List Creation and Comparison

When the mail recipient (example: wills@vanguard-email.com) receives a new email, V@nguard will compare the sender's email address (example: tom.company@aol.com) with the recipient's Known Sender List.   If the sender's email address is not in the Known Sender List, a notification message [⚠⚠ FROM NEW SENDER ⚠⚠] will appear at the email subject, alerting the recipient that this is the first email received from such sender.
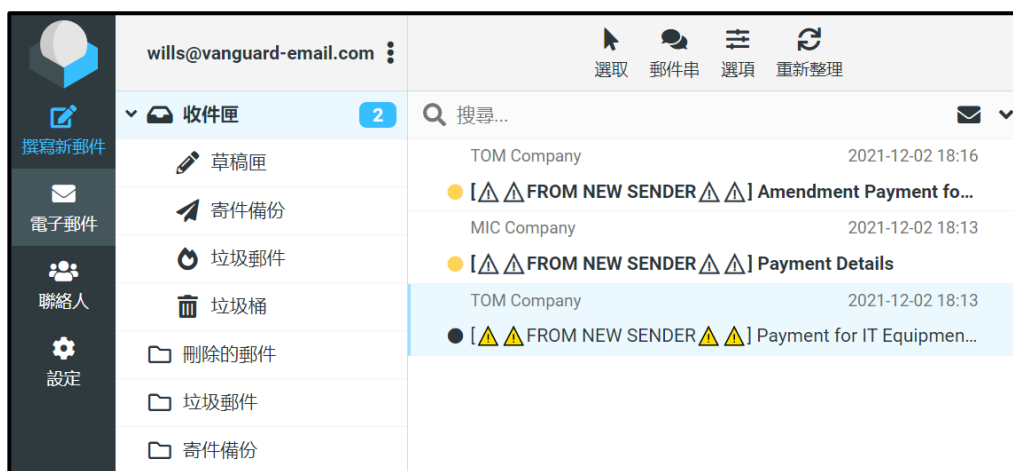

A warning banner in red will also be displayed at the beginning of the email, thereby reminding the recipient to confirm the authenticity of the email content and seek IT assistance if in doubt.
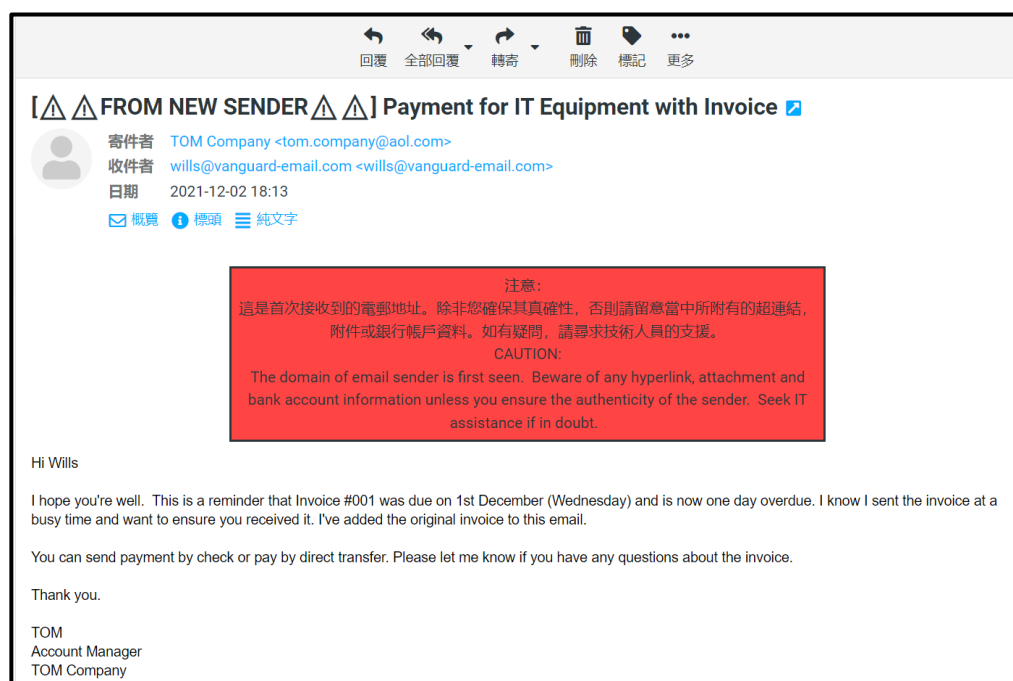
After the recipient opens the email, five minutes later, V@nguard will automatically import the sender's email address to the Known Sender List. Once a sender email address is added to the Known Sender List, its email subject and content would no longer display any notification messages and warning banners.


