

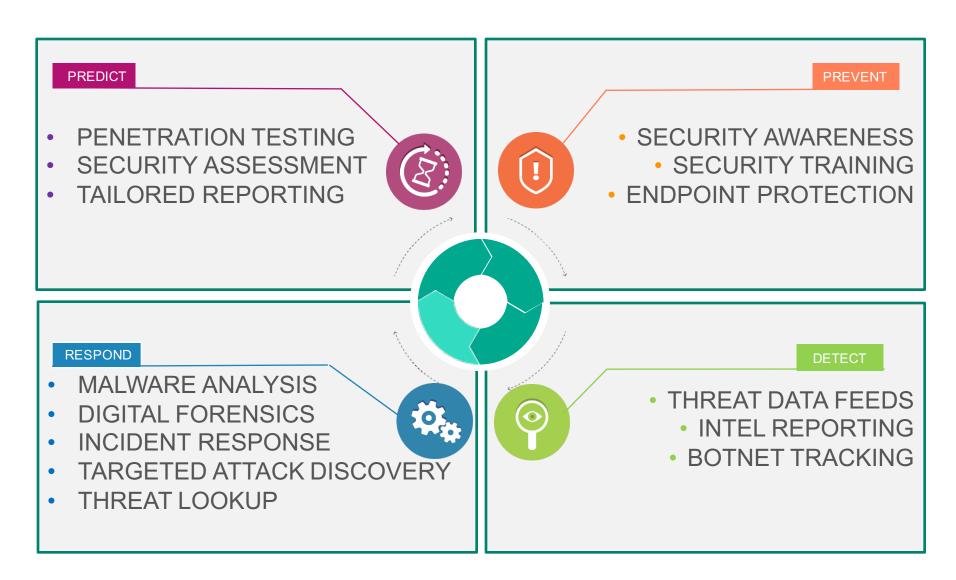
# HOW GOVERNMENTAL AGENCIES FIGHT AGAINST CYBERCRIME. BEST PRACTICES AND REAL CASES

Cyberdrill, Quito, Ecuador

#### **MIKHAIL NAGORNY**

HEAD OF SECURITY SERVICES, ENTERPRISE BUSINESS

#### GARTNER'S ADAPTIVE SECURITY CYCLE



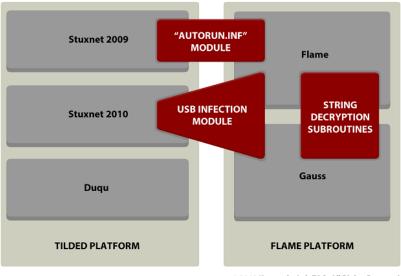
# EUGENE KASPERSKY CALLS FOR CLOSER COLLABORATION BETWEEN GOVERNMENT AND BUSINESS TO COMBAT CYBER THREATS



# KASPERSKY LAB AND ITU RESEARCH REVEALS NEW ADVANCED CYBER THREAT



#### The relationship of Stuxnet, Dugu, Flame and Gauss



© 2012 Kaspersky Lab ZAO. All Rights Reserved.



# CRIMINALS BEHIND THE COINVAULT RANSOMWARE ARE BUSTED BY KASPERSKY LAB AND DUTCH POLICE



#### RANSOMWARE DECRYPTOR

Are you a <u>ransomware</u> victim? The National High Tech Crime Unit (NHTCU) of the Netherlands' police, the Netherlands' National Prosecutors Office and Kaspersky Lab have been working together to fight the <u>CoinVault</u> ransomware campaign. During our joint investigation we have been able to obtain data that can help you to decrypt the files being held hostage on your PC. We provide both decryption keys and the <u>decryption application</u>. For more information please see this how-to. Please note that this is an ongoing investigation and new keys will be added in the future.

April 29 update: 13 decryption keys added to the database April 17 update: 711 decryption keys added to the database



Enter your data here...



# FIGHTING CYBERCRIME, COLLABORATING WITH AROUND 90 CERTS/CIRTS

ICT Qatar CERT.GOV.AZ

CERT.br

INTECO CERT EU

GovCERT - Austria

CERT.LV

Hong Kong CERT

UNAM-CERT CERT-PY NCSC Ecuador CERT

Nippon CSIRT Association

CERT-BY CERT Australia

Thai CERT CERT-MX

UK Cert RIPE NCC

CSIRT Panama CERT Societe Generale CIRCL LU

Siemens CERT CERT-PL NorCERT

Canadian Cyber Incident Response Centre



# BEST PRACTICES ABOUT COLLABORATION BETWEEN KASPERSKY GREAT TEAM AND CERTS/CIRTS

RETWEETS

**FAVORITES** 

14

12:29 PM - 13 Apr 2015

- Signing collaboration agreements
- Sharing Intelligence
- Working as a Team
- Law enforcement coordination





