

WE ARE A PROFESSIONAL IT COMPANY
“We Bring Safe and Saved **IT Solutions & Services”**

VNETWORK is an IT company specialized in providing solutions of IT infrastructure, content delivery network, and security in Vietnam.

With clear direction and development criteria, VNETWORK is known as a dynamic young unit that has always pioneered the application and transfer of advanced technology with international service standards in Vietnam.

Receive GUARD

New generation of secure email gateway

I



Importance of mail security

- | 01 Hacking Damage Report
- | 02 Receive GUARD

Evolution of Social Engineering Email Attack



Being hacked via link/ URL

Soure: Palo Alto Networks



BEC Damage

Source: Trend micro paradigm



Email attack


Source: Valimail

Evolution of Social Engineering Email Attack



2. Receive GUARD



 **Receive GUARD** is not using pattern update, but using behavior analysis technology to block social engineering attack initially

This technology recognized by **Gartner®**

Specialized in targeting BEC



The only preemptive Cyber security product in the world dealing with **APT attacks and BEC** by self-developed technology of behavior-based filtering system, own e-mail engine and service knowhow.

Proactively analyze user damage



Behavior-based dynamic analysis can detect the danger possibility of not only body and but images ,URLs hidden in attachments. Also it proactively blocks unknown ransomware and malware.

Remove potential dangerous factor



When abnormal behavior is detected in the received email, it is **converted to an image to eliminate the risk.** Also if the user replies to the detected danger of fraud address , manager will receive the warning

2. Receive GUARD



Global Assessment Certification

2017-03



“ReceiveGUARD is specialized in blocking targeting attacks”

Innovation secure mail gateway through AI and Machine learning

2017-09



Test for procuring Singapore government About total **364** inspects factor , ‘**Weakness 0**’

II



Solution Introduction

- | 01 | Function list
- | 02 | Core Function
- | 03 | Statics Report

1. Functions

Malicious email analysis and custom filtering



Virtual Area

- Examines incoming in real time by allocating as many VA's as it is necessary per mail.
- More than 1,000 VA's are available for allocation
- Improves mail speed and secures the accuracy of the examination
- Performs analysis of URL and forged/falsified files, and detection of viruses and malware



Program Credibility

- Creates credibility based on the results of analysis and learning in VA
- Builds individual credibility of each incoming mail
- Determines the delivery of a mail to the user based on the risk level assessed by the credibility



Intelligent Learning

- Analyzes the entire body of the mail in case a user wants to receive the mail blocked before
- Automatically creates patterns to be suitable for each exception when analyzing the mail
- Stores it a floating encryption scheme to prevent pattern falsification



Blocked Ransomware

- Continue scanning for viruses and malware to scan the default attachments.
- In VA, open the URL directly connected to the main body and, if VA exists, download the download file in advance to identify the risk.
- Malware detection detects malware with modified file extensions.



Real-time Analysis of URL END POINT

- Examines all addresses linked to the mail by opening them in VA in advance to check if any malicious code is hidden
- Removes additional risk in advance by checking the linked URL included in the mail body to the end-point if it found that another link of the URL is set further inside the linked website



Tracking Sender address

- The first mail routing information for each account is stored.
- And compares it with the stored path when receiving the mail again.
- Insert a warning message when changing the route.



Examination of sender's address

- Check the validity of the mail forwarding address and inspect the stomach and modulation.
- Although the server is valid, it detects traces of stomach and modulation of the sender's address separately.
- Prevent snooping attacks.



Image Conversion of Suspicious Mails

- Activates function enabling to convert the image of suspicious mail before delivering filtered mail to user
- Delivers the body of the mail to user after converting it into the image in case a link to URL is detected in the body of blocked mails
- Sends the body of a mail after confirming its address and password through communicating with the account authentication server when re-transmission is requested



Inspection of Similar domain

- Analyze similarity comparison with existing domain.
- If it is a risk account, display a warning after comparative analysis.