         V@nguard User Manual (Last Update: 2022-01-10)
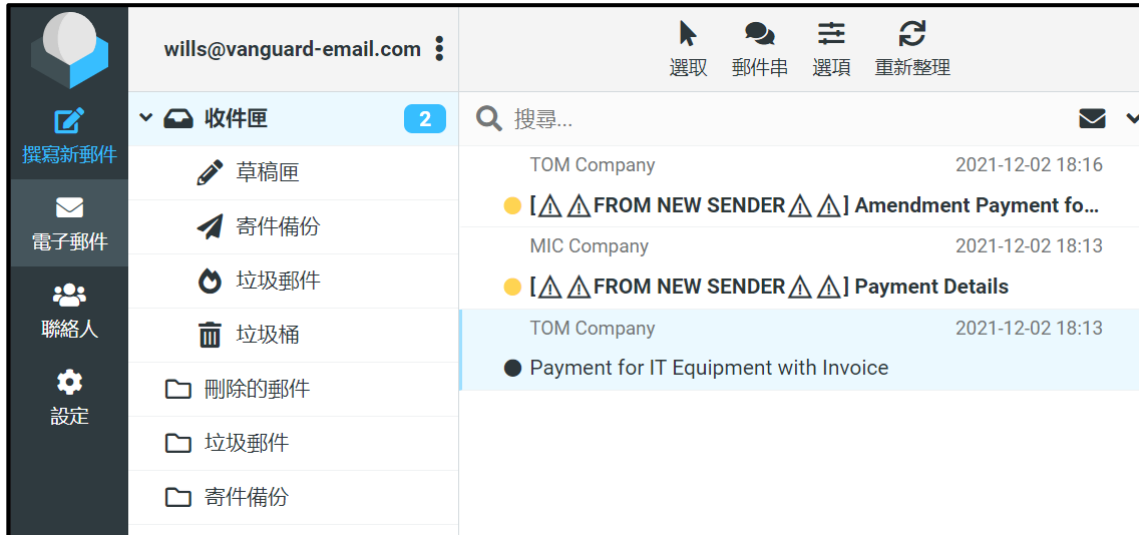
After the recipient confirms the sender is known and the email address is imported to the Known Sender List, further emails from the same sender would not display the notification messages and warning banners.
