

## Cyber Crime Types, Prevention & Reporting

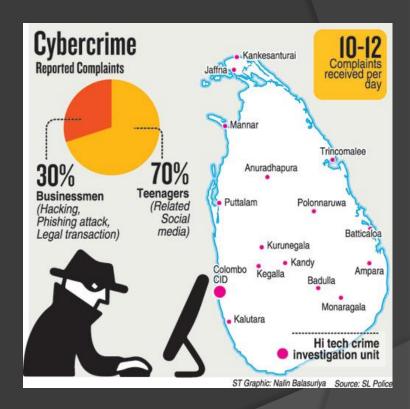
### Session Objectives

At the end of this session participants will be able to:

- Identify Type of Cybercrime Reported in Sri Lanka.
- Related Laws.
- Describe Standard Reporting Procedures.
- How to Prevent.

### Cyber Crime Types Reported In Sri Lanka

- EMAIL SPOOFING & PHISHING
- IP SPOOFING
- PACKET SNIFFING
- HACKING
- VIRUS, WORMS & TROJANS
- DENIAL OF SERVICE ATTACK



### E-mail spoofing & Phishing

**E-mail spoofing** is a term used to describe (usually fraudulent) e-mail activity in which the sender address and other parts of the e-mail header are altered to appear as though the e-mail originated from a different source.

E-mail spoofing is a technique commonly used for <u>spam</u>
 e-mail and <u>phishing</u> to hide the origin of an <u>e-mail</u> messag

Anonymous Emails ?

#### Google Security Team to chaftimehmood

Verification Required.

#### Dear Gmail User,

The Gmail infrastructure is going through an annual security and performance overhaul. In the same respect, you are requested to verify your account by clicking on the following link. The Google Security Team is available to provide you all the assistance for secure communication over the Internet. Happy surfing!

<u>accountverification.gmail.com/src/verify.php?confirmation=dhPGcsiuUNdnAoN77q5CHwCgl4MmCAX</u> <u>E72d</u>

You are requested to act on this immediately to guarantee the smooth functioning of your mail account.

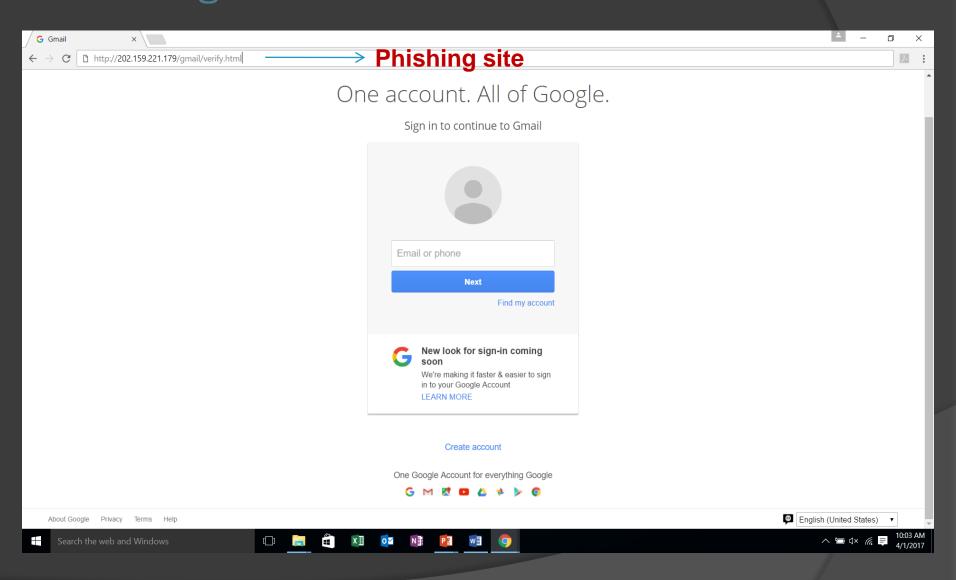
Thanks,
Account Security Administrator
Google Security Team
Google, Inc. Phone: +1 650-253-0000