1. Functions

Malicious email analysis and custom filtering



Report

- Grant administrator permission to set up reports (for whom and what to exclude reports)
- Block mail after checking reports after connecting separate links / Enable Allow
- Send a report mail to the user e.g history of blocking ...
- Mail management features to view incoming history, block mail, and allow mail



Manage business/ advertising messages

- Mail is managed separately through schedule patterns such as mail body and mail header.
- Manage mail easily through separate statistics.



Load balancing

- Self-check mail server traffic status and distribute and forward usage
- Prompt handling when receiving large mail



Analysis of Fake file

- Malicious codes and viruses disguised as commonly used document files such as PDF, HWP, DOC, and PPT are detected.
- Check the VA in advance and block to avoid risks may occur.



Risk Link Detection in Attachment

- Analyze the body of the attached document in the mail to detect the link.
- Analyze the risk of links based on the already accumulated confidence data.
- The more data it accumulates, the clearer it is detectable.



Insert warning text in subject

- When blocking mail is allowed, a warning such as [BLOCK] [WARNING] is inserted and delivered to the user.
- Check the security of the mail by checking the warning text.
- The warning text can be changed by the administrator.



Archiving

- Enables private backups as often as set by the administrator
- You can also restore emails that have been deleted accidentally
- Apply archiving the same as your webmail system
- Keeps the same original text as the actual mail system by separating information and files



Build Personal User Data

- Send periodic reports to individual users when blocking mail
- Manage your data through a dedicated personal Web page.
- It is applicable to systems without a separate central administrator.
- The verification of various users ensures clearer filtering.



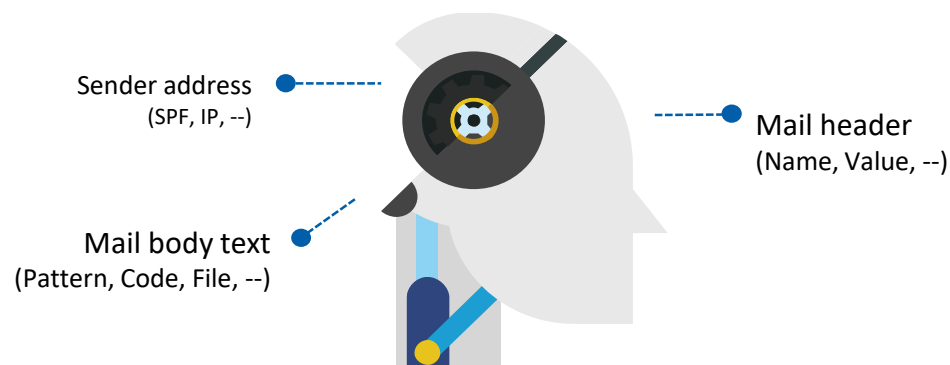
Various Support

- Provides a Web administrator function that enables communication checks with a connected mail server.
- You can inquire RCPT and log history of mail forwarding results.
- Provides real-time information about the entire system operation
- Provides flow settings for internal private networks

2. Core Function (Learning a mail)

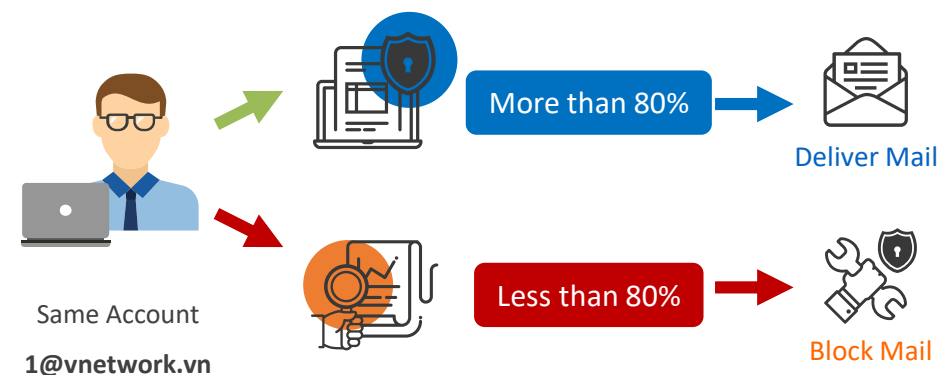
“Build individual data for each incoming mail”