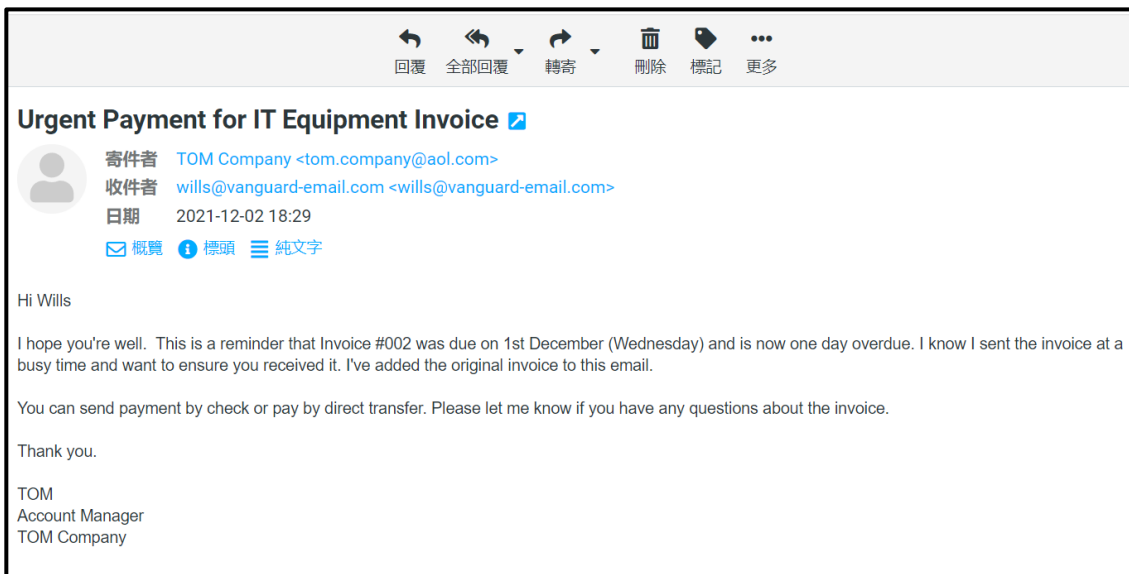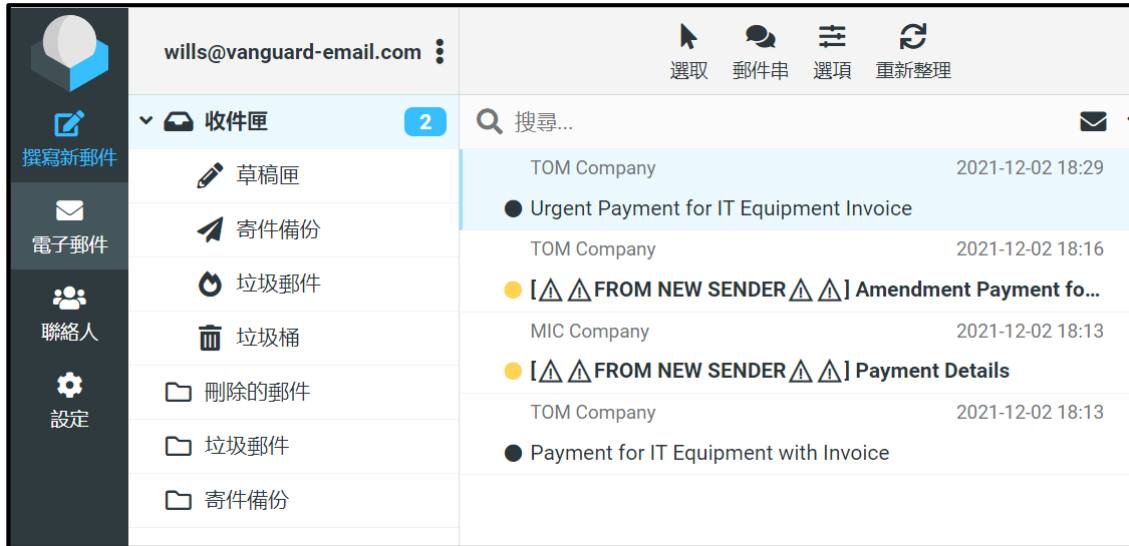
3. Known Sender List Storage

Known Sender List is independent of the individual recipient in the same email server.   After the recipient has imported the sender's email address (example: tom.company@aol.com) to the Known Sender List, further emails from the same sender sent to other mail recipients in the same email server (example: jack@vangaurd-email.com) would still display the notification message [⚠⚠ FROM NEW SENDER ⚠⚠] and the warning banner.