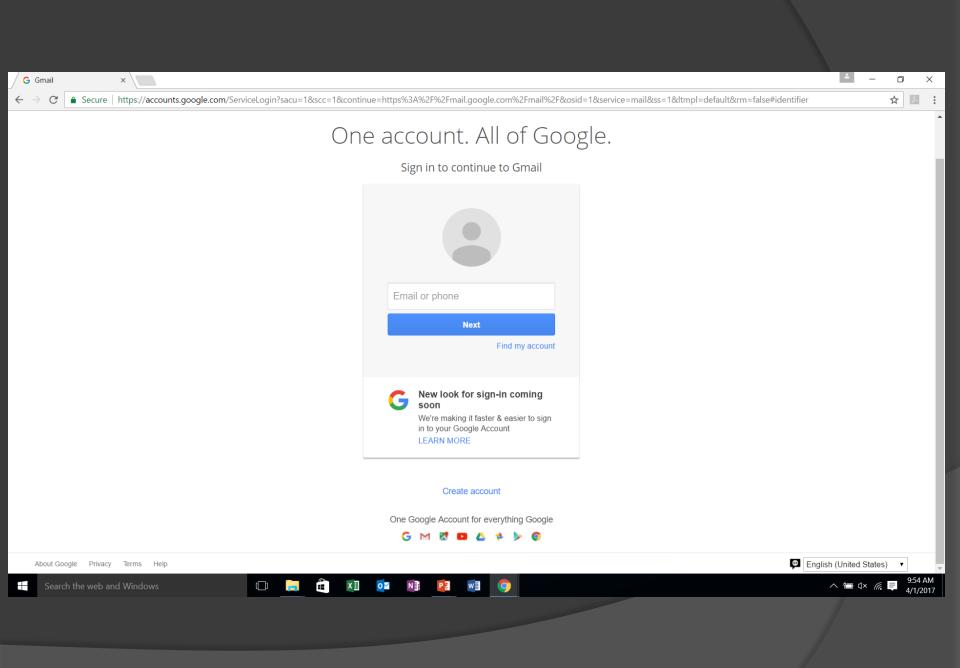
You are receiving this message from Google because you are a valued member. Google respects your privacy. To learn more, please read our online Privacy Statement. For more information or for general questions regarding your e-mail account, please visit Gmail Help.

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### Phishing??

### http://202.159.221.179/gmail/verify.html





# **Experience In Cyber Crime Investigation**

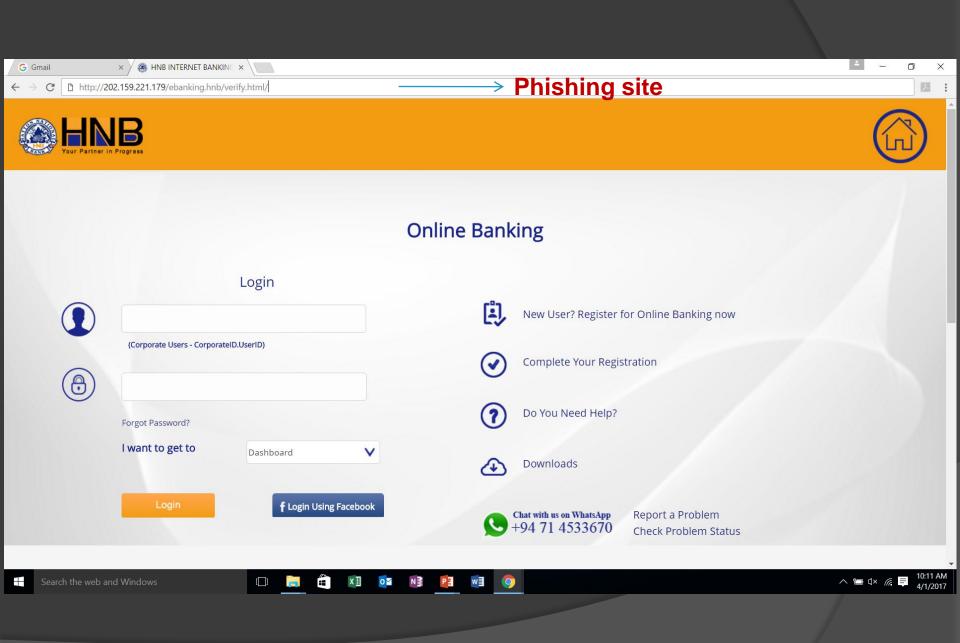
Committing frauds by inducing the general public to obtain website services which appear to be genuine (phishing attack). Fraudulently obtaining money from Internet Bank Accounts

