#### **Protect Your Online Business**

# Cyber Security Seminar & Workshop

#### Yohanes Syailendra, CEH, ECSA 16 May 2017 | Marquee, Cyber 2 Tower 17<sup>th</sup> | Jakarta, Indonesia



Indonesia Honeynet Project





## Who Am I







#### Singer Wannabe

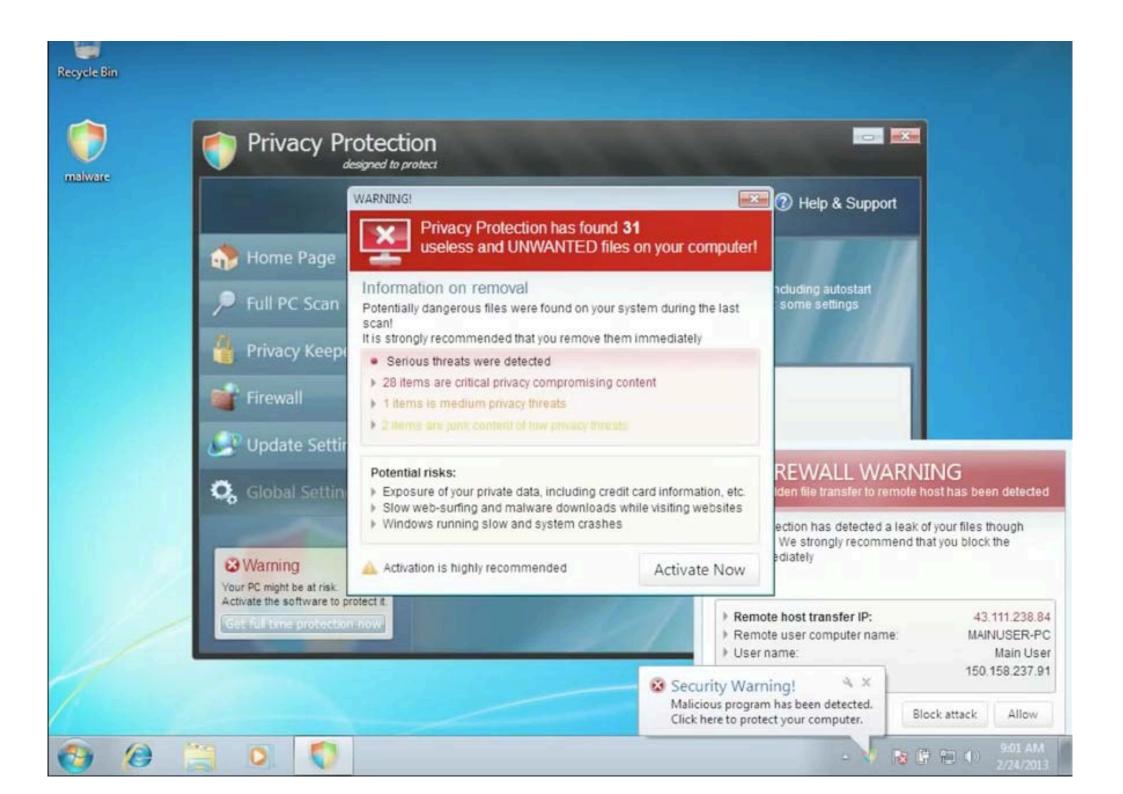
Programmer and System Integrator 3x Indonesia Cyber Defense Competition Winner + DoD Cyber Security Team



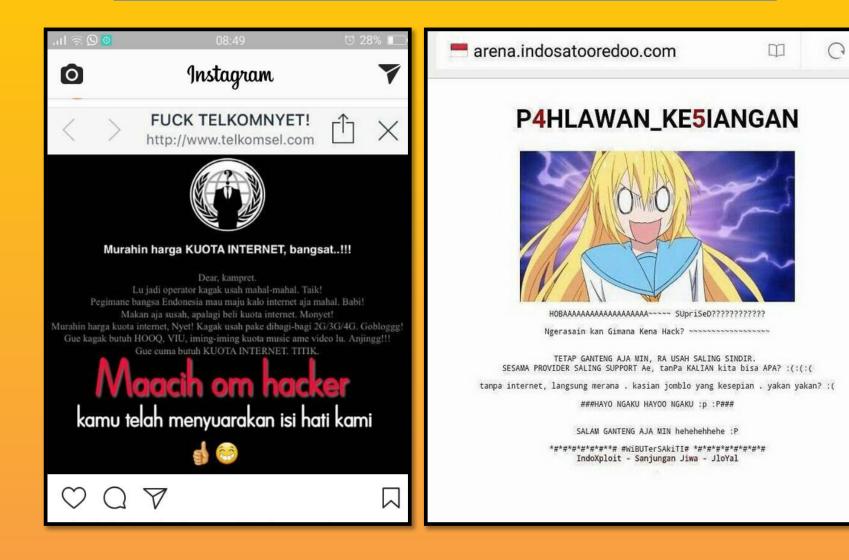
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#### Two of the biggest Telco in Indonesia got Hacked at the same day