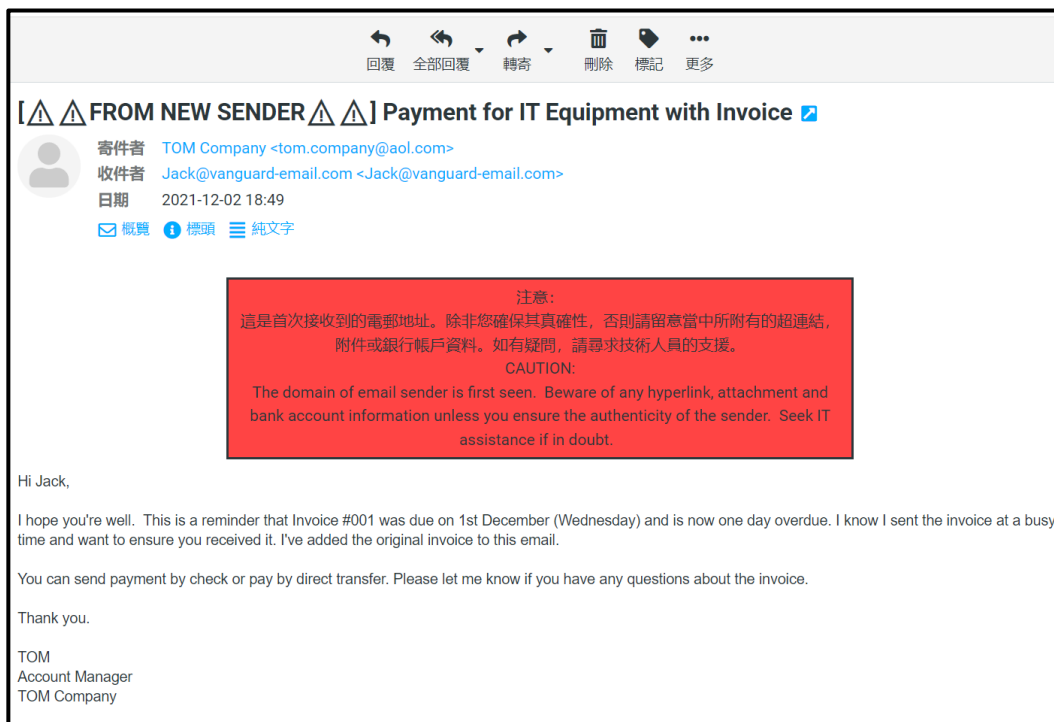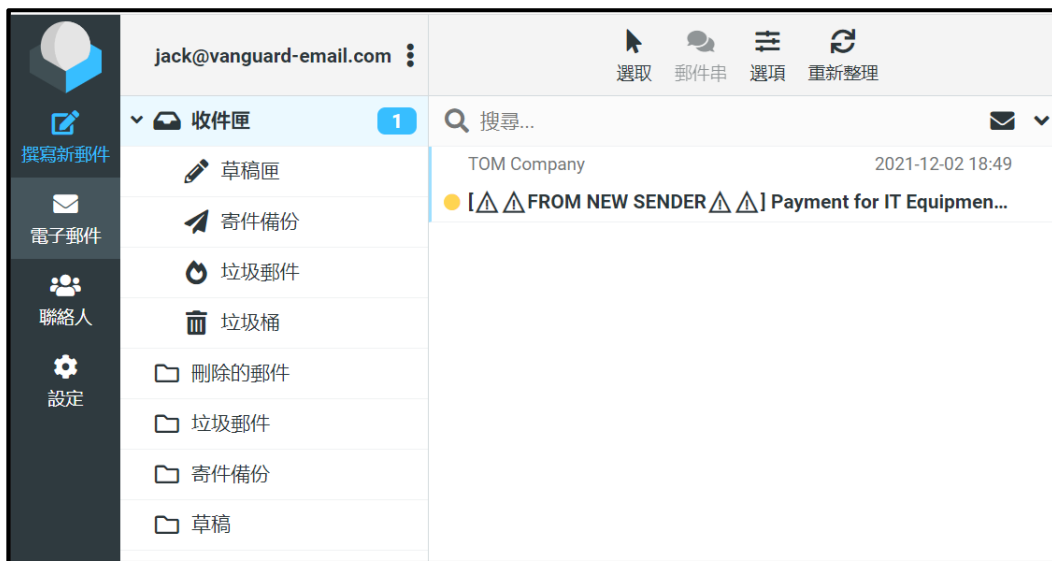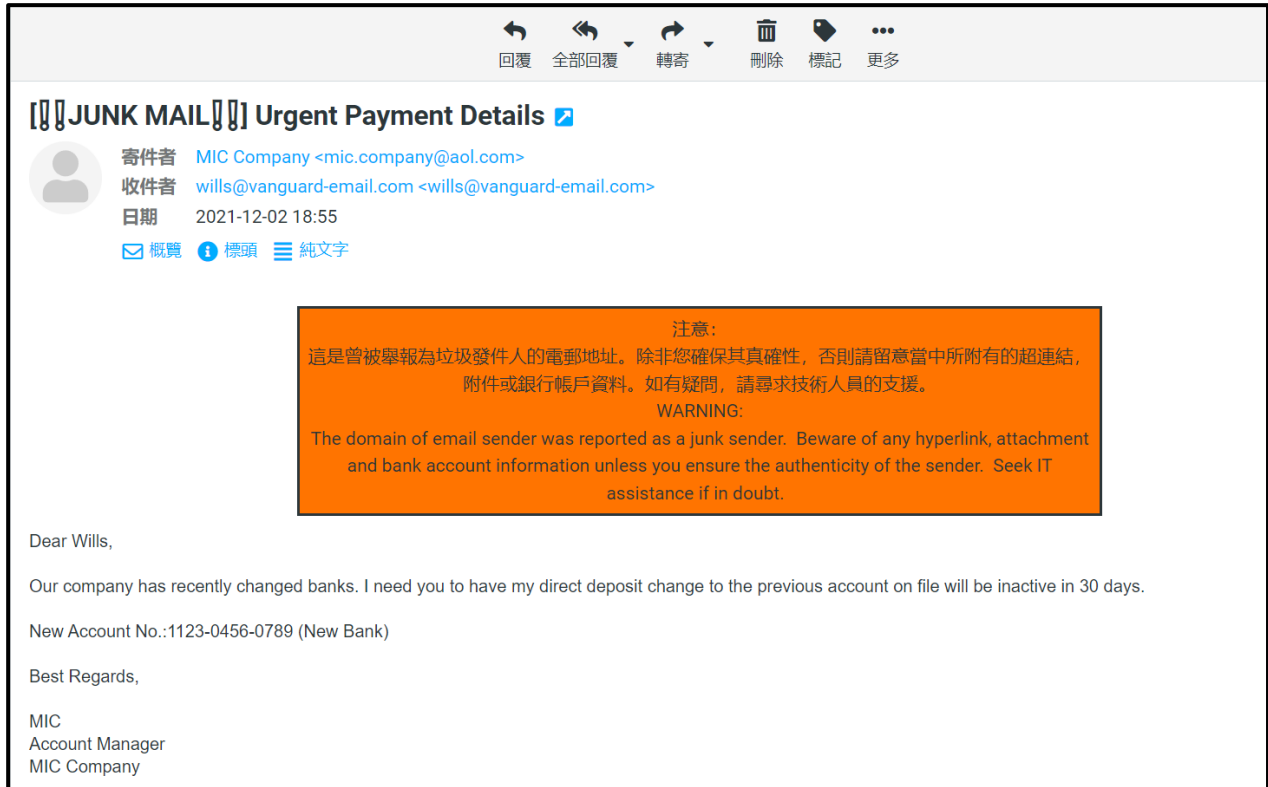
4. Junk Sender List Creation

If the recipient (example: wills@vanguard-email.com) confirms that the received email is suspicious, he / she should move the concerned email (example: mic.company@aol.com) to the Junk Folder. By doing so, the sender's email address is added to the Junk Sender List. A notification message [‼JUNK MAIL‼] would appear at the email subject to alert the recipient.

When the recipient receives further emails from the same sender, those emails would be automatically placed in the Junk Folder with the notification message displayed at the email subject.