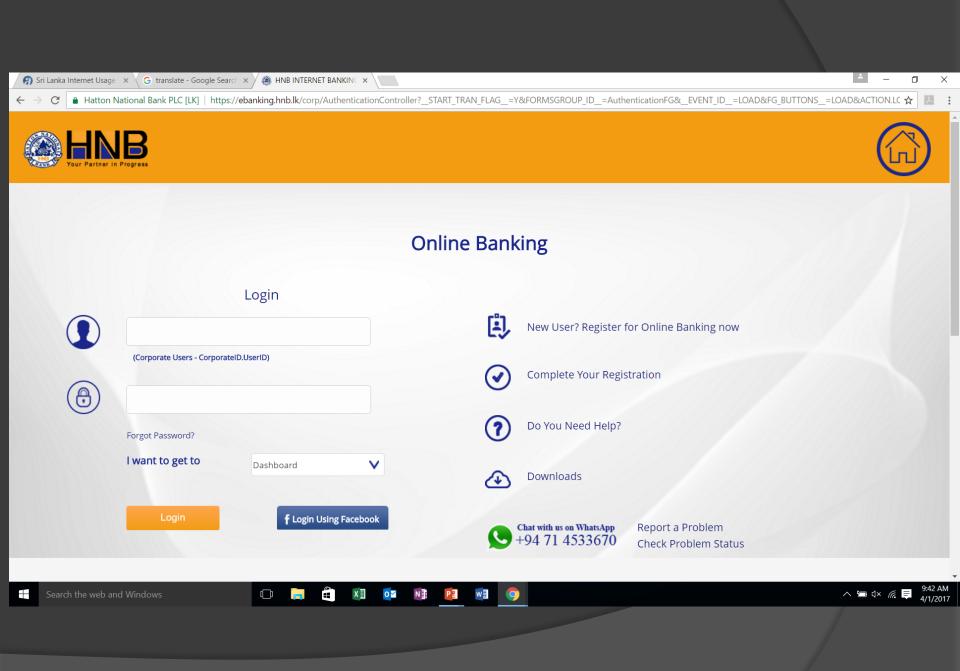
### **Cyber Crime Investigation done by CID**

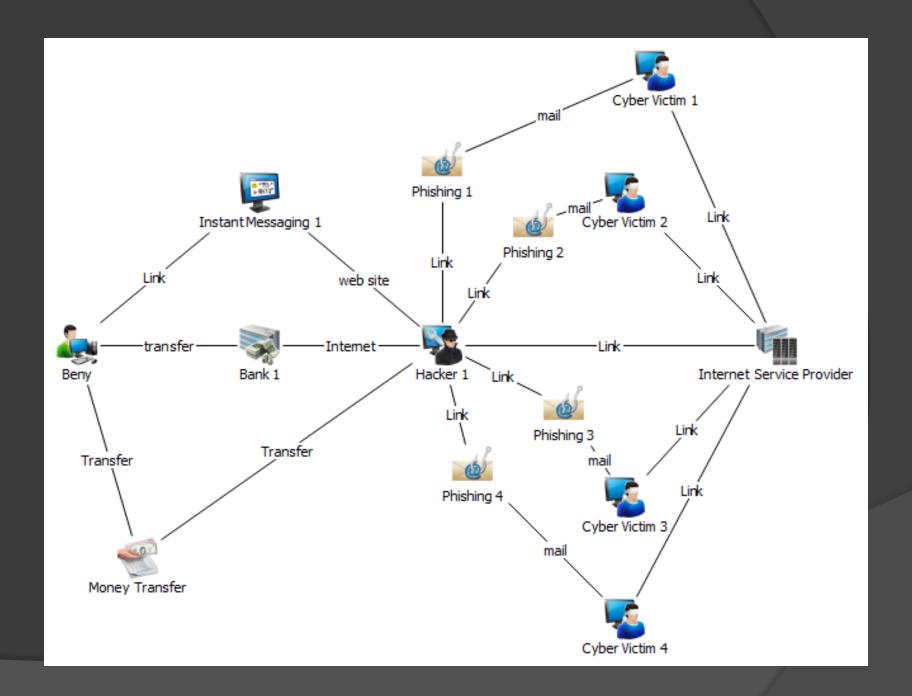
- E-mail header analysis
- Analyzed e-bank server
- Evidence of transaction logs
- Beneficiary account information