### HOW TO BE READY TO FIGHT AGAINST CYBERCRIME







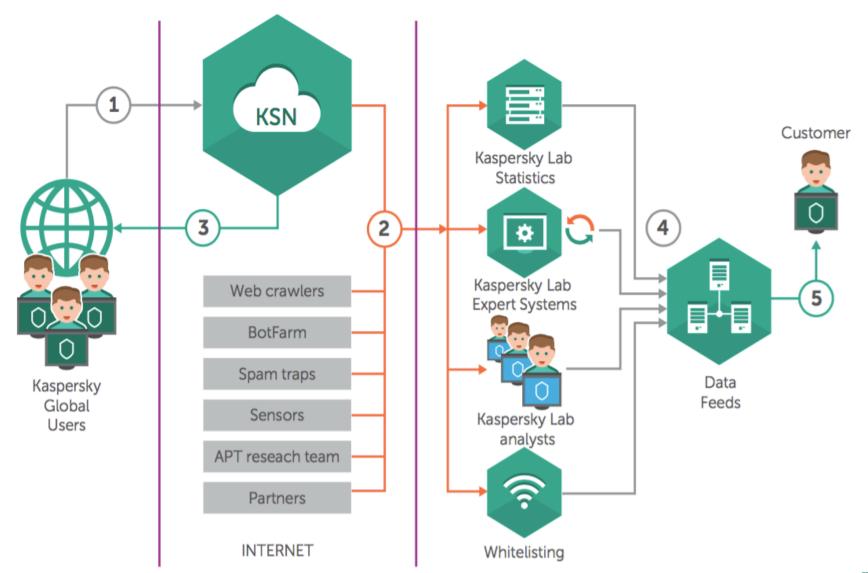


SOC & INCIDENT
RESPONSE TEAMS ARE
EXPERIENCED IN DIGITAL
FORENSICS AND
MALWARE ANALYSIS



ANTI-MALWARE VENDOR SUPPORT IN MALWARE ANALYSIS AND DIGITAL FORENSICS

# THREAT INTELLIGENCE FROM DIFFERENT SOURCES BECOMES MORE AND MORE IMPORTANT



#### THREAT DATA FEEDS

#### **IP REPUTATION**

**IP Reputation** — a set of IP addresses with context covering suspicious and malicious hosts. (JSON)

#### **URL FEEDS**

**Malicious URLs** — a set of URLs covering malicious links and websites. Masked and non-masked records are available. (JSON)

**Phishing URLs** — a set of URLs covering phishing links and websites. Masked and non-masked records are available. (JSON)

**Botnet C&C URLs** — a set of URLs covering botnet C&C servers and related malicious objects. (JSON)

#### **HASH FEEDS**

**Malware Hashes** — a set of file hashes and corresponding verdicts covering the most dangerous and prevalent malware delivered through the intelligence of KSN. (JSON)

**Mobile Malware Hashes** — a set of file hashes for detecting malicious objects that infect mobile Android and iPhone platforms (JSON)

#### **MOBILE THREAT FEEDS**

P-SMS Trojan Feed — a set of Trojan hashes with corresponding context for detecting SMS Trojans ringing up premium charges for mobile users as well as enabling an attacker to steal, delete and respond to SMS messages. (JSON)

Mobile Botnet C&C URLs — a set of URLs with context covering mobile botnet C&C servers. (JSON)