# **Tiket.com Hacked?**

HACKER REMAJA **INI SUKSES BOBOL** SITUS TIKET.COM **DI SERVER** CITILINK, KERUGIAN **DITAKSIR RP 4,1** MILIAR

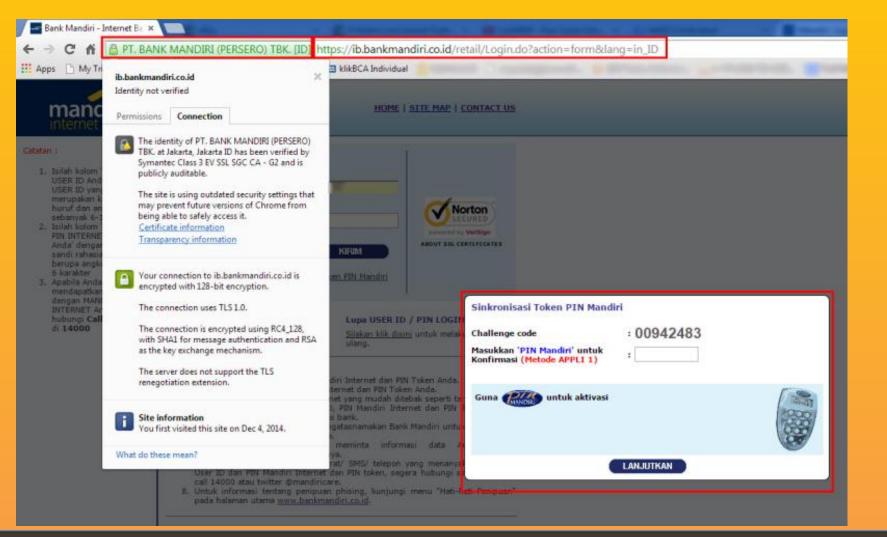
Saksikan Video Berita Terupdate Hari Ini







# "Sinkronisasi Token" and Malware trying to spoof destination account

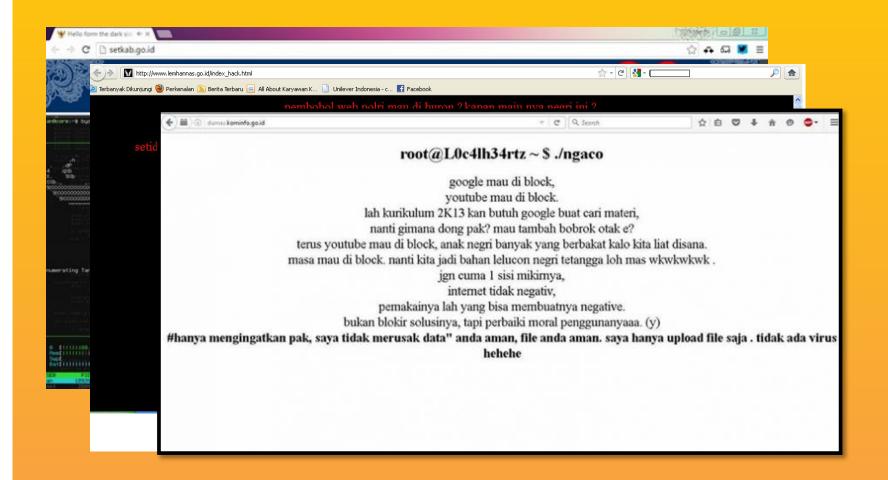








#### Hundreds of Government sites aren't Secured









## Hacked website by Blackhat group

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# Half of Internet Down in 2016

# DDoS attack that disrupted internet was largest of its kind in history, experts say

Dyn, the victim of last week's denial of service attack, said it was orchestrated using a weapon called the Mirai botnet as the 'primary source of malicious attack'

Dyn estimated that the attack had involved '100,000 malicious endpoints', and the company said there had been reports of an extraordinary attack strength of 1.2 terabits (1,200 gigabytes) per second. Photograph: Alamy

The cyber-attack that brought down much of America's internet last week was caused by a new weapon called the Mirai botnet and was likely the largest of its kind in history, experts said.

The victim was the servers of Dyn, a company that controls much of the internet's domain name system (DNS) infrastructure. It was hit on 21 October and remained under sustained assault for most of the day, bringing down sites including Twitter, the Guardian, Netflix, Reddit, CNN and many others in Europe and the US.