03 Suspects were arrested, Case pending in court.





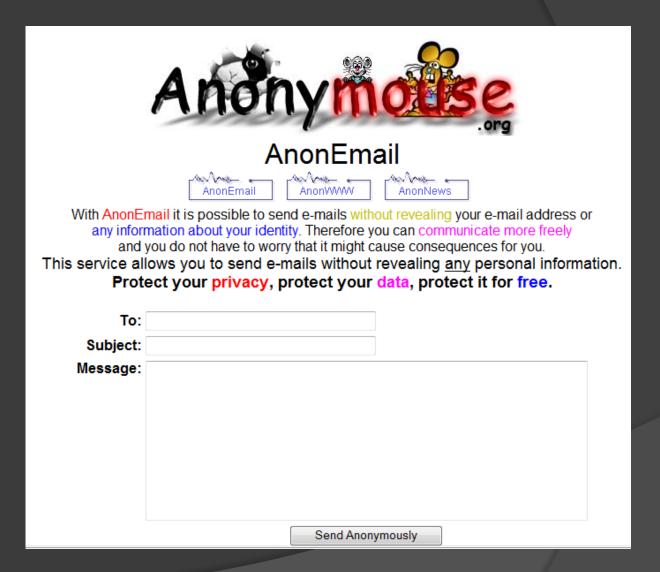


### Anonymous Email Service

**TOR Networks** 

Proxy IPs

Anonymouse.Org



### Fake mails

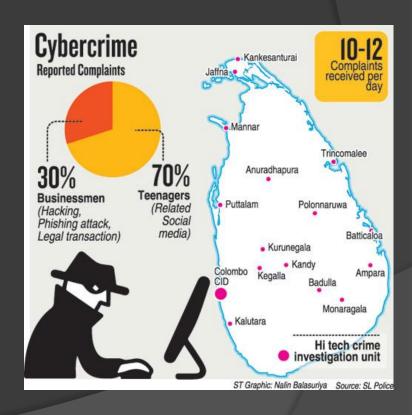
Send fake email.  Send prank emails to your friends.  Sign in  Sup up  From Path:  Send prank emails to your friends.  Send prank emails to your friends.  Send prank emails to your friends.  From Name  From E-mail*  Subject of the email:  Path:  Path:					
	Username:  Password:  Sign In  Sign up Forgot your password?  Visitors  US 176,407  IN 63,619  GB 39,089  CA 22,522  II IT 21,295  DE 17,116  NL 10,553  BR 9,112  AU 9,040  R0 8,436  1,808,998  CLike 541	Send prank emails to your friends.  From Name :  From E-mail * :   To Email * :  Subject of the email :   D B I U ARG E = E Format Font family Format Font family Format Format Font family Font family Format Font family Font famil	(Optional)  (Optional)  ont size	_	Privacy D
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### Fake mails



### Cyber Crime Types Reported In Sri Lanka

- EMAIL SPOOFING & PHISHING
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- DENIAL OF SERVICE ATTACK



### IP Spoofing

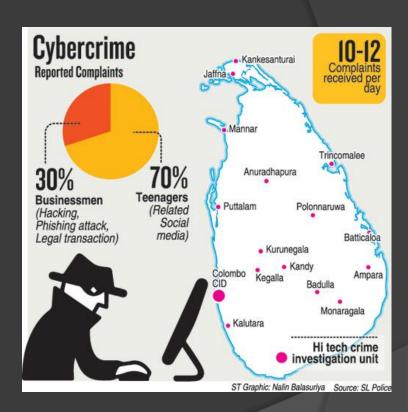
• IP (Internet Protocol) address spoofing refers to the creation of IP packets with a forged (spoofed) source IP address with the purpose of concealing the identity of the sender or impersonating another computing system.