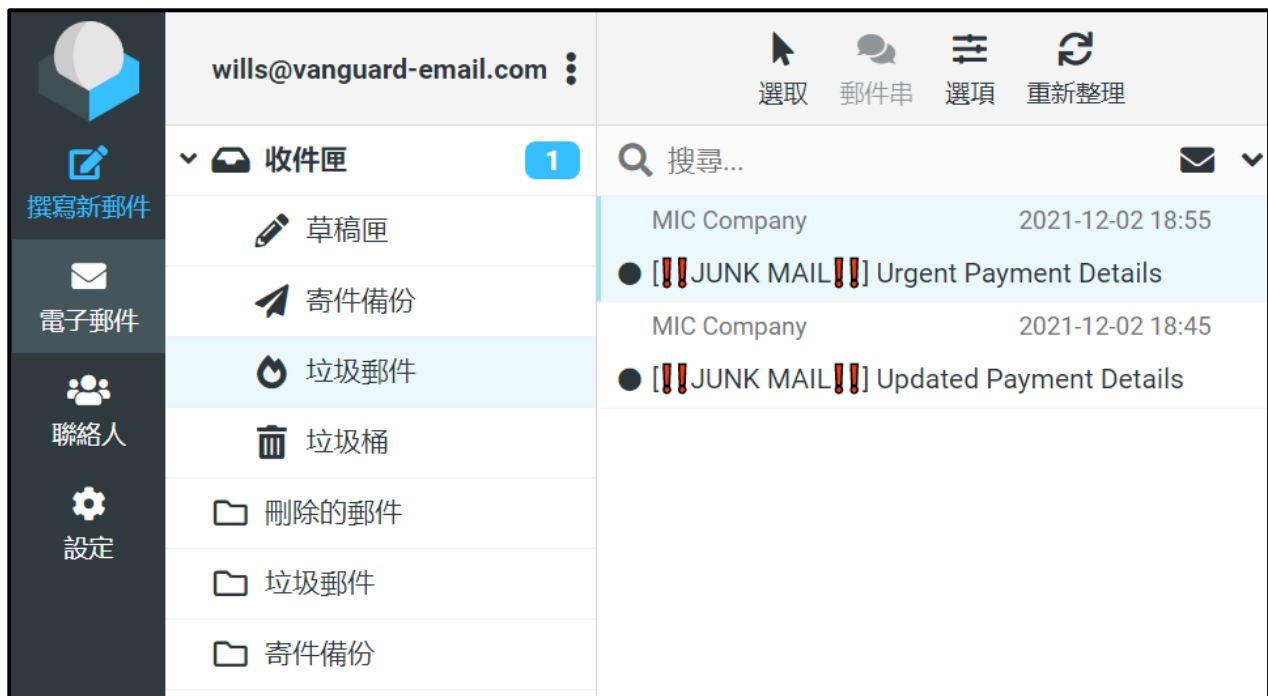
Upon opening the email that has been moved to the Junk Folder, an orange warning banner would be displayed at the beginning of the email to remind the recipient to confirm the authenticity of the email and seek IT assistance if in doubt.

Junk Sender List is shared by all recipients in the same email server.   After one of the recipients has imported the sender's email address (mic.company@aol.com) to the Junk Sender List, further emails from the same sender sends to other mail recipients in the same email server (example: jack@vangaurd-email.com) would be automatically placed in the Junk Folder with the notification message and warning banner displayed.