### APT INTEL REPORTING - DELIVERY

#### **Via APT Intel Portal**

#### > Convenient Search





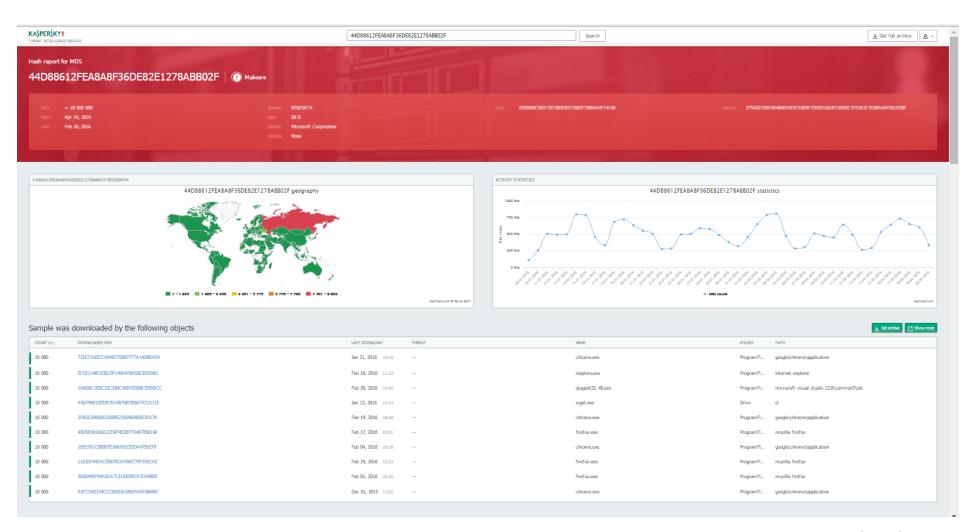


Report Name	Downloads available	Last update	Tags
Gcman-Attack Against Financial Institutions	YARA IOC Report	2016-01-18	Financial institutions Russia
Winnti-HDroot	YARA IOC Report	2016-01-16	Winnti South Korea Japan China Bangladesh + 12
Metel-Financial Fraud	YARA IOC Report	2015-11-06	Financial institutions Russia
WildNeutron-new activity Sept15	YARA IOC Report	2015-09-29	WildNeutron Jripbot Morpho Law firms Bitcoin + 14
Scarlet APT	YARA IOC Report	2015-09-18	Belgium
Carbanak-new wave of attacks Sept15	YARA IOC Report	2015-09-15	Carbanak
Sofacy-New Toolset Aug15	YARA IOC Report	2015-08-13	Sofacy Fancy Bear Sednit Tsar Team APT28 +
Flowershop APT	YARA IOC Report	2015-08-07	Telecommunications Aerospace Europe Asia Middle East + 8



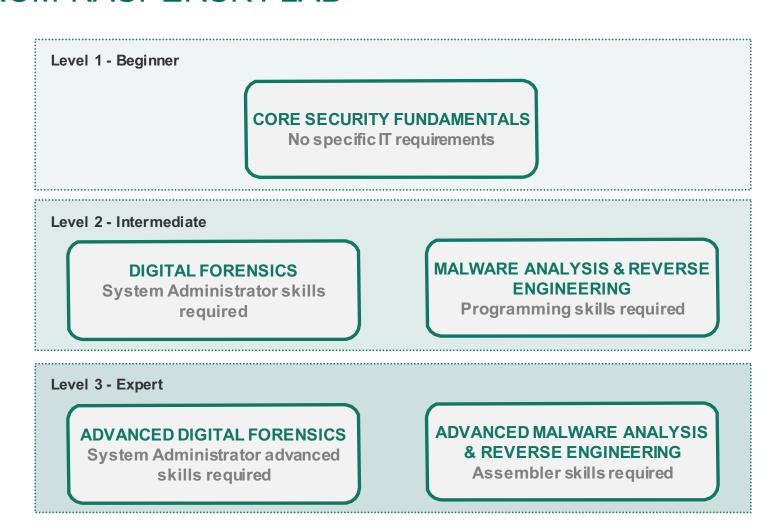


## THREAT LOOKUP & HUNTING SERVICES





# WHY SECURITY TRAINING AND SECURITY AWARENESS IS IMPORTANT. BEST PRACTICES FROM KASPERSKY LAB



## LEVEL 1 CORE SECURITY FUNDAMENTALS

COURSE DESCRIPTION	DURATION	COURSE AUDIENCE	SKILLS GAINED
Level 1 – core security fundamentals  TOPICS:  Cyberthreats & Underground market overview  Spam & Phishing, Email security  Cyber threat types & protection technologies  Advanced persistent threats  Investigation basics using	2 days	Broad range of enterprise employees	<ul> <li>understand the threat landscape</li> <li>be able to use your PC more safely</li> <li>recognize different types of attacks</li> <li>classify cyber weapons and malware and understand their goals and working principles</li> <li>analyze phishing mails</li> <li>recognize infected or faked websites</li> </ul>
<ul><li>public web tools</li><li>Securing your workplace</li></ul>			



# LEVEL 2 DIGITAL FORENSICS

COURSE DESCRIPTION	DURATION	COURSE AUDIENCE	SKILLS GAINED
<ul> <li>Level 2 – digital forensics</li> <li>TOPICS:</li> <li>Introduction to Digital Forensics</li> <li>Live Response and Evidence Acquisition</li> <li>Windows Registry Internals</li> <li>Windows artifacts analysis</li> <li>Browsers Forensics</li> <li>Email analysis</li> </ul>	5 days	Employees in the areas of incident response and digital forensics	<ul> <li>build the Digital Forensics lab</li> <li>collect digital evidence and deal with it properly</li> <li>reconstruct an incident and use time stamps</li> <li>find traces of intrusion on investigation artifacts in Windows OS</li> <li>find and analyze browser and email history</li> <li>be able be apply with the tools and instruments of digital forensics</li> </ul>