The Onion Router, Proxy Servers etc

Return-path	<pre><incidencia@centraldellibro.com></incidencia@centraldellibro.com></pre>						
	from avserver.sandesh.cert-in.org.in with ESMTP id <0JHJ00D02MTJWM00@sandesh.cert-in.org.ir (IST)		t-in.org.in ("sandesh.cert-in.org.in SMTP server") t-in.org.in; Sat, 05 May 2007 06:30:55 +0530				
Received	from avserver.sandesh.cert-in.org.in for <incident@cert-in.org.in>; Sat, 05 May 2007 06:44:54 +</incident@cert-in.org.in>	by localhost.sandesh.cert-in.org.in (Postfix) with ESMTP id 7819AF49 07 06:44:54 +0530 (IST)					
		by avserver.sandesh.cert-in.org.in (Postfix) with ESMTP id 5677EF04for ncident@cert-in.org.in>; Sat, 05 May 2007 06:44:54 +0530 (IST)					
Received	from cpe-24-59-205-142.twcny.res.rr.com ([24.59.205.142]) by sandesh.cert-in.org.in ("sandesh.cert-in.org.in SMTP server") with SMTP id <0JHJ00D03MTGWI00@sandesh.cert-in.org.in> forincident@cert-in.org.in; Sat, 05 May 2007 06:30:54 +0530 (IST)						
Received	(qmail 5503 by uid 479); Fri, 04 May 2007 09:18:28 -0500						
Date	Sat, 05 May 2007 06:30:54 +0530 (IST)						
Date-warning	Date header was inserted by sandesh.cert-in.org.in						
From	admin@microsoft.com	_					
The second contract of	Internet Explorer 7.0 Beta		91.45.656.0 is an invalid IP				
X-Originating-IP							
	incident@cert-in.org.in		address value				
The Control of the Co	incident@cert-in.org.in						
	<20070504041828.5505.qmail@cpe-24-59-205-142.twcny.res.rr.com>						
MIME-version							
Content-type							
Importance							
Control of the Contro	[incident@cert-in.org.in]						
X-imss-version	\$2876.00 h						
X-imss-result							
	Clean:1.17076 C:2 M:5 S:9 R:5						
Account from the Addition of the Control of the Con	Baseline:1 C:3 M:3 S:3 R:3 (0.0000 0.0000)						
Original-recipient	rfc822;incident@cert-in.org.in						

### Cyber Crime Types Reported In Sri Lanka

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# Cyber Crime Types Reported In Sri Lanka

- SOFTWARE PIRACY
- o PORNOGRAPHY
- O CREDIT CARD FRAUD
- O CYBER STALKING
- **O CYBER DEFAMATION**
- O CYBER BULLYING
- o **CYBER SCAMS**

```
inwSigyyediqiwabalizasky
jBqatjer53yibwqehulzasky
jBqatjer53yibwqehulzasky
jozabaciq
jhjdeUsqB3upv
jrbale55gio
jrbale55gio
hdaids?iw
jauhw5ig
jtbqqatj
jtbqqqi
jtbqqqi
jtbale55gio
jrbale55gio
```

## Computer Forensics or Electronic Forensics?

- Are computers the only devices with microprocessors?
- Are computers the only devices with memory (RAM/ROM/PROM/EPROM/EPROM)?
- Are computers the only devices that can input, process, store, and output data?

## Stages of Computer Forensics

Identification

(Media that contains potential evidence)

• Preservation

(So that data is not lost)

Analysis & Discovery

(Scope of Investigation & Forensic software tools)

Documentation

(Comprehensive notes & journals)

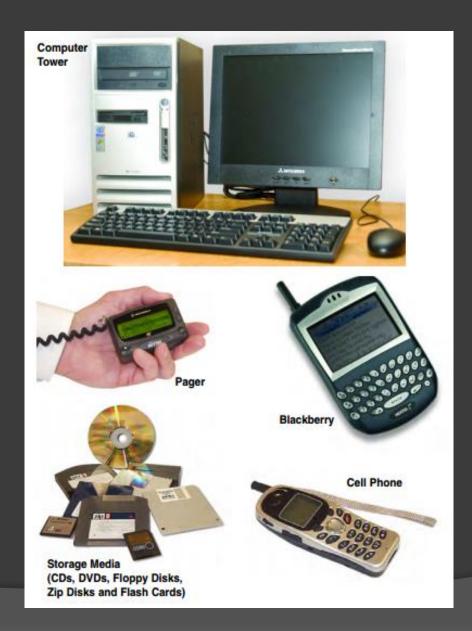
Verification

(Hashing)