Learning & Analyzing all incoming e-mails of each account



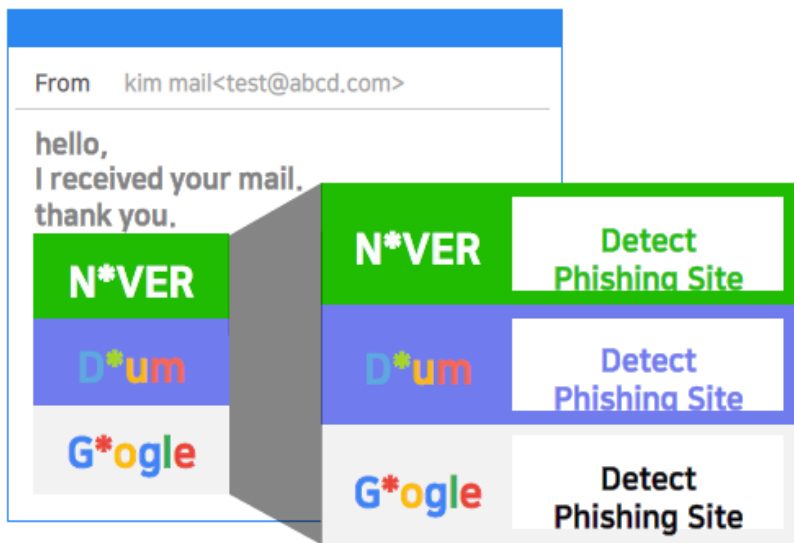
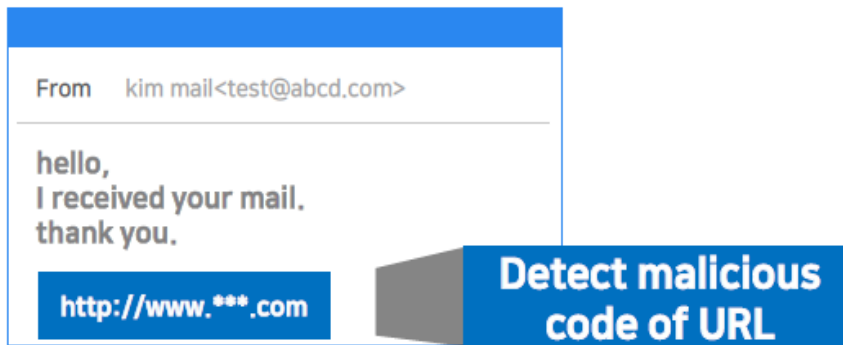
All incoming mails are learned by using machine learning technology. It takes 2~4 weeks to learn and understand user's information and behavior.

Based on learning, creates credibility for each e-mail



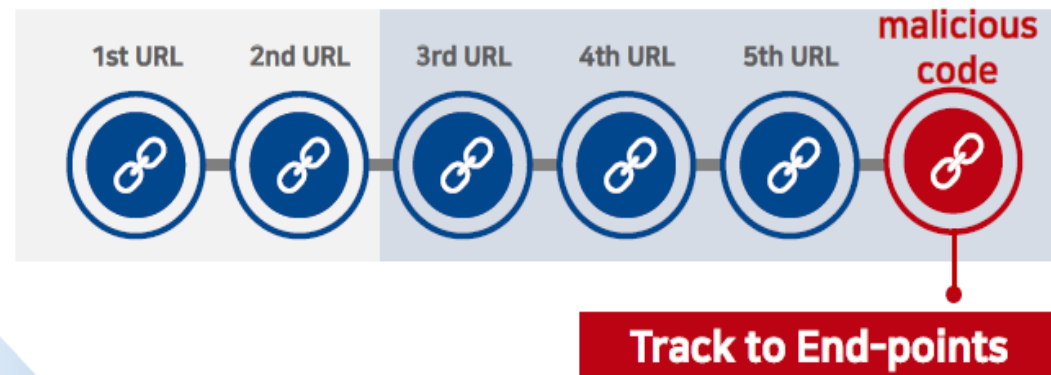
Through the results of the learning, Receive Guard will compare and analyze the mail sent from the same account to determine whether the mail is normal or not.

