

# CYBERSECURITY FOR MOBILE DEVICES

A COMPILATION OF INFOGRAPHICS FROM ASEAN COUNTRIES



**ASEAN · JAPAN**  
Cybersecurity Cooperation



# Introduction

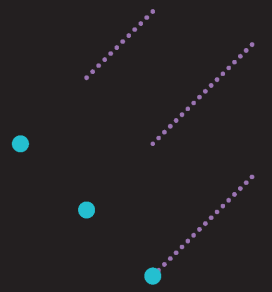
The increased use of smartphones and other smart devices has made life more convenient. At the same time, it has also exposed us to risk from cyber threats such as online scams and data theft.

With the COVID-19 pandemic triggering a surge in digitalisation and e-commerce, the attack surface for cyber criminals has correspondingly increased. It is now more urgent than ever for government agencies to increase public awareness of cybersecurity and the need to adopt measures to protect our devices and data.

At the First ASEAN-Japan Cybersecurity Working Group Online Meeting on 18 Feb 2021, ASEAN Member States and Japan agreed to work on building cybersecurity awareness through collaborative efforts. This compilation of infographics by ASEAN Member States and Japan based on the theme, "Cybersecurity for Mobile Devices", is an initiative to bring countries together to share best practices and exchange public education resources. More importantly, it aims to help the citizens of the ASEAN-Japan community navigate cyberspace safely.







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Brunei  
Darussalam

Two-Factor  
Authentication

# Two-Factor Authentication

or **Multiple Factor Authentication** is when a user successfully presents two or more pieces of evidence to an authentication device to gain access to his mobile device.



## Examples of Two-Factor Authentication

### Password & E-mail Verification

Password  +

Hi,  
Good on you for keeping your account secure.  
Here's your authentication code: **738118**  
This code expires in 20 minutes, but you can generate another by logging in again.  
**What to do if you didn't request this email**  
This email is sent automatically when you log into your MYOB account. If you haven't logged in recently, someone else might be trying to access your account.

### Password & SMS Code Verification

Password  +

**Messages**  
Search

**220-00** 6:16 PM >  
• G-964261 is your Google verification code.

### PIN Code & SMS Code Verification

+ **Messages**  
Search

**220-00** 6:16 PM >  
• G-964261 is your Google verification code.

## Enable Two-Factor Authentication On Your Social Media Accounts



### WhatsApp

Settings > Account > Two-Factor Verification



### Facebook

Settings & Privacy > Settings > Security & Login > Use Two-Factor Authentication



### Instagram

Settings > Security > Two-Factor Authentication



### Twitter

Settings and privacy > Account > Security > Two-Factor Authentication



### LinkedIn

Settings > Sign In & Security > Two-Step Verification



### Telegram

Settings > Privacy & Security > Two-Step Verification



### Apple ID

Settings > [Your Apple ID] > Password & Security > Turn on Two-Factor Authentication



### Google Account

Go to <https://myaccount.google.com> > Security > Select 2-Step Verification > Follow the instructions to turn on 2-Step Verification

An initiative by



A team under



Learn more about online safety



[www.SecureVerifyConnect.info](http://www.SecureVerifyConnect.info)



Cambodia

Mobile  
Password Management



## MOBILE PASSWORD MANAGEMENT



Set up unique password / pin / passcode not related to your personal information

Use a password manager to stores all the login information you use



Lock your device with strong password / pin / passcode

Use multi-factor authentication to confirm your identity before you can access an app or website



Use biometrics to unlock your device (Ex. facial recognition or fingerprint access )

Don't share your password to other



Use unique and separate password for each account and app on your device

Don't reuse old password





Indonesia

Two-Factor  
Authentication

# THE RISE OF PANDAVA

ADAPTED FROM THE GREAT WAR OF KURUKSHETRA IN MAHABHARATA STORY



The war between the good and evil lasts forever. Nevertheless in Mayapada, the realm of human kind in the epic of Mahabharata, the Kaurava managed to have Pandava cornered.



I'm on my way...

Unable to withstand the onslaught of Kaurava cyber-attacks, Ghatotkach - the Pandava warlord, immediately dashed into Khayangan asking for God's guidance to overcome Kaurava's cyber-attacks.



O God... Our password protection somehow failed to protect us from Kaurava's cyber-attacks

My Lord, teach me how to master that knowledge.

Brave knight, son of Bhima, bear in your mind that the reign of password is over now!  
Kaurava's supercomputer can easily crack passwords within seconds.  
But there is ONE THING that CAN STOP THEM from doing it.



Ghatotkach came to see Batara Guru, the God of Wisdom.