Presentation

(Investigators & Court)

## Identification





## Stages of Computer Forensics

- Identification(Media that contains potential evidence)
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- Presentation (Investigators & Court)

### Package and transport

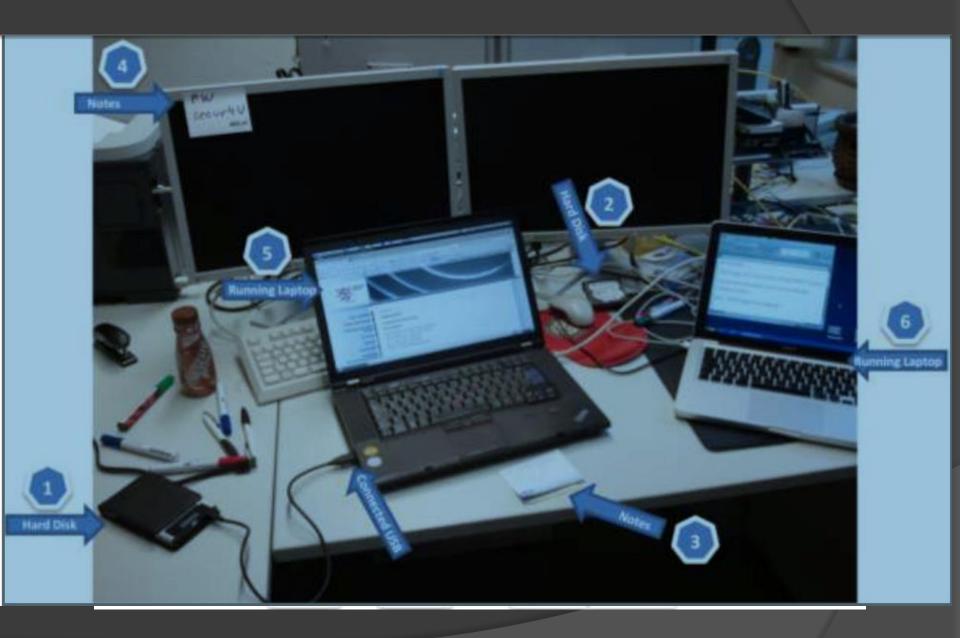
- 1. Antistatic bags
- 2. Antistatic bubble wrap
- 3. Cable ties
- 4. Evidence bags and tape
- 5. Boxes for packaging external storage media such as USB devices DVDs, or CDs
- 6. Packing materials
- 7. Flat pack assembly boxes or sturdy boxes of various sizes