2. Core Function (Learning a mail)



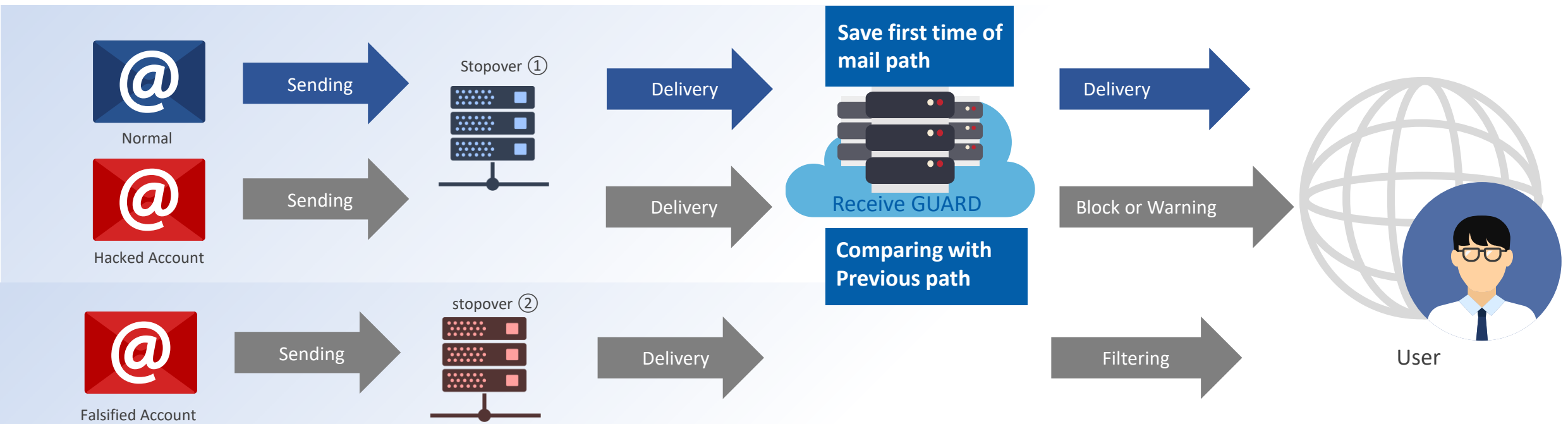
Normally detect this area

Hidden danger area



2. Core Function (Tracking sender)

Block changed route not normal route



Receive GUARD saves mail address of senders; if it changes suddenly, **Receive GUARD** blocks and warns receivers for more inspection in need.

Receiver can check with the sender whether it's changed or not.