### LEVEL 3 ADVANCED DIGITAL FORENSICS

COURSE DESCRIPTION	DURATION	COURSE AUDIENCE	SKILLS GAINED
Level 3 – advanced digital forensics  TOPICS:  Deep Windows Forensics Data recovery Network and Cloud forensics Memory forensics Timeline analysis	5 days	Employees in the areas of incident response and digital forensics	<ul> <li>Be able to perform deep file system analysis</li> <li>Be able to recover deleted files</li> <li>Be able to analyze network traffic</li> <li>Reveal malicious activities from Memory dumps</li> <li>Reconstruct the incident</li> </ul>
<ul> <li>Real world targeted attack forensics practice</li> </ul>			timeline



## LEVEL 2 MALWARE ANALYSIS & RE

COURSE DESCRIPTION	DURATION	COURSE AUDIENCE	SKILLS GAINED
<ul> <li>Level 2 – malware analysis &amp; re</li> <li>TOPICS:</li> <li>Malware Analysis &amp; Reverse     Engineering goals and techniques</li> <li>Windows internals, executable files,     x86 assembler</li> <li>Basic Static analysis techniques     (strings extracting, import analysis, PE     entry points at a glance, automatic     unpacking, etc.)</li> <li>Basic Dynamic analysis techniques     (debugging, monitoring tools, traffic     interception, etc.)</li> <li>.NET, Visual basic, Win64 files analysis</li> <li>Script and non-PE analysis techniques     (Batch files; Autoit; Python; Jscript;     JavaScript; VBS)</li> </ul>	5 days	Employees in the areas of malware analysis and reverse engineering	<ul> <li>Build a secure environment for malware analysis: deploy sandbox and all needed tools</li> <li>Understand principles of Windows program execution</li> <li>Unpack, debug and analyze malicious object, identify its functions</li> <li>Detect malicious sites through script malware analysis</li> <li>Conduct express malware analysis</li> </ul>

### LEVEL 3 ADVANCED MALWARE ANALYSIS & RE

COURSE DESCRIPTION	DURATI ON	COURSE AUDIENCE	SKILLS GAINED
<ul> <li>Level 3 – advanced ma&amp;re</li> <li>TOPICS:</li> <li>Malware Analysis &amp; Reverse Engineering goals and technics</li> <li>Advanced Static &amp; dynamic analysis techniques (manual unpacking)</li> <li>Deobfuscation techniques</li> <li>Rootkit &amp; Bootkit analysis</li> <li>Exploits analysis (.pdf, .doc, .swf, etc.)</li> <li>Non-Windows Malware Analysis (Android, Linux, Mac OS)</li> </ul>	5 days	Employees in the areas of malware analysis and reverse engineering	<ul> <li>use the world best practices in reverse engineering</li> <li>recognize anti-reverse engineering technics (obfuscation, anti-debugging)</li> <li>apply advanced malware analysis for Rootkits/Bootkits</li> <li>analyze exploit shellcode, embedded in different file types</li> <li>analyze non-Windows malware</li> </ul>

#### CYBER SECURITY TRAINING - CASE STUDIES

**CUSTOMER CASE STUDY** 







#### CITY OF LONDON POLICE

- Kaspersky Lab has delivered several courses in the areas of Digital Forensics and Malware Analysis
- Public reference is available and you can request an official pdf approved by COLP management
- You can find more in public press releases:
  - http://www.kaspersky.com/about/news/ virus/2014/City-of-London-Police-and-Kaspersky-Lab-lead-the-way-incombatting-fraud
  - http://www.computerworlduk.com/news/ security/3539039/city-of-london-policebrings-in-kaspersky-to-train-officers-totackle-cybercrime/



# HOW TO RESPOND THE CYBERCRIME AND CYBER THREATS – MALWARE ANALYSIS.

Malware Analysis offers a complete understanding of the behavior and objectives of specific malware files that are targeting your organization.

Kaspersky Lab's experts carry out a thorough analysis of the malware sample provided by your organization, creating a detailed report that includes:





**Sample properties**: A short description of the sample and a verdict on its malware classification.



Detailed malware description: An indepth analysis of your malware sample's functions, threat behavior and objectives including IOCs - arming you with the information required to neutralize its activities.



Remediation scenario: The report will suggest steps to fully secure your organization against this type of threat.

# LET'S TALK?

Kaspersky Lab HQ 39A/3 Leningradskoe Shosse Moscow, 125212, Russian Federation

Tel: +7 (495) 797-8700

www.kaspersky.com