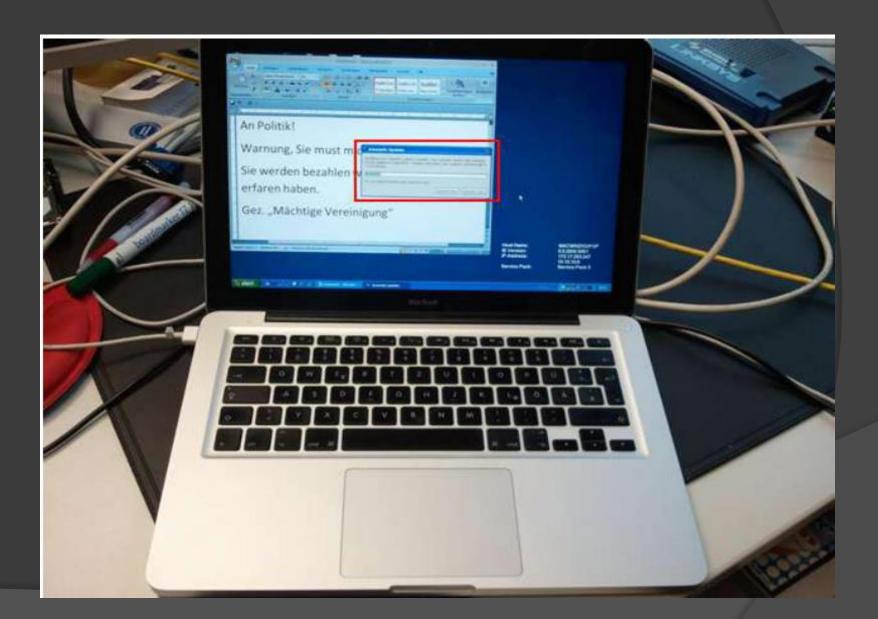


### Package and transport

properly documented and labelled before packaging

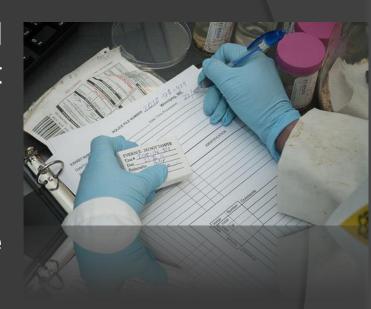
transport the collected e-evidence in the original packaging





## Storage

- Ensure that evidence is inventoried in accordance with the relevant policies.
- Store evidence in a secure area, away from extreme temperature and humidity.
- Protect it from magnetic sources, moisture, dust, and other harmful particles or contaminants.



## Storage facilities

Use an adequately secure store room with appropriate

- access control,
- fire protection (e.g., alarm, fire extinguishers, no smoking in the storage area or in the vicinity),
- temperature and humidity, and
- protection from magnetic sources (e.g., far from directional radio devices).



## Stages of Computer Forensics

- Identification(Media that contains potential evidence)
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### **Protection of Digital Evidence**

### Algorithms of Hash

- **♦** MD5
- **❖** SHA 1
- ❖ SHA 2
- **\*** TIGER
- PANAMA
- **❖** RIPMD 160

### **Protection of Digital Evidence**

- Hash Calculation Software
- Hash Cal
- Helix 4
- FTK Imager
- EnCase

## Stages of Computer Forensics

- Identification(Media that contains potential evidence)
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## Related Legislations

- ✓ The Computer Crime Act No: 24 of 2007
- ✓ The Payment Devices Frauds Act No: 30 of 2006
- ✓ The Electronic Transaction Act No: 19 of 2006
- ✓ The Payment & Settlement System Act No: 28 of 2005
- ✓ Intellectual Property act No 36 of 2003
- $\checkmark$  The Evidence (special provisions) Act No: 14 of 1995
- ✓ Obscene publications Act No: 22 of 1983
- Penal code & Criminal Procedure Code

## Evidence (Special Provisions) Act. No. 14 of 1995

**Section 4 :** How to proceed contemporaneous records as a evidence

**Section 5 :** Computer Evidence

Section 6: Affidavits for Evidence

**Section 7 :** Notice to have access to inspect.

<u>Provisions under Computer Crimes Act No.24 of year 2007 and the relevance of the Act.</u>

The Act is defined under sections 1 & 2
On the occasion of a person committing a crime under this Act while residing in Sri Lanka or outside Sri Lanka

A Computer/Program affected as a result of an Act committed which amounts to an offence under the Act "in Sri Lanka or outside" during the relevant period

# Provisions under Computer Crimes Act No.24 of year 2007 and the relevance of the Act. Crimes are defined under sections 3 to 14.

- Section 3 An Act resulting in accessing the computer system illegally
- Section 4 An act committed in order to illegally access the system to commit a crime
- Section 5 Performing a computer function without proper authority

Crimes are defined under sections 3 to 14.

- Section 6 Crimes against national security
   National Security
   National Economy
   Public Security
- Section 7 Using data obtained illegally
- Section 8 Obtaining date illegally

Crimes are defined under sections 3 to 14.

- Section 9 Providing illegal assistance to commit a crime
- Section 10- Revealing data without proper authority to access
- Section 11 Attempting to commit a crime

Crimes are defined under sections 3 to 14.