2. Core Function (Detect Similar Domain)



1@VNETWORK.VN



Capital letter - 0

1@VNETWORK.VN



The number - 0

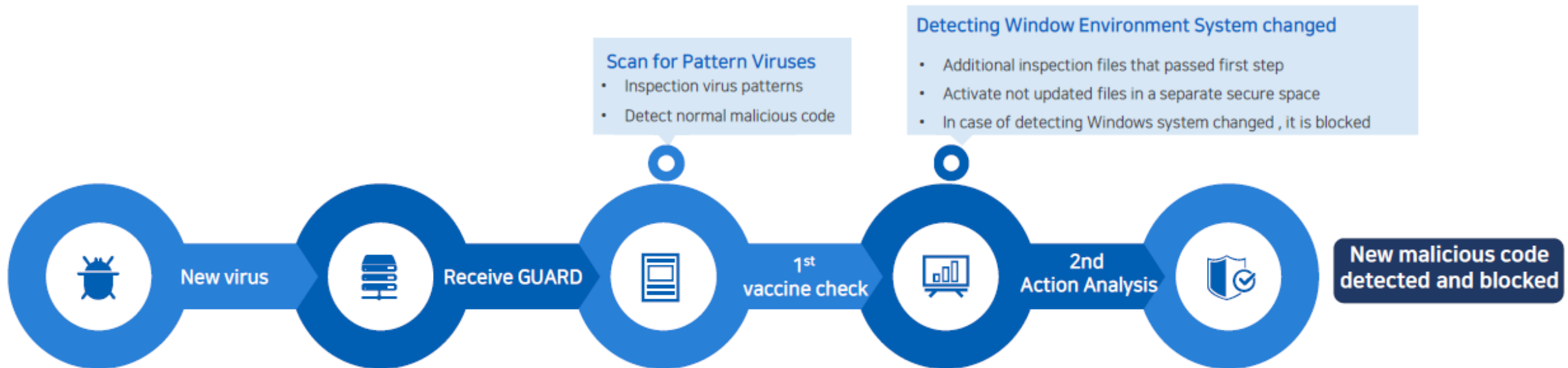
Similarity filtering (Warning, Caution, Need to Watch) user alert notification

“Detection of similar domain which is difficult to distinguish”

- Build data for each business and individual user for incoming mail addresses and domains (accounts).
- If similar addresses are found, users will be notified by conducting a similar check on the account received in the future.

2. Core Function (New Virus)

Multiple different inspection ways for analyzing all of behavior case



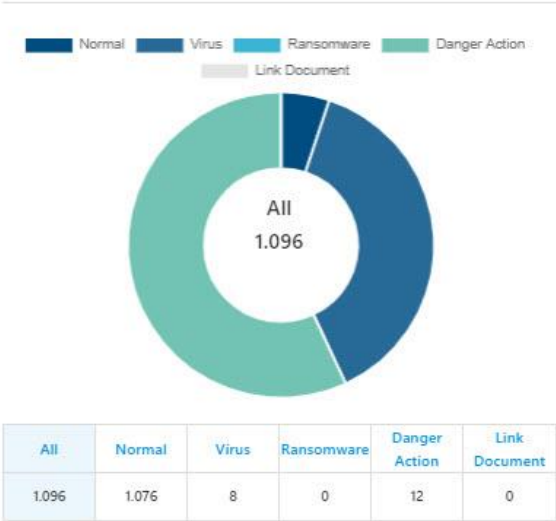
I. Perform an examination of files even though no abnormalities were detected in the 1st vaccine test.

2. 2nd test is to filter attachments based on the purpose of action regardless of MS or vaccine.

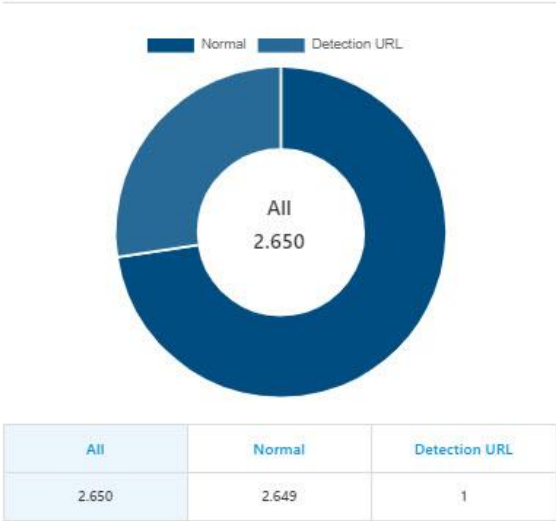
- Files attempting to change parameters of Windows system
- Files trying to act beyond the limits as a downloaded file
- Programs attempting to install unknown software in the system during compression or decompression