#### Is This a Hacker ?











#### They are around us..

# All activities should be anonymous









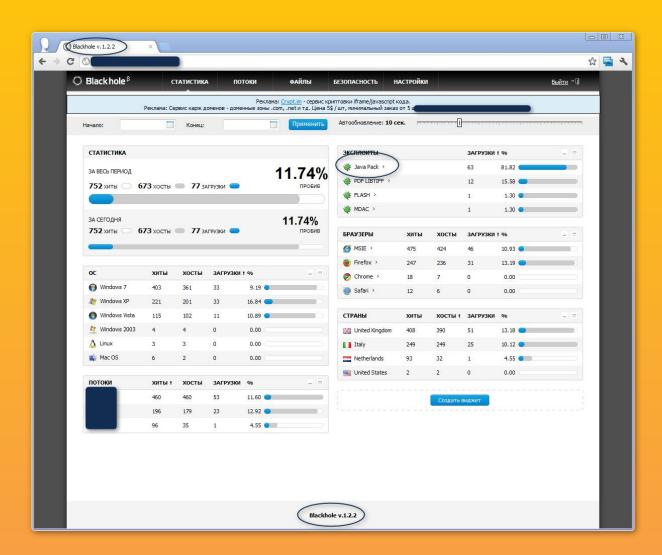








## **Botnet Command and Control**









#### **Advanced Persistent Threat (APT): The Uninvited Guest**

How attackers remain in your network harvesting information and avoiding detection over time

#### 1. INCURSION

Attackers break into network by using social engineering to deliver targeted malware to vulnerable systems and people.

#### 2. DISCOVERY

Once in, the attackers stay "low and slow" to avoid detection. They then map the organization's defenses from the inside and create a battle plan and deploy multiple parallel kill chains to ensure success.

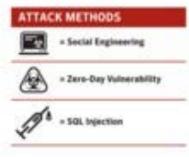
#### **3. CAPTURE**

Attackers access unprotected systems and capture information over an extended period.

They may also install malware to secretly acquire data or disrupt operations.

#### 4. EXFILTRATION

Captured information is sent back to attack team's home base for analysis and further exploitation fraud—or worse.











## So, How to Protect?

Know Your Enemy, Know Yourself, And Victory is Never in Doubt, not in a hundred battles

- Sun Tzu, The Art of War -















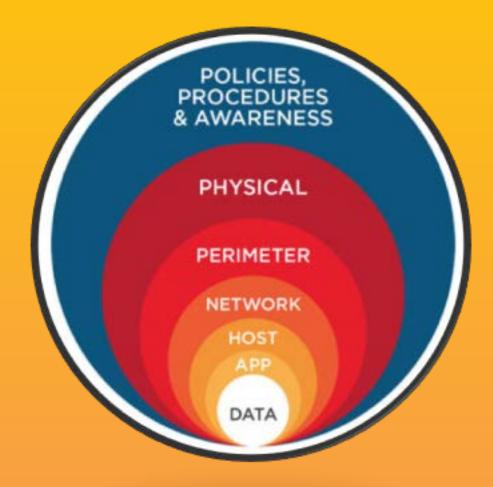
1. Conduct a Security Assessment to measure the Security Risks and Maturity Level