All Pandava troops must start protecting their devices and accounts with "TWO FACTOR AUTHENTICATION"



## WHY 2FA?

1. HACKERS MUST GET ANOTHER FACTOR OF AUTHENTICATION TO GET INTO THE ACCOUNT.
2. EVEN IF THE PASSWORD AND USERNAME ARE LEAKED, AS LONG AS THE OTHER PARTY DOES NOT HAVE ANOTHER AUTHENTICATION FACTOR, THEY WILL STILL NOT BE ABLE TO ACCESS THE ACCOUNT.
3. IF SUDDENLY YOU RECEIVE AN OTP CODE WHILE YOU ARE NOT ACCESSING ANY ACCOUNT, IT CAN CONCLUDED THAT THERE HAS BEEN AN UNAUTHORIZED ATTEMPT TO ACCESS THE ACCOUNT.

PRESENTED BY:



**BADAN SIBER DAN SANDI NEGARA**

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www.bssn.go.id



An abstract graphic on the left side of the page, consisting of a network of nodes and lines. The nodes are small blue dots, and the lines are thin, light blue lines connecting the nodes. The overall shape is irregular and somewhat resembles a map or a complex network diagram. The word "Japan" is written in white text to the right of this graphic.

Japan

Patch Your  
Psychological  
Security Hole



# Patch Your Psychological Security Hole



## Resistance to Social Engineering

Starting with searching trash cans, this method has been used for all kinds of fraud, including money transfer fraud such as "leading a person into a situation where they cannot make rational decisions", methods of controlling the other party's behavior to extract necessary information, or in many cases where important information is stolen because of believing that "no one is watching" or "no one would be looking without permission" or letting your guard down. Company information and personal information are important assets. To protect your assets, be wary of "vulnerabilities of the mind"!

### What Is a "Social Engineering" ?

This is a method of stealing vital information such as passwords that are needed to break into networks. Many of these methods take advantage of the psychological vulnerabilities of humans and behavioral mistakes.



### Social Engineering in the digitalized generation

Social Engineering in the digitalized generation also uses manipulation in the same way.



### "Trashing"

Going through garbage cans, a technique that does not require direct contact with a target.

Use a shredder, etc. to ensure that documents or DVDs data cannot be restored!



### "Shoulder Hacking"

For example, as a way to obtain valuable information without direct contact with the target, the PIN code or pattern lock of someone using their smartphone on the train can be stolen using "Shoulder Hacking" while standing behind them.



### "Name Dropping" "Hurry Up"

"Name Dropping" (Eliciting information by appearing to have authority), and "Hurry Up" (To get information by rushing a target) to control the situation where the target cannot think normally, elicit the necessary information or have the target perform a requested action.



### "Looking at Finger Traces on the screen"

Or the pattern lock of a smartphone left on a table can be discovered by picking it up and looking at the finger traces on the screen. By identifying how to unlock the smartphone in advance, you can obtain all of their other personal data by stealing their smartphone later.



### Classic Social Engineering

For scams in general, including bank transfer scams, calling it "a commonly-used social engineering technique that targets psychological security holes" gives you an idea of its nature.