3. Static Report

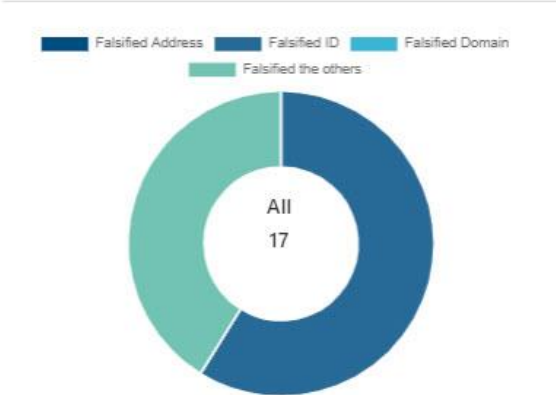
► Status of attachment file inspection



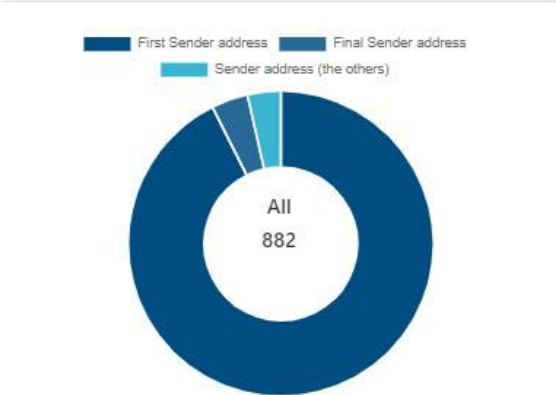
► Status of URL inspection



► Status of falsified header inspection



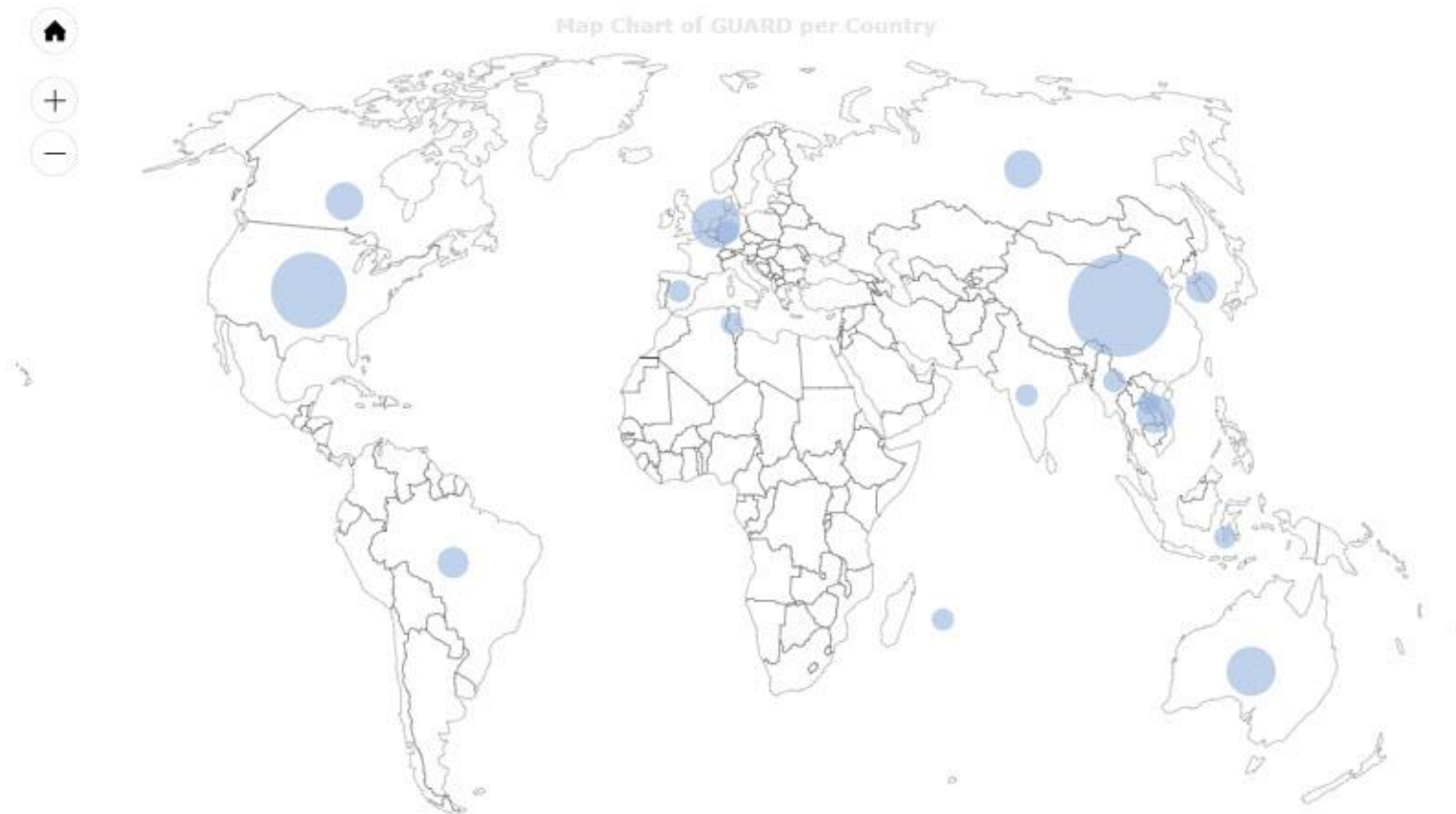
► Status of sender address inspection



3. Statics Report

► Status of GUARD per Country

- Map Chart of GUARD per Country



3. Statics Report

Status/ Report - ReceiveGUARD

Group

Domain

1 Day

2019-03-07

2019-03-07

Apply

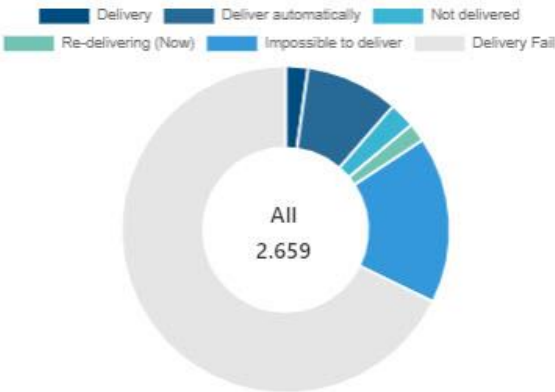
[Print 'Report'](#)

► Status of operation

Date	All	Normal Mail		Dangerous Mail					Falsified Mail		
		Normal	Reliability (Normal)	AD (Business)	AD (Normal)	Virus Mail	Ransomware	Danger Action	Falsified Header	Danger of sender address	Similar Domain
2019-3-7	2.613	1.071	91	21	141	8	0	12	17	882	2

► Status of delivery

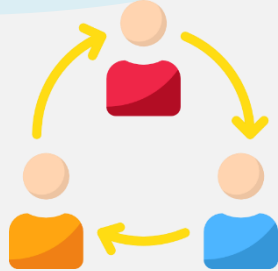
All	2.659
Delivery	1.202
Deliver automatically	5
Not delivered	1.405
Re-delivering (Now)	1
Impossible to deliver	9
Delivery Fail	37