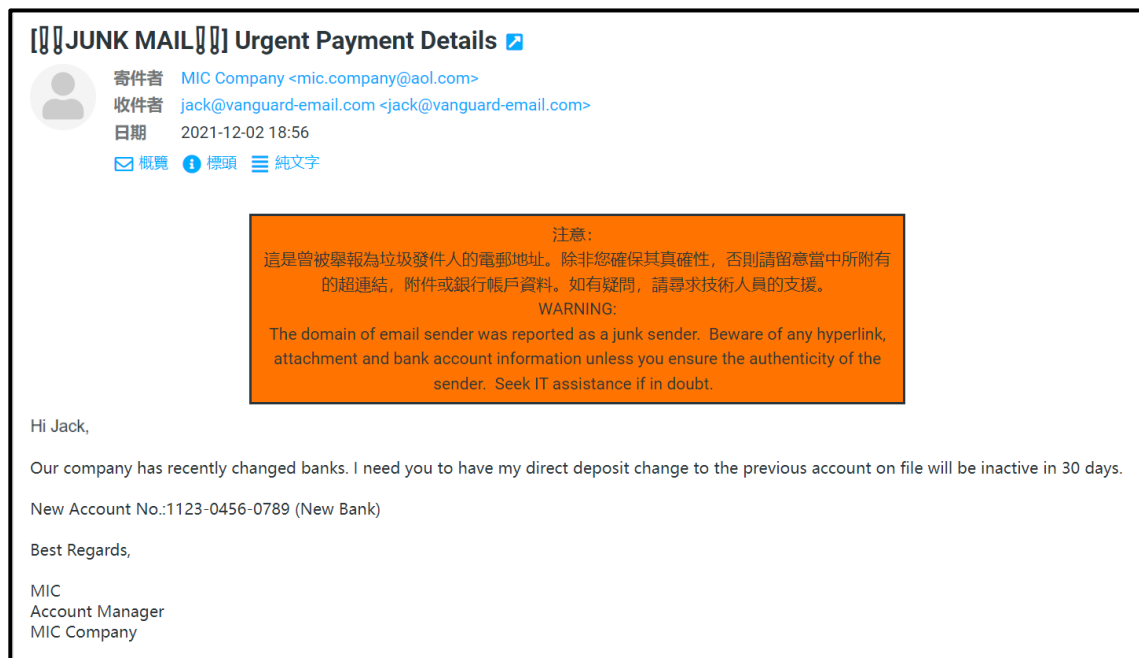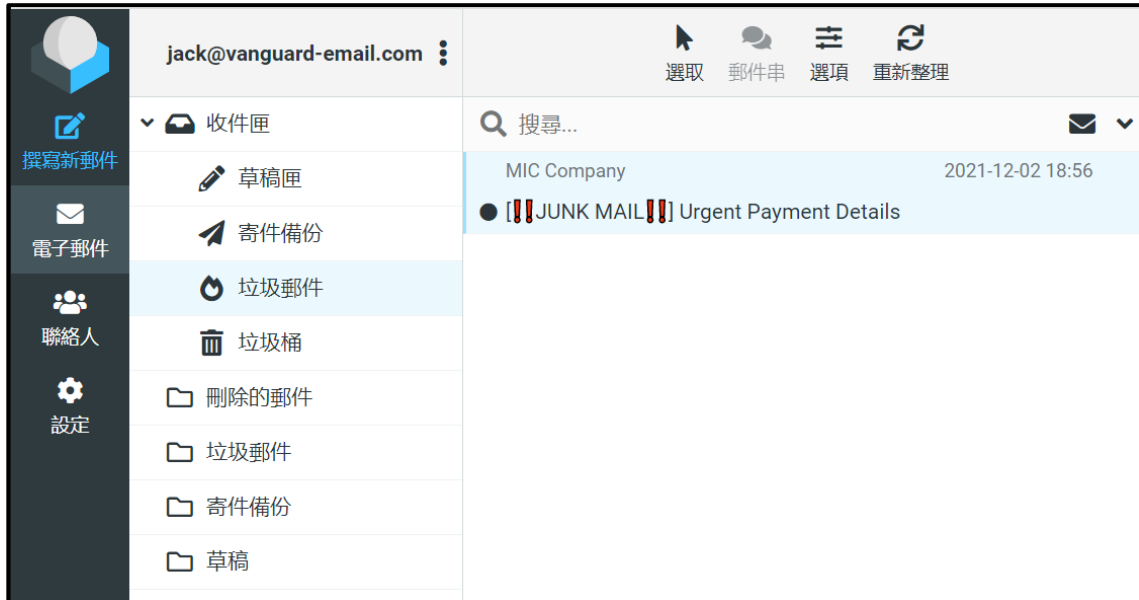
* If the recipient is required to amend the Junk Sender List, please seek assistance from the IT staff.