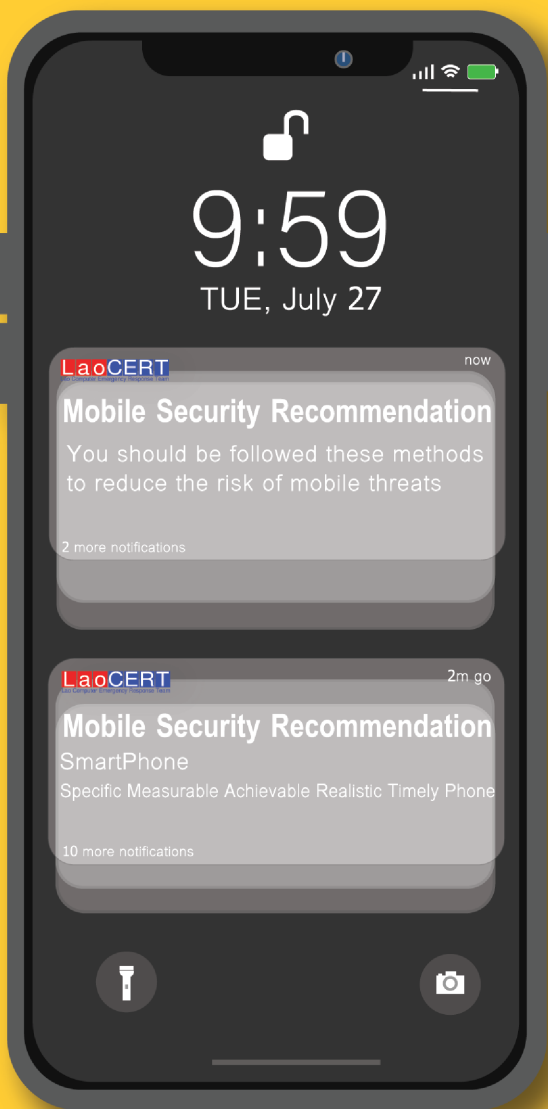


Lao PDR

Mobile  
Security  
Recommendation

# Mobile Security Recommendation

You should be followed these methods to reduce the risk of mobile threats



Use a strong password to lock the screen



Check privacy and security, Especially turn on finding my phone



Keep your phone software updated



Don't save essential information on mobile phone



Be careful when connecting to free Wi-Fi, Especially do not process any financial



Be careful before click links

Don't forget to log out from the application when you are not used

99% of mobile threats occurred from a lack of understanding of how to use mobile safety, so awareness-raising is the most essential.



Malaysia

Online  
Presence Security



# Online Presence Security



**What is online presence?**

Online presence is **any existence** of an individual, organization or business that can be found via an online search or the **internet**



**Why we need online presence security?**



**What are the dangers during online presence?**



**How can we protect our online presence?**

Do not share personal information online

Use strong and unique password for every login

Turn-off 'Save Password' feature in web browser

Use Two-Factor authentication

Perform routine Back-up

Install and update an antivirus in every device

Avoid using public wi-fi

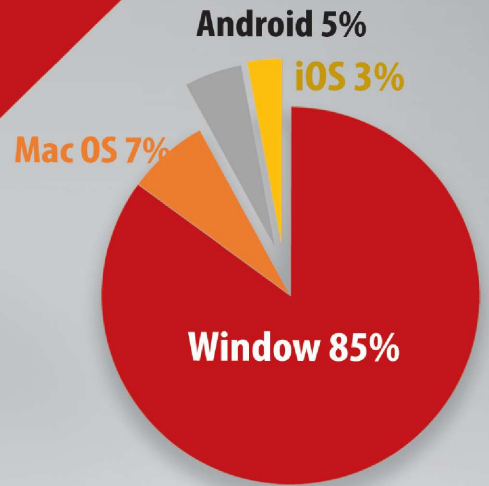
Make online purchase from secure site



Myanmar

Ransomware  
in Mobile Device

# RANSOMWARE IN MOBILE DEVICE



Source: purplesec.us

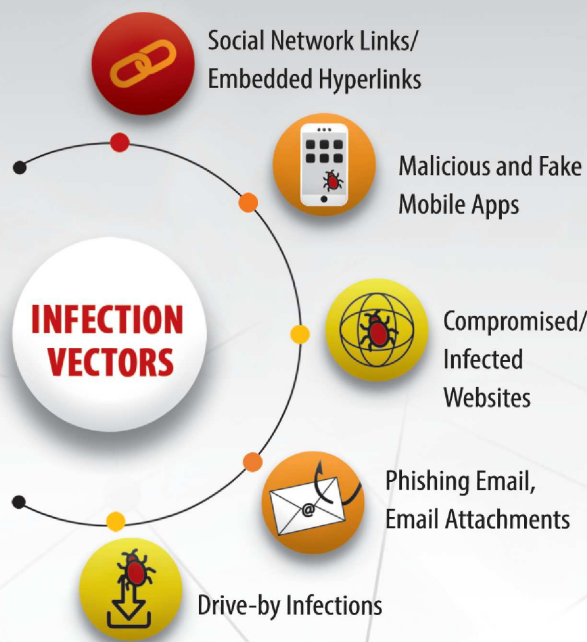
## TYPES OF MOBILE RANSOMWARE



▶ Lock-screen types



▶ File-encrypting type



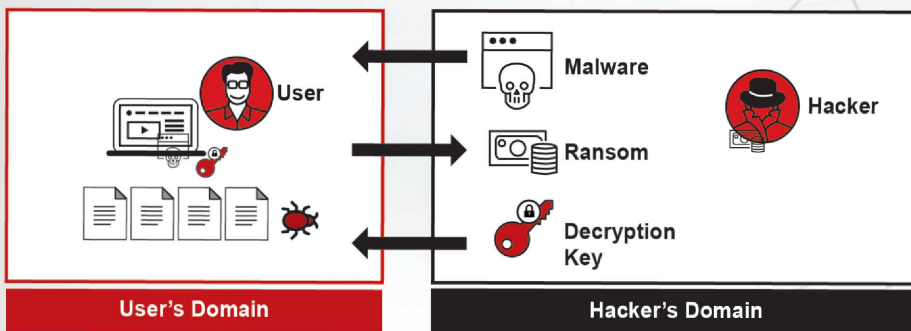
**Damage costs predicted to reach 20 Billion USD by 2021**