4. Outstanding Functions

Outstanding Functions of **SECUMAIL**

EMAIL SHARING



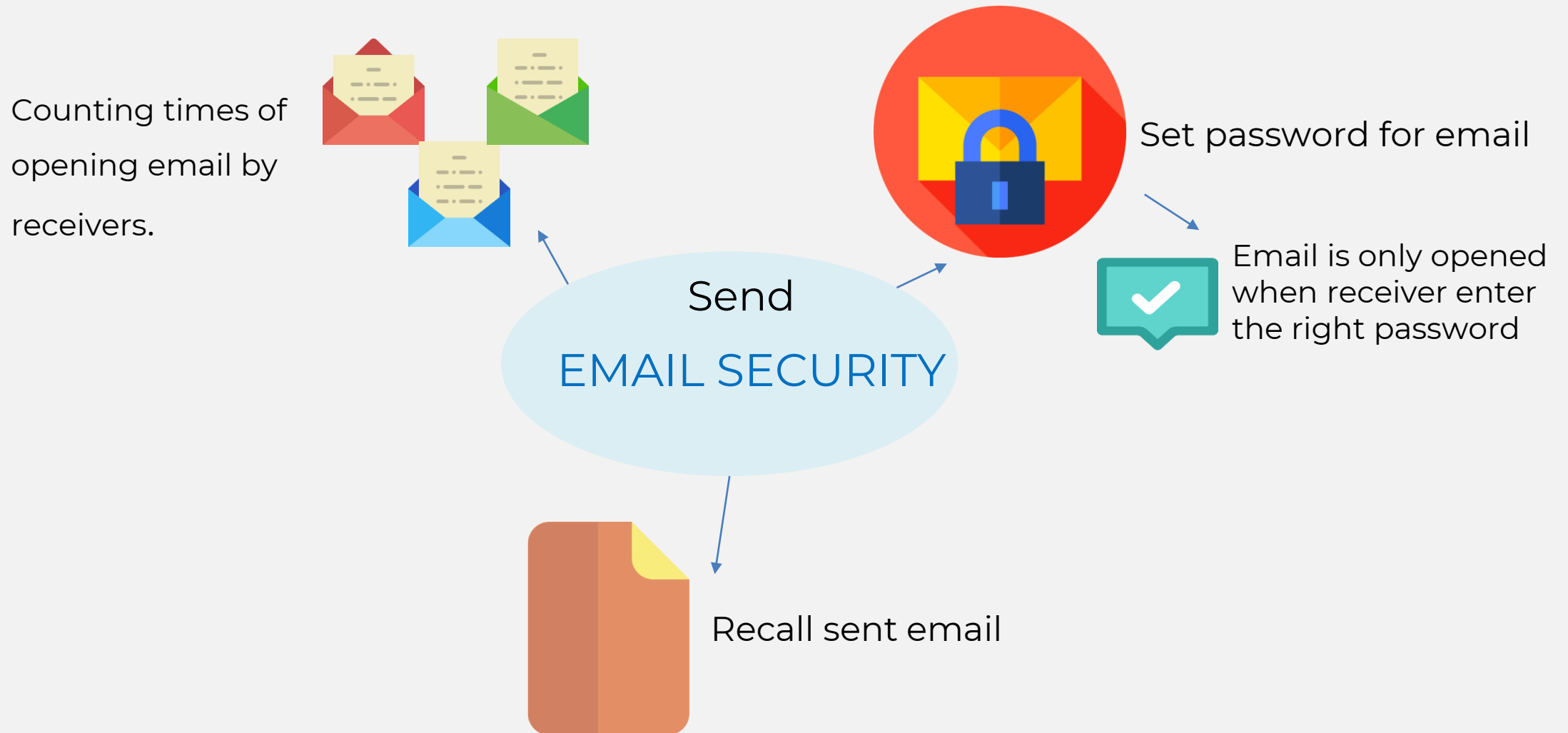
- Share emails to the same email group.
- When the recipient responds to any email in the group, all members receive it.
- Set up timing for email sending

ATTATCH LARGE FILES

- Up to 10GB
- Allow to send by Outlook



4. Outstanding Functions



“The best choice of Email Security system” - **SECUMAIL**





X-04.59, 4th floor, Sunrise City North Tower,
27 Nguyen Huu Tho street, Tan Hung ward,
District 7, HCMC, Vietnam



<https://vnetwork.vn>
contact@vnetwork.vn



(84-28) 73 068 789



THANK YOU