# 2. Implement Layered Security Protection

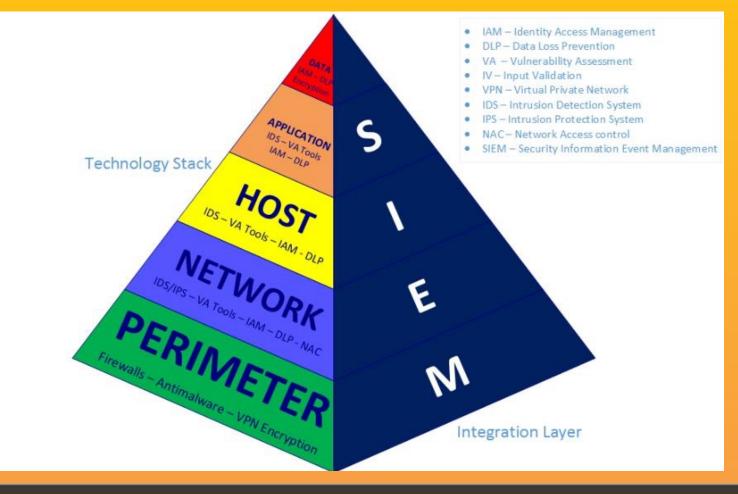








# **Layered Security Model**



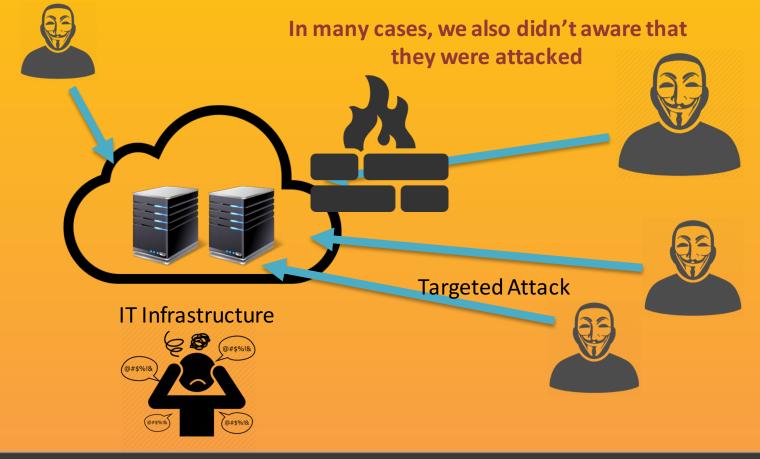


CBN



### **Targeted Attack Landscape**

Current Security System cannot guarantee to protect you from ANY Attacks, especially when you are TARGETED

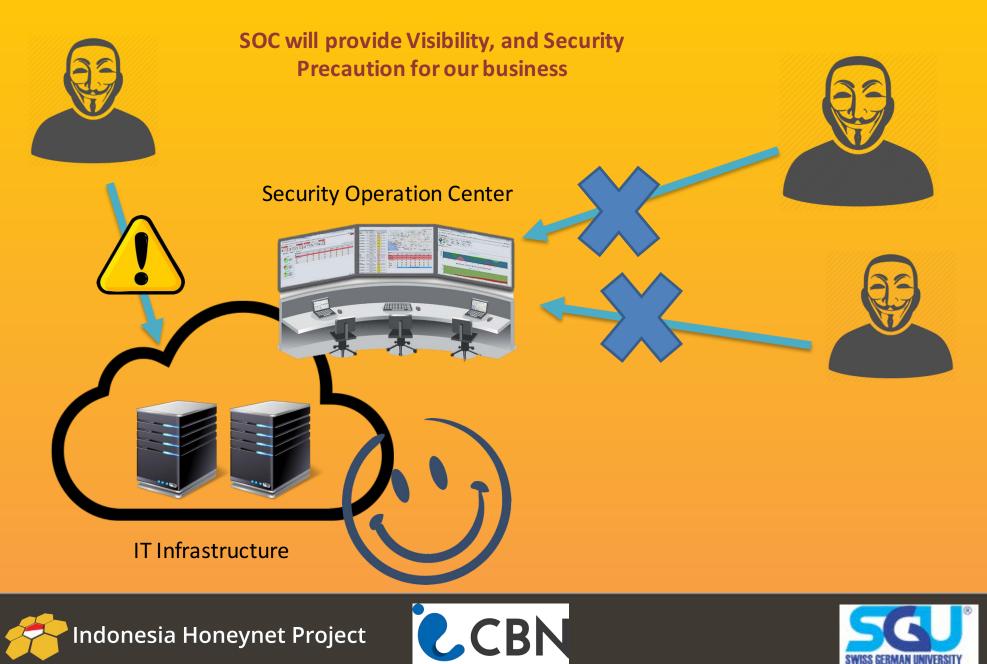




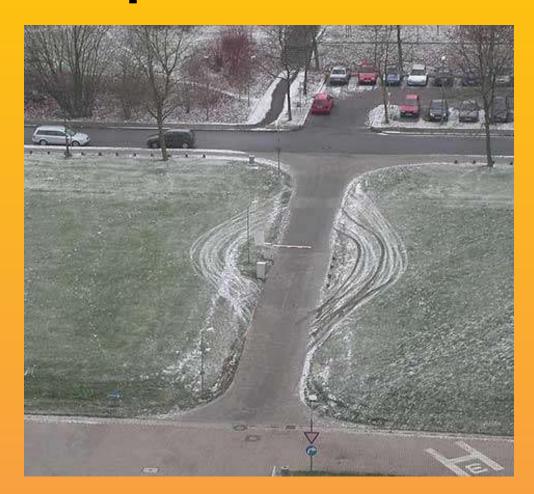




#### **3. Implement Monitoring TEAM**



# Common Mistakes on Security Implementation









#### CyberSecurity is a SHARED RESPONSIBILITY, And it boils down to this: In CyberSecurity, THE MORE SYSTEMS WE SECURE, THE MORE SECURE WE ALL ARE

- Jen Johnson -(Secretary of Homeland Security)



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