Source: cybersecurityventures

## RISKS OF INFECTION

- ▶ Destroy Backups
- ▶ Steal Credentials
- ▶ Leak Stolen Data
- ▶ Publicly expose Victims
- ▶ Threaten victim's customers

## PROCESS OF RANSOMWARE



## WAYS TO PROTECT RANSOMWARE

- ▶ Be aware of installing fake apps
- ▶ Back up all files
- ▶ Use a trusted and robust mobile security solution
- ▶ Keep up-to-date about the latest threats
- ▶ Install Security Patches



Expected to attack a business  
Every  
**11**  
SECONDS  
by the end of 2021

Source: cybersecurityventures



Philippines

Online  
Classroom  
Platforms



# Safe Use of Online Classroom Platforms

Set your online class to “private”

Teachers should have a class list to ensure that students in the room are accounted for

Don't share the class link or Meeting ID number on social media or any messaging apps

Enable password for each session



Don't let anyone use your account for your online classes

Teachers should appoint a co-host that could take control of the class in case he/she gets kicked out of the room

Regularly update application

Avoid using third party apps like video and voice recording, during class



Singapore

Email  
Extortion  
Scam

# WHAT IS AN EMAIL EXTORTION SCAM?



**What should you do if you receive an extortion email?**

**Learn how this scam works and what you should do to avoid falling victim.**

## HOW THE SCAM WORKS



- 1** You receive an email claiming that your device/account has been compromised
- 2** Scammer claims to have your 'private and confidential' information
- 3** A ransom is demanded to keep the information private, typically in a currency called Bitcoin
- 4** Scammer may use your email and password from past data breaches as 'proof' that the email is legitimate

## WHAT SHOULD YOU DO?

**Do not make payment. Delete the email immediately.**

**To prevent unauthorised access, you should:**



Set strong passwords that are long and random



Do not use personal information (e.g. NRIC) in your passwords



Use different passwords for different accounts



Enable Two-Factor Authentication (2FA) when available



Perform anti-virus scans on all devices



Keep your software up-to-date



Thailand

How to Use  
Mobile Safely

# HOW TO USE MOBILE SAFELY

LOSING MOBILE MIGHT BE MORE DANGEROUS THAN YOU COULD IMAGINE



PERSONAL DATA OR ORGANIZATIONS' CLASSIFICATION DATA **MIGHT BE LEAKED AND RANSOMED**



THE POSSIBILITY IN BEING **DIGITALLY TRACKED AND FRAUD** COULD EMERGE



IMPORTANT DATA **MIGHT BE STOLEN** AND CANNOT BE **RETRIEVED**




**BETTER SAFE THAN SORRY**



**WHEN THE DAMAGE IS DONE**

 **BE AWARE OF THE DATA AND APPLICATIONS YOU HAVE ON YOUR MOBILE**

 **APPLY "DOUBLE LOCK"** BY USING MOBILE PASSCODE FOR MOBILE ACCESS AND USE PASSWORD FOR APPLICATION LOG IN

 **DO NOT FORGET TO LOGOUT** FROM APPLICATIONS WHEN THEY ARE NOT USED

 **DO NOT SAVE ANY PASSWORDS** IN YOUR MOBILE

 **ANDROID**  **TURN ON FIND MY DEVICE**

 **iOS**  **TURN ON FIND MY iPhone**  
THE APPLICATIONS THAT CAN BE LOGGED IN FROM BROWSERS TO LOCK OR RESET YOUR LOST PHONE

 **NOTIFY THE APPLICATION SERVICE PROVIDERS SUCH AS e-BANKING SERVICES FOR SUSPENSION**

 **CHANGE PASSWORDS** FOR EVERY APPLICATION IN YOUR PHONE

 **NOTIFY THE POLICE** TO TRACK CRIMINAL ACTIVITIES AND TO KEEP THE NOTIFICATION AS EVIDENCE IN CASE CRIMINAL ACTIVITIES ARE COMMITTED VIA YOUR PHONE

 **ACCESS FIND MY DEVICE OR FIND MY iPhone** TO **LIMIT THE ACCESS AND DELETE THE IMPORTANT DATA REMOTELY**







Vietnam

Free Apps

# FREE APPS - COSTLY EXPERIENCE



Remove untrusted apps which can  
exploit sensitive information from your smartphone



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