- Section 12- Aiding and Abetting a crime
- Section 13 Conspiring to commit a crime
- Section 14 Offering financial grant as a reward for profit or loss consequent to committing a crime

- •By Sections 15 & 16, the applicability of provisions of sections 15 and 16 of Crime Act No.15 of 1979 are defined.
- Section 17 ;a specialist is defined
- A special committee appointed by the Minister consisting of academics of the University
- Enter upon any premises along with a police officer not below the rank of a sub-inspector.
- •Section 18 Powers to check and confiscate
- •Section 19 Powers to protect data and systems involved in the investigation.

Section 20; Normal use of computer not to be hampered.

Section 21; Powers of police officer to arrest, search and seize

No police officer shall access any computer for the purpose of an investigation under this Act unless the IGP has certified in writing that such police officer possesses adequate knowledge and skill in the field

Section 22; Police officer to record and afford access to

police officer should issue a complete list of such items and data including the date and time of such seizure

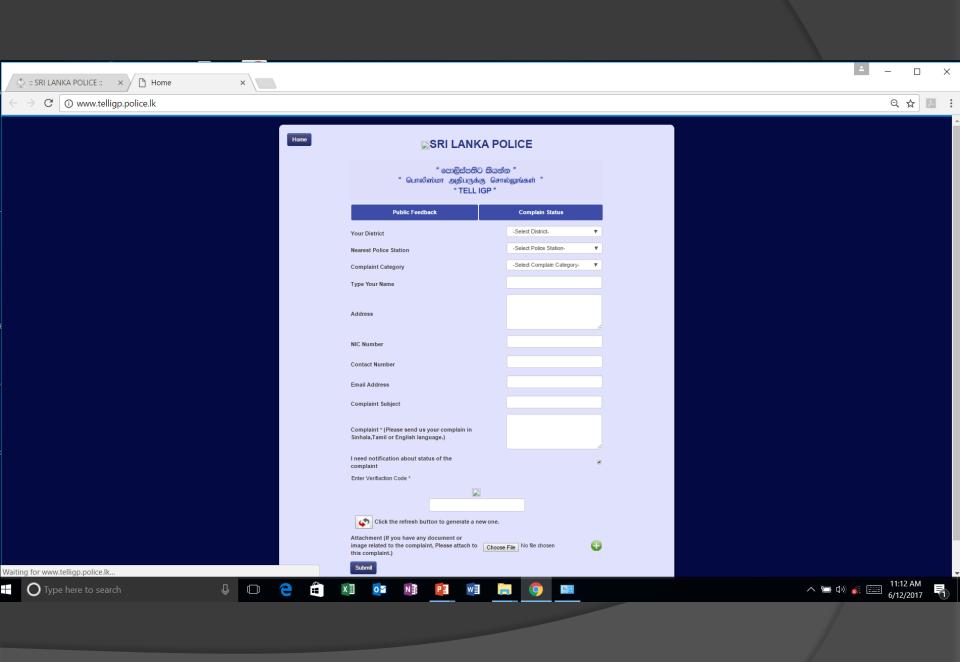
Section 23; Duty to assist investigation.

Section 24; Confidentiality of information obtained in the course of an investigation.

Section 25; Jurisdiction; delegated to the Supreme Court

#### Reporting Procedures

- Tell IGP (telligp@police.lk)
- 119 Call System
- Police Cyber Crime Reporting Center (http://www.telligp.police.lk/)
- Reporting CID (dir.cid@police.lk)
   Hot line 0112422176
   Cybercrime Unit 0112326979
- All Police Stations



Home

#### **INSTRUMENTAL SERVICE**

" පොලිස්පතිට කියන්න " " போலிஸ்மா அதிபருக்கு சொல்லுங்கள் " " TELL IGP "

Public Feedback		Complain Status	
Your District		-Select District-	₩.
Nearest Police Station		-Select Police Station-	₹
Complaint Category		-Select Complain Category-	₹
Type Your Name			
Address			
			_//
NIC Number			
Contact Number			
Emall Address			
Complaint Subject			
Complaint * (Please send us your complain in Sinhala,Tamil or English language.)			
			//
I need notification about status of the complaint			₹
Enter Verifiaction Code *			
Click the refresh button to generate a new one.			
Attachment (if you have any document or image related to the complaint, Please attach to this complaint.)	Choose File	No file chosen	0
Submit			

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## Questions?



# THANK